

UNCLASSIFIED

PD-ACC-351



**AGENCY FOR  
INTERNATIONAL  
DEVELOPMENT**

**COUNTRY ASSISTANCE PROGRAM**

**INDIA FY 1966**

**PART III**

**DEPARTMENT  
OF  
STATE**



DECEMBER 1964

SECTION III - U.S. ASSISTANCE PROGRAM

Subject

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1/ LAS Annex No.6 submitted previously.

2/ LAS Annex No.13 submitted previously.

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- 1/ IAS Annex No.17 submitted previously.
- 2/ IAS Annex No.19 submitted previously.
- 3/ IAS Annex on Minerals under preparation.
- 4/ IAS Annex No.11 submitted previously.
- 5/ IAS Annex No.16 submitted previously.

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1/ LAS Annex No. 22 submitted previously.

2/ LAS Annex No. 1 submitted previously.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS											SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA				3. PROJECT NO.				4. TITLE Summary: All Goals						
	5. U.S. FUNDING:		BEGIN FY		END FY		6. PRIOR REFERENCES										
	PHYSICAL WORK:																
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a.	b.	c.	d.	PERSONNEL SERVICES				PARTICIPANTS		COMMODITIES		OTHER COSTS		LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	380,391	37,418	26,664	758	18,246	12,199	4,791	297,816	9,081	5,536	5,300			
		DL	L	1,577,848	-	-	-	-	-	-	-	1577848	-	-	-		
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	7,358	3,524	1,518	148	1,267	1,057	357	179	1,497	932	403			
		DL	L	357,450	-	-	-	-	-	-	357,450	-	-	-	-		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	368,798	28,794	26,541	753	14,789	10,990	3,740	296,878	6,135	4,842	4,130	11,381	734	
		DL	L	979,634	-	-	-	-	-	-	979,634	-	-	-	-	-	
	EXPENDITURES (ACTUAL YEAR)	TC	G	8,841	5,498	1,474	147	2,395	932	360	193	2,005	597	738	-	-	
		DL	L	381,760	-	-	-	-	-	-	381,760	-	-	-	-	-	
C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	11,593	8,624	123	5	3,457	1,209	1,051	938	2,946	694	1,170				
	DL	L	598,214	-	-	-	-	-	-	598,214	-	-	-	-	-		
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	10,263	5,392	1,394	511	3,183	1,252	724	554	700	1,160	785			
		DL	L	457,460	5,500	-	-	4,000	-	-	451,960	1,500	-	-	-		
	B. EXPENDITURES	TC	G	9,383	5,398	1,370	365	2,604	1,176	583	693	1,465	381	746			
		DL	L	389,742	700	-	-	700	-	-	389,042	-	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	12,473	8,618	147	151	4,036	1,285	1,192	799	2,181	1,473	1,209			
		DL	L	665,932	4,800	-	-	3,300	-	-	661,132	1,500	-	-	-		
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TC	G	13,217	9,371	1,497	698	6,185	1,324	1,192	327	710	-	1,284			
		DL	L	235,340	2,340	-	-	-	-	-	233,000	2340	-	-	-		
	B. EXPENDITURES	TC	G	10,910	6,993	1,443	590	3,933	1,143	902	371	1,177	370	981			
		DL	L	389,462	3,562	-	-	2,500	-	-	385,900	1,062	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	14,780	10,996	201	259	6,288	1,466	1,482	755	1,714	1,103	1,512			
		DL	L	511,810	3,578	-	-	800	-	-	508,232	2,778	-	-	-		
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/	TC	G	13,595	9,510	1,712	776	6,037	1,197	1,482	400	700	-	1,291	4,501	7,670	
		DL	L	227,804	2,804	-	-	-	-	-	225,000	2,804	-	-	-	375,596	2,900
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	36,147	32,436	1,365	1,208	20,012	1,138	6,104	-	1,600	-	4,720	7,079	45,272	
		DL	L	12,594	12,594	-	-	-	-	-	-	12,594	-	-	-	357,636	16,076
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	453,613	94,127	32,632	3,951	53,663	17,110	14,293	299,097	12,791	6,696	13,380	359,486	94,127	
		DL	L	2,511,046	23,238	-	-	4,000	-	-	2487808	19,238	-	-	-	2487808	23,238

REMARKS:

1/ This is a memorandum (non-add) column.

2/ Show estimated expenditures in column 1.

1/ Includes for closed projects not included in individual a) L/C charged to \$ A/c: i) Goal - Housing \$ 3 goals; total amounts indicated at right: ii) Tech-Support \$759

b) TC: i) Goal - Housing 246 ii) Tech-Support 2,790

2/ FY 1966 DL obligation is estimated at 435,000; difference between this total and 235,340 shown represents amounts not yet allocated to individual projects. See Explanatory Note on page AK-1a

3/ FY 1967 DL obligation expected to be over 435,000; See Explanatory Note on page AK-1a.

See next page for TC(L) figures

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED							
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA			3. PROJECT NO.				4. TITLE Summary: All Goals									
	5. U.S. FUNDING:		BEGIN FY		END FY		6. PRIOR REFERENCES												
	PHYSICAL WORK:																		
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		c.	b.	c.	d.	e.			f.		g.		h.		i. 1/				
						APPROPRIATION TITLE	LOAN OR GRANT	TOTAL	CONTRACT 1/	PERSONNEL SERVICES		PARTICIPANTS		COMMODITIES		OTHER COSTS		LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
										(1) U.S. AGENCIES	(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	L	18,366	-	-	-	-	-	-	-	18,366	-	-	-	-	-		
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	L	15,366	-	-	-	-	-	-	-	15,366	-	-	-	-	-		
	EXPENDITURES (ACTUAL YEAR)	TC	L	2,859	-	-	-	-	-	-	-	2,859	-	-	-	-	-		
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS																		
	B. EXPENDITURES	TC	L	2,000	-	-	-	-	-	-	-	2,000	-	-	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	L	1,020	-	-	-	-	-	-	-	1,020	-	-	-	-	-		
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS																		
	B. EXPENDITURES	TC	L	1,020	-	-	-	-	-	-	-	1,020	-	-	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR																		
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/																		
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/																		
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	L	18,366	-	-	-	-	-	-	-	18,366	-	-	-	18,366	-		

## REMARKS:

- 1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column 1.

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PAGE NO.

III-2

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. Funding	BEG. FY	END FY	4. PROJECT NO.	5. TITLE		6. PRIOR REFERENCES:			
	1 November 1964		INDIA						1951	1972	Summary: All Goals			
	7. OBLIGATED AND DISBURSED	g. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
(1) TYPE		(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED	
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G		12,115 <sup>a</sup>		58,017 <sup>a</sup>			22,358	11,225		24,434	
	FA	(ii) TRUST FUND	Govt. Rev.		1,202 <sup>a</sup>	1,276 <sup>a</sup>	6,187	6,112					6,187	6,112
	ACT	(iii) OTHER LC	Sec. 402	G	100,510	96,746	481,197	463,177	198,300	198,300	23,644	5,284	242,971	235,949
	B. P.L. 480 LC	Sec. 104(e)&(g)	*	946,657	912,024	4,532,213	4,366,406	3,839,813	3,674,006			692,400	692,400	
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G											
	FA	(ii) TRUST FUND	Govt. Rev.		186	180	862	827					862	827
	ACT	(iii) OTHER LC	Sec. 402	G	4,058	4,082	19,402	19,544			8,170	1,612	9,623	9,762
	B. P.L. 480 LC	Sec. 104(e)&(g)	*	275,591	358,502	1,319,137	1,716,871	1,156,137	1,445,541			163,000	271,330	
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G											
	FA	(ii) TRUST FUND	Govt. Rev.		487	490	2,333	2,347					2,333	2,347
	ACT	(iii) OTHER LC	Sec. 402	G	6,943	5,447	33,239	26,085			11,278	2,906	15,625	11,901
	B. P.L. 480 LC	Sec. 104(e)&(g)	*	684,203	667,692	3,275,707	3,196,647	3,203,507	3,124,447			72,200	72,200	
III BUDGET YEAR (EST.) FY 1966	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G											
	FA	(ii) TRUST FUND	Govt. Rev.		662	663	3,166	3,174					3,166	3,174
	ACT	(iii) OTHER LC	Sec. 402	G	7,903	6,640	37,838	31,796			15,318	2,941	14,580	13,537
	B. P.L. 480 LC	Sec. 104		8,000	46,645	38,301	223,329	38,301	223,329					
IV PLANNING YEAR (EST.) FY 1967	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G											
	FA	(ii) TRUST FUND	Govt. Rev.		737	738	3,538	3,547					3,538	3,547
	ACT	(iii) OTHER LC	Sec. 402	G	9,019	7,395	43,181	35,405			19,182	2,904	14,480	13,319
	B. P.L. 480 LC	Sec. 104		6,000	16,910	28,726	80,960	28,726	80,960					
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G											
	FA	(ii) TRUST FUND	Govt. Rev.		1,869	1,880	8,951	8,995					8,951	8,995
	ACT	(iii) OTHER LC	Sec. 402	G	23,615	31,762	113,059	152,051			112,030	2,652	24,419	37,369
	B. P.L. 480 LC	Sec. 104		10,000	11,589	47,876	55,481	47,876	55,481					
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G		12,115		58,017			22,358	11,225		24,434	
	FA	(ii) TRUST FUND	Govt. Rev.		5,047	5,047	24,175	24,175					24,175	24,175
	ACT	(iii) OTHER LC	Sec. 402	G	147,990	147,990	708,514	708,514	198,300	198,300	181,452	16,687	312,075	312,075
	B. P.L. 480 LC	Sec. 104(e) & (g)	*	1,654,860	1,654,860	7,922,823	7,922,823	7,158,223	7,158,223			764,600	764,600	

REMARKS: \* L and G a/ includes for closed projects not included 1) L/C charged to \$ A/c \$762 in individual goals. ) 1) Trust Fund \$ 28

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS		1. DATA CURRENT AS OF:		2. COOPERATING CTRY.		3. PERSONNEL SERVICES		BEG. FY	END FY	4. PROJECT NO.		5. ALL SUBSEQUENT FYs						g. TOTAL ALL YEARS				
	PERSONNEL AND PARTICIPANTS		1 November 1964		INDIA		PARTICIPANT TRAINING				1951	1972	Summary: All Goals		f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS					
	B. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		a. CUM. THRU ACTUAL FY		b. ACTUAL FY 64			c. OPERATIONAL FY 65			d. BUDGET FY 66			e. PLANNING FY 67			Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	1213.7	114.3	937.3	101.7	9.4	189.4	85.8	14.1	202.5	94.0	33.2	298.8	90.8	38.5	34.1	72.0	61.8	1102.5	1556.3	261.9	2882.2
	B. ON BOARD	Non U.S.	2439.0	-	311.0	495.0	-	121.6	-	115.0	-	-	-	135.0	-	-	135.0	-	-	347.0	2439.0	-	1043.0
II PARTICIPANTS PROGRAMMED	A. U.S.		2946.0	-	1060.0	259.0	-	89.0	377.0	3.0	217.0	359.0	3.0	234.0	316.0	3.0	301.0	426.0	6.0	1234.0	4424.0	15.0	3046.0
	B. THIRD CTRY.		24.0	-	-	-	-	15.0	-	-	-	10.0	-	-	57.0	-	-	57.0	-	-	-	-	-

REMARKS: 1/ End of Fiscal Year 1/ Includes 4.0 for closed projects under Housing for which separate goal not proposed

AID FORM 10-110 (7-62)	DATE PREPARED 1 November 1964	COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	TOTAL PROGRAM	E-2
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**1. LOCAL CURRENCY GENERATED THROUGH AID DOLLAR PROGRAM**  
(\$1,000)

	Cumulative through Actual FY	Operational FY	Budget FY
	1964	1965	1966
A. Total AID Dollar Program Obligation	2,108,932	-	-
B. (1) U.S. Owned L/C for MSP Uses	67,662	-	-
(a) Potential Generation			
(b) Less: Triangular trade for others	-	-	-
Waivers	1,088	-	-
Local Currency Generation for MSP Uses	66,574	-	-
(2) Country Counterpart	-	-	-
(a) Potential Generation	-	-	-
(b) Less: L/C for U.S. uses	-	-	-
Waiver of Deposit	-	-	-
Other	-	-	-
(c) Excess of sale over Commensurate Value	-	-	-
Add: Other (footnote)	-	-	-
TOTAL	66,574	-	-

**2. PL 480 ACTIVITY AND LOCAL CURRENCY ALLOCATION**  
(\$1,000 or equivalent)

	Cumulative Actual	Operational Year	Budget Year
A. Total Sales Contemplated by	2,484,806 <sup>1/</sup>	398,300 <sup>3/</sup>	488,700 <sup>4/</sup>
(1) Reserved for U.S. use: Sec. 104 (a, b, f, h, etc.)	270,578	39,830	122,175
(2) L/C Proceeds For MSP Country Uses			
(a) Military Sec. 104 (c)			
DOD Administered	-	-	-
AID Administered	-	-	-
(b) Triangular Trade: Sec. 104 (d)	45,038	-	-
(c) Grants Sec. 104 (e)	788,175	-	-
Regular	168,087	39,830	-
Cooley Loans	1,212,958	318,640	366,525
(d) Loans: Sec. 104 (g)			
Total MSP	2,214,228	358,470	366,525
B. Title I			
(1) Sec. 201 - Emergency Relief (in CCC prices)	15,717		
II			
(2) Sec. 202 - Work Projects (in CCC prices) Show in footnote any local currency generation	1,950	900	4,500
C. Title III - Voluntary Agency (in CCC prices)	210,458	26,193	31,432
D. Title IV - Dollar credit sales	189,656	-	-

3. TITLE I <del>USES</del> COMMODITIES (Values in \$ Millions)	Cumulative Through Actual Year		Operational Year		Budget Year	
	Unit and Quantity	Value	Unit and Quantity	Value	Unit and Quantity	Value <sup>2/</sup>
1. Wheat & Flour (1000 M.T.)	27,067.2	1,630.7	4,000.0	274.5	5,000.0	400.0
2. Feedgrains '000 MT	836.5	41.3	-	-	100.0	7.2
3. Rice '000 M.T.	1,398.1	165.3	300.0	36.1	300.0	42.0
4. Cotton '000 Bales	2,363.0	272.7	-	-	200.0	23.0
5. Tobacco '000 M.T.	6.3	13.8	-	-	-	-
6. Dairy Products '000 M.T.	34.6	8.1	-	-	-	-
7. Fats & Oils '000 M.T.	3.7	1.0	75.0	18.9	75.0	16.5
8. Ocean Transportation	-	358.4	-	68.8	-	-
		2,491.3 <sup>2/</sup>		398.3		488.7

**4. REMARKS**

- 1/ Actual deposits by GOI thru 6/30/64 were equivalent of \$2,011,059 thousands. ~~approx.~~
- 2/ Includes Ocean transportation.
- 3/ Distributed on the assumed basis of 10% US-uses, 10% Cooley and 80% loans.
- 4/ Distributed on the assumed basis of 25% US-uses and 75% loans.
- 5/ Includes 6.5 ocean transportation differentials for which the U.S. is not reimbursed by India.

SECURITY CLASSIFICATION  
UNCLASSIFIED

PAGE III-4

AID 1020-4 (7-64)		PROGRAM STATUS OF LOCAL CURRENCY FUNDS - TOTAL PROGRAM AVAILABILITIES AND OBLIGATIONS FOR FINANCING LOCAL COSTS										
E-3a		1. DATA CURRENT AS OF: 1 November 1964				2. COOPERATING COUNTRY INDIA				SECURITY CLASSIFICATION UNCLASSIFIED		
4. PLANNING AND OBLIGATION STATUS		3. SOURCES AND AMOUNTS OF LOCAL CURRENCY - LOCAL CURRENCY UNITS (000)										
		a. TOTAL		b. P.L. 480				c. FOREIGN ASSISTANCE ACT				
		(1) 1/ DOLLAR EQUIVALENTS (8000)	(2) LOCAL CURRENCY UNITS (000)	(1) TITLE I				(2) OTHER TITLES (Specify)	(1) COUNTERPART	(2) U.S. OWNED	(3) TRUST FUND	(4) LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS
				(a) SEC. 104 (c)	(b) SEC. 104 (e) GRANTS	(c) SEC. 104 (e) COOLEY LOANS	(d) SEC. 104 (g) LOANS					
I. END OF PRIOR YR.-AVAILABILITIES FOR PROGRAMMING, UNOBLIGATED		1078,666	5164,223	-	1989,644	644,096	2477,313	-	-	53,156	14	
II. ACTUAL YEAR												
A. NEW AVAIL. FROM \$ AND P.L. 480 OBL., AY		48,708	233,196	-	-	12,902	219,345	-	-	-	949	
B. NET OBLIGATIONS		319,770	1530,932	-	499,389	201,367	811,900	-	-	17,374	902	
(i) BUDGET SUPPORT												
MILITARY		-	-	-	-	-	-	-	-	-	-	-
ECONOMIC DEVELOPMENT		-	-	-	-	-	-	-	-	-	-	-
OTHER		-	-	-	-	-	-	-	-	-	-	-
(ii) CAPITAL ASSISTANCE PROJECTS		179,440	859,089	-	47,189	-	811,900	-	-	-	-	-
(iii) TECHNICAL ASSISTANCE PROJECTS		37,864	181,276	-	163,000	-	-	-	-	17,374	902	-
(iv) LOCAL CURRENCY PROJECTS												
CAPITAL ASSISTANCE		102,466	490,567	-	289,200	201,367	-	-	-	-	-	-
TECHNICAL ASSISTANCE		-	-	-	-	-	-	-	-	-	-	-
(v) COUNTERPART COMMITMENTS FOR TRUST FUND		-	-	-	-	-	-	-	-	-	-	-
C. END OF AY - AVAILABILITIES FOR PROGRAMMING, UNOBL.		807,604	3866,487	-	1490,255	455,631	1884,758	-	-	35,782	61	
III. OPERATIONAL YEAR (EST.)												
A. NEW AVAIL. FROM \$ AND P.L. 480 OBL., OY		358,957	1718,544	-	-	190,690	1525,521	-	-	-	2,333	
B. NET OBLIGATIONS		710,866	3403,343	-	1145,102	259,669	1963,000	-	-	33,239	2,333	
(i) BUDGET SUPPORT												
MILITARY		-	-	-	-	-	-	-	-	-	-	-
ECONOMIC DEVELOPMENT		-	-	-	-	-	-	-	-	-	-	-
OTHER		-	-	-	-	-	-	-	-	-	-	-
(ii) CAPITAL ASSISTANCE PROJECTS		454,362	2175,302	-	212,302	-	1963,000	-	-	-	-	-
(iii) TECHNICAL ASSISTANCE PROJECTS		43,398	207,772	-	172,200	-	-	-	-	33,239	2,333	-
(iv) LOCAL CURRENCY PROJECTS												
CAPITAL ASSISTANCE		213,106	1020,269	-	760,600	259,669	-	-	-	-	-	-
TECHNICAL ASSISTANCE		-	-	-	-	-	-	-	-	-	-	-
(v) COUNTERPART COMMITMENTS FOR TRUST FUND		-	-	-	-	-	-	-	-	-	-	-
C. END OF OY - AVAILABILITIES FOR PROGRAMMING, UNOBL.		455,695	2181,688	-	345,153	386,652	1447,279	-	-	2,543	61	
IV. BUDGET YEAR (EST.)												
A. NEW AVAIL. FROM \$ AND P.L. 480 OBL., BY												
B. NET OBLIGATIONS												
(i) BUDGET SUPPORT												
MILITARY												
ECONOMIC DEVELOPMENT												
OTHER												
(ii) CAPITAL ASSISTANCE PROJECTS												
(iii) TECHNICAL ASSISTANCE PROJECTS												
(iv) LOCAL CURRENCY PROJECTS												
CAPITAL ASSISTANCE												
TECHNICAL ASSISTANCE												
(v) COUNTERPART COMMITMENTS FOR TRUST FUND												
C. END OF BY - AVAILABILITIES FOR PROGRAMMING, UNOBLIGATED												

## REMARKS:

1/ EXCHANGE RATE: \$1 = Rs.4.7876

a/ Includes 100,000 proposed for use as replacement of Sec. 402 funds to cover Local project support and Mission technical support expenses; excludes 7,935 granted to Literacy Village out of rupees reserved for U.S. uses.

1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA		3. SOURCES AND AMOUNTS OF LOCAL CURRENCY - LOCAL CURRENCY UNITS (000)							c. FOREIGN ASSISTANCE ACT			
4. CASH STATUS OF PROGRAM IMPLEMENTATION		g. TOTAL		b. P.L. 480				(2) OTHER TITLES (Specify)	(1) COUNTER- PART	(2) U.S. OWNED	(3) TRUST FUND	(4) LC COSTS CHGD TO \$ ACCTS.		
		(1) 1/ DOLLAR- EQUIVA- LENTS (000)	(2) LOCAL CURRENCY UNITS (000)	(a) Sec. 104 (c)	(b) Sec. 104 (e) GRANTS	(c) Sec. 104 (e) Cooley Loans	(d) Sec. 104 (g) LOANS							
I. END OF PRIOR YEAR	A. TOTAL CASH ON HAND	632,996	3030,533	-	1372,778	395,489	1188,912	-	-	73,302	52			
	UNOBLIGATED	333,546	1596,886	-	440,437	418,429	684,850	-	-	53,156	14			
II. ACTUAL YEAR  FY 1964	B. TOTAL BALANCE TO BE GENERATED, PRIOR YEAR PROGRAMS	745,276	3568,081	-	1549,683	225,667	1792,463	-	-	-	268			
	RECEIVABLES UNCOMMITTED	745,220	3567,813	-	1549683	225,667	1792463	-	-	-	-			
III. OPERATIONAL YEAR (EST.)  FY 1965	A. TOTAL DEPOSITS	366,668	1755,458	-	818,767	98,685	837,057	-	-	-	949			
	(i) FROM PRIOR PROGRAMS	366,526	1754,777	-	818,767	98,685	837,057	-	-	-	268			
IV. BUDGET YEAR (EST.)  FY 1966	(ii) FROM AY PROGRAMS	142	681	-	-	-	-	-	-	-	681			
	B. TOTAL CASH DISBURSEMENTS	495,557	2372,529	-	966,599	72,690	1312,835	-	-	19,480	925			
I. END OF PRIOR YEAR	(i) BUDGET SUPPORT	-	-	-	-	-	-	-	-	-	-			
	MILITARY	-	-	-	-	-	-	-	-	-	-			
II. ACTUAL YEAR  FY 1964	ECONOMIC DEVELOPMENT	-	-	-	-	-	-	-	-	-	-			
	OTHER	-	-	-	-	-	-	-	-	-	-			
III. OPERATIONAL YEAR (EST.)  FY 1965	(iii) CAPITAL ASSISTANCE PROJECTS	317,000	1517,669	-	204,834	-	1312,835	-	-	-	-			
	(iiii) TECHNICAL ASSISTANCE PROJECTS	39,923	191,134	-	170,729	-	-	-	-	19,480	925			
IV. BUDGET YEAR (EST.)  FY 1966	(iv) LOCAL CURRENCY PROJECTS	138,634	663,726	-	591,036	72,690	-	-	-	-	-			
	CAPITAL ASSISTANCE	-	-	-	-	-	-	-	-	-	-			
I. END OF PRIOR YEAR	TECHNICAL ASSISTANCE	-	-	-	-	-	-	-	-	-	-			
	(v) COUNTERPART TRANSFERS TO TRUST FUND	-	-	-	-	-	-	-	-	-	-			
II. ACTUAL YEAR  FY 1964	C. TOTAL CASH ON HAND END OF AY	429,453	2056,049	-	940,919	401,329	659,903	-	-	53,822	76			
	UNOBLIGATED (Deposits)	380,444	1821,412	-	759,815	315,747	710,007	-	-	35,782	61			
III. OPERATIONAL YEAR (EST.)  FY 1965	D. TOTAL BALANCE TO BE GENERATED, END OF AY	427,209	2045,305	-	730,440	139,884	1174,751	-	-	-	230			
	RECEIVABLES UNCOMMITTED	427,161	2045,075	-	730,440	139,884	1174,751	-	-	-	-			
IV. BUDGET YEAR (EST.)  FY 1966	A. TOTAL DEPOSITS	548,982	2628,310	-	492,591	228,985	1904,401	-	-	-	2,333			
	(i) FROM PRIOR PROGRAMS	238,118	1140,013	-	492,591	63,853	583,339	-	-	-	230			
I. END OF PRIOR YEAR	(ii) FROM OY PROGRAMS	310,864	1488,297	-	-	165,132	1321,062	-	-	-	2,103			
	B. TOTAL CASH DISBURSEMENTS	692,861	3317,144	-	1145,102	180,610	1963,000	-	-	26,085	2,347			
II. ACTUAL YEAR  FY 1964	(i) BUDGET SUPPORT	-	-	-	-	-	-	-	-	-	-			
	MILITARY	-	-	-	-	-	-	-	-	-	-			
III. OPERATIONAL YEAR (EST.)  FY 1965	ECONOMIC DEVELOPMENT	-	-	-	-	-	-	-	-	-	-			
	OTHER	-	-	-	-	-	-	-	-	-	-			
IV. BUDGET YEAR (EST.)  FY 1966	(iii) CAPITAL ASSISTANCE PROJECTS	454,362	2175,302	-	212,302	-	1963,000	-	-	-	-			
	(iiii) TECHNICAL ASSISTANCE PROJECTS	41,906	200,632	-	172,200	-	-	-	-	26,085	2,347			
I. END OF PRIOR YEAR	(iv) LOCAL CURRENCY PROJECTS	196,593	941,210	-	760,600	180,610	-	-	-	-	-			
	CAPITAL ASSISTANCE	-	-	-	-	-	-	-	-	-	-			
II. ACTUAL YEAR  FY 1964	TECHNICAL ASSISTANCE	-	-	-	-	-	-	-	-	-	-			
	(v) COUNTERPART TRANSFERS TO TRUST FUND	-	-	-	-	-	-	-	-	-	-			
III. OPERATIONAL YEAR (EST.)  FY 1965	C. TOTAL CASH ON HAND END OF OY	285,574	1367,215	-	288,408	449,704	601,304	-	-	27,737	62			
	UNOBLIGATED (Deposits)	218,560	1046,379	-	107,304	285,063	651,408	-	-	2,543	61			
IV. BUDGET YEAR (EST.)  FY 1966	D. TOTAL BALANCE	237,183	1135,539	-	237,849	101,589	795,871	-	-	-	230			
	RECEIVABLES UNCOMMITTED	237,135	1135,309	-	237,849	101,589	795,871	-	-	-	-			

REMARKS:  
1/ Exchange Rate: \$1 = Rs. 4.7876

See attached.

SECURITY CLASSIFICATION  
UNCLASSIFIED

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AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED		
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- a/ Includes 100,000 proposed for use as replacement of Sec. 402 funds to cover local project support and Mission technical support expenses; excludes 7,935 granted to Literacy Village out of rupees reserved for U.S. uses.
- b/ Funds are transferred to the cooperating country on an advance basis upon execution of project agreements. Actual expenditures by GOI, however, lag behind. Physical accomplishment status is indicated in the Progress To Date section of the relevant E-1s.
- c/ Trust Fund represents rupee deposits made by the cooperating country with the USAID to cover certain local costs of U.S. direct-hire, PASA, and contract technicians requested by GOI.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	PL 480 Title I Country Use Program <u>Explanatory Note</u>
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THE PL 480 COUNTRY USE LOCAL CURRENCY PROGRAM

Availabilities (See Annex A for details)

At the close of GOI FY 1964 there were Rs.958.1 million of unobligated Section 104(e) grant and Rs.685.5 million of unobligated Section 104(g) loan funds on hand. During GOI FY 1965 it is estimated that additional deposits from Title I sales will bring the total available for grants to Rs.1,751 million and for loans to Rs.1,853 million. Assuming a continuing sales program at about the same level in GOI FY 1965/66, it is projected that about Rs.2,000 million of new deposits will become available for loans that year. The new PL 480 legislation, of course, virtually rules out the possibility of large grant funds.

Projects and Programs (See Annex B for details)

It is expected that significant changes will occur in allocations by GOI FY 1966/67 which will reflect the Mission's desire to associate PL 480 rupees with endeavors which bring direct benefits to the people of India and the corollary desire to draw wider attention to the benefits of the Food for Peace program. The grant program in fact is devoted largely to such activities at present. Malaria and Smallpox eradication, primary health centers and elementary education are especially noteworthy from this point of view. These combined constitute about two-thirds of the grant program. The remaining grants serve objectives closely related to the dollar development grant program, e.g., IIT-Kanpur, the Indian Investment Center and in other high priority areas such as agriculture.

While theoretically it would be possible to give the program greater coherence, this would be difficult to achieve in the face of long standing commitments to finance Third Plan programs. Although these commitments are not absolutely binding, it would appear that little is to be gained by dropping sound programs which are not yet completed. This argument becomes even more persuasive in view of the forthcoming demise of the large grant program. Since the transition to a loans only basis will occur more or less concurrently with the transition to the Fourth Five Year Plan, it will be much more practical to evolve a new approach to the local currency program to be implemented at that time.

The GOI has not as yet considered in any depth the transition to loans only, and probably will be unable to do so prior to consideration of the next budget. Meanwhile the loan program is based on long established criteria of financing institutions which serve the private sector and supplying the local currency requirements of dollar development loans. However, one change in the previous pattern is expected. The Mission does not anticipate making additional loans for a large number of river valley development projects which are not associated with either of the criteria mentioned above and about which there is some question of conformity with the LAS guidelines in this field.

The Mission expects to allocate during the remainder of the Third Plan Rs.350-500 million to institutions which finance private sector development projects. This financing serves an extremely important function and should be continued and perhaps expanded in coverage.

The dollar loan projects which are to receive PL 480 loan funds during the remainder of the Third Plan are almost all for public sector power generation and distribution. While these projects are vital to Indian development and are the most important element in the Mission's DL program, there is no compelling reason to cover their local currency costs. However, in view of commitments already made and the present lack of a sound alternative, it is anticipated that such financing will continue during the current Plan, but some movement away from this practice may be advisable during the next two years.

Matching Availabilities & Requirements

The table below brings together current Mission estimates of availabilities and reasonably firm GOI requirements. The detailed data on which this table is based are in Annexes A and B.

(See table on next page)

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	PL 480 Title I Country Use Program Explanatory Note
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Availabilities & Requirements

(Rs. 000)

Section 104(e) Grants	Section 104(g) Loans	
958,143	685,515	Unobligated deposits 3/31/64
792,913	1,167,176	Estimated deposits GOI FY 64/65
1,751,056	1,852,691	Available for GOI FY 64/65
less 498,650	less 285,600	Obligations 4/1/64 - 6/30/64
1,252,406	1,567,091	Remaining availability GOI FY 64/65
less 229,188		ProAgs, in process 10/11/64
1,023,218	1,567,091	Remaining availability 10/11/64
less 282,014	less 953,700	Known additional require- ments for GOI FY 64/65
741,204	613,391	Available for additional obligations
	1,970,303*	Estimated new deposits GOI FY 65/66
741,204	2,583,694	Balance available
less 633,900	less 1,009,300	GOI requirements for GOI FY 65/66 as of 10/20/64
107,304	1,574,394*	Remaining availability.

\*The total generation from U.S. FY 1965 commitments may be approximately \$15 million greater than estimated in this analysis because of difference in prices used to value physical imports and the anticipated addition of a small amount of imports of tallow and corn.

At current rate, most grant funds will be used up by March 1966. Loan funds, however, will remain available. If the assumptions re availabilities prove correct, the loan program during 1965/66 could be expanded. At this time, it is not possible to specify projects for the remaining loan funds.

ANNEX A

Assumptions and Methodology Employed in  
Estimating PL 480 Title I Availabilities

The following assumptions underlie estimates of PL 480 Title I availabilities from sales agreements made through November 30, 1962:

- 1) That imports under the May 4, 1960, sales agreement will be completed by December 1964, and that the corresponding GOI deposits will be made by the end of March 1965.
- 2) That there will be no significant fluctuations in prices and that the freight differential (against which the GOI does not make deposits) will not exceed Rs.558 million under the May 4, 1960, agreement. Accordingly, total deposits under that agreement are not expected to exceed Rs.6 billions (Rs.4,119 million deposited through 3/31/64 plus Rs.1,880 million to be deposited through 3/31/65).
- 3) That no more deposits will be made against the November 13, 1959, May 1, 1962, and November 30, 1962, sales agreements; in fact, deposits under these agreements were complete as of 3/31/64.
- 4) That total deposits under the November 26, 1962, agreement will not exceed Rs.350 million (Rs.231.7 million deposited through 3/31/64 plus Rs.118.3 million to be deposited through 3/31/65) against an agreement value of Rs.493.6 million. The difference is due to the freight differential and the expected non-utilization of import licences by the private sector.
- 5) That all deposits will be transferred to the AID account and thus become available for obligation.
- 6) That loan agreements under the May 1, 1962, November 26, 1962, and November 30, 1962, sales agreements will be signed before March 31, 1965.

The estimates for deposits under the agreement signed September 30, 1964, and for additional agreements assumed to be concluded in FYs 1965 and 1966 are geared to the following program magnitudes:

SECURITY CLASSIFICATION

UNCLASSIFIED

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AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	FL 480 Title I Country Use Program Explanatory Note
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FL 480 - Title I Program

(In 000 M.T. except for cotton which is in 000 bales)

	<u>1964/65</u>	<u>1965/66</u>
Wheat	4,000	5,000
Rice	300	300
Corn	—	100
Cotton	—	200
Soybean Oil	75	75

Deposits always lag behind arrivals by a considerable period; in our calculation the lag has been assumed at three months. Accordingly, the quantities of arrivals assumed to be reflected in deposits for any GOI fiscal year will be those arriving in India before December 31. It follows that because of the lag in deposits, arrivals during January-March are reflected in the deposit level of the next year. The following is an example of the arithmetic involved in computing the quantities of wheat affecting 1965/66 deposits:

Carry-over of deposits from January-March 1965 arrivals 1964/65	1,600,000
plus	
Arrivals in 1965/66 under 1964/65 agreements	1,700,000
Sub-total - Arrivals under Previous Agreements	3,300,000
plus	
Arrivals through December 31, 1965 under 1965/66 agreement	2,850,000
	6,150,000 M.T.

The unit prices include allowances for ocean freight. The "shipping deduction" represents an allowance for freight differentials.

The allocations of availabilities in 1965/66 represent the Mission's understanding that the new law requires a minimum of 20 percent to be set aside for U.S. uses. In addition, payments in dollars for shipping will reduce local currency availabilities. In the calculation, 30 percent has been deducted from net generation with the additional 10 percent deduction representing a rough estimate of minimum deductions for the new shipping provision and for Cooley loans.

(See Table on next pages)

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED		<u>PL 480 Title I Country Use Program</u> <u>Explanatory Note</u>
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ANNEX A - TABLE I

Availabilities of PL 480 Title I Funds  
(Rs. 000)

	<u>1964/65</u>				
	<u>Total</u>	<u>U.S.uses</u>	<u>Cooley</u>	<u>Grants</u>	<u>Loans</u>
<b>A. <u>Under Existing Agreements</u> <sup>a/</sup></b>					
<b>I. <u>Availabilities</u></b>					
Unobligated Deposits 3/31/64		n.a.	235,496	958,143	685,515
Additional Deposits 4/1/64 - 3/31/65					
a. Sales Agreement 11/13/59					
b. Sales Agreement 5/4/60	1,880,724	200,673	94,225	792,913	792,913
c. Sales Agreement 5/1/62					
d. Sales Agreement 11/26/62	118,255	11,825	5,912		100,518
e. Sales Agreement 11/30/62					
Sub-Total	(1,998,979)		335,633	1,751,056	1,578,946
<b>II. <u>Obligations &amp; Existing Programs</u></b>					
a. Actual Obligations 4/1/64 to 9/24/64				498,650	285,600
b. Agreements in Process					
(1) Elementary Education				207,900	
(2) Foodgrain Storage				9,488	
(3) IIT-Kanpur				10,000	
(4) Indian Investment Center				1,800	
c. Section 402 Replacement				100,000	
d. Agr. Refinance Corp				50,000	(Under Mission consideration)
e. Industrial Dev. Bank				150,000	(Under Mission consideration)
Sub-Total				1,027,838	285,600
III. Net Availabilities			335,633	723,218	1,293,346
<b>B. <u>Under Projected Agreements for 1964/65</u></b>	342,181	34,218	34,218		273,745
<b>C. Total Net Availabilities</b>				723,218	1,567,091

a/ See Annex A.

(Contd..on next page)

Availabilities of PL 480 Title I Funds (Contd.)

(Rs. 000)

			<u>1965/66</u>		
	<u>Total</u>	<u>U.S. uses</u>	<u>Cooley</u>	<u>Grants</u>	<u>Loans</u>
A. Lagging Deposits (i.e. against arrivals 1/1/65 to 3/31/65)	692,841	69,284	69,284	-	554,213
B. Deposits due arrivals under FY 1964/65 Agreement	616,304	61,630	61,630	-	493,044
C. Deposits under FY 1965/66 Agreement	1,230,648	307,662 <sup>b/</sup>	-	-	922,986
D. Total Net Availabilities	2,539,793	569,490	-	-	1,970,303

b/ 25% tentatively assumed subject to later adjustment for Cooley.

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	PL 480 Title I Country Use Program Explanatory Note
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ANNEX B - TABLE I

PL 480 TITLE I SECTION 104(e) GRANT PROGRAM

GOI REQUIREMENTS & USAID OBLIGATIONS

(Figures in Thousands of Rupees)

Project No. and Title	GOI Requirements			USAID Obligation Status			
	Thru 3/31/65	4/1/65 to 3/31/66	Total	Obligated Thru 6/30/64	ProAgs in process as of 10/11/64	Balance Required	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>GRAND TOTAL</b>	<b>2,794,413</b>	<b>633,900</b>	<b>3,428,313</b>	<b>2,283,211</b>	<b>229,188**</b>	<b>915,914**</b>	<b>3,428,313</b>
011, River Valley Dev.	59,400	-	59,400	59,400	-	-	59,400
135, Malaria Eradication	692,400	72,200	764,600	692,400	-	72,200	764,600
150, IIT-Kanpur	32,000	11,400	43,400	22,000	10,000	11,400	43,400
147, U.P. Agr. University	21,600	-	21,600	21,600	-	-	21,600
185, AIIMS Hospital	29,000	-	29,000	29,000	-	-	29,000
164, Indian Investment Center	5,460	1,900	7,360	3,660	1,800	1,900	7,360
069, Dairy Development	36,000	-	36,000	36,000	-	-	36,000
156, Soil & Water Conservation	71,800	34,000	105,800	66,450	-	39,350	105,800
211, National Highways	192,700	59,700	252,400	200,000	-	52,400	252,400
212, Exploration of Groundwater Res.	8,000	-	8,000	8,000	-	-	8,000
214, Craftsmen Training	274,000	78,300	352,300	274,000	-	78,300	352,300
031, Foodgrain Storage	131,250	27,400	158,650	121,762	9,488	27,400	158,650
213, Higher Tech. Ed.	112,000	30,000	142,000	69,000	-	73,000	142,000
218, Elementary Education	627,900	250,000	877,900	420,000	207,900	250,000	877,900
217, Smallpox Eradication	87,400	22,700	110,100	87,400	-	22,700	110,100
216, Primary Health Centers	97,800	26,300	124,100	97,800	-	26,300	124,100
123, Med. Ed. Trng.	74,000	20,000	94,000	74,000	-	20,000	94,000
115, National Productivity Council	739	-	739	739	-	-	739
231, Agr. Ref. Corp.	50,000	-	50,000	-	-	50,000	50,000
UNN, Sec. 402 Replacement	100,000	-	100,000	-	-	100,000	100,000
281, Agr. Univ. Dev.	90,964 *	-	90,964	-	-	90,964	90,964

\* Requirements through 31 March 1966 to be obligated during US FY 1965.

\*\* These two figures total (1,145,102) FY 1965 obligation schedule.

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AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	PL 480 Title I Country Use Program Explanatory Note
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ANNEX B - TABLE II

PL 480 TITLE I SECTION 104(r) LOAN PROGRAM

GOI REQUIREMENTS & USAID OBLIGATIONS

(Figures in Thousands of Rupees)

Project No. and Title	GOI Requirements			USAID Obligation Status			
	Thru 3/31/65	4/1/65 to 3/31/66	Total	Obligated Thru 6/30/64	ProAgs in process as of 10/11/64	Balance Required	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<u>GRAND TOTAL</u>	<u>4,876,100</u>	<u>1,009,300</u>	<u>5,885,400</u>	<u>3,922,400</u>	-	<u>1,963,000**5</u>	<u>5,885,400</u>
011, River Valley Dev.	1,973,100*	-	1,973,100	1,973,100	-	-	1,973,100
166, Sharavathi Hydel	440,700	142,700	583,400	344,500	-	238,900	583,400
168, ICICI	200,000	100,000	300,000	200,000	-	100,000	300,000
165, IFC	200,000	-	200,000	200,000	-	-	200,000
186, Chandrapura Thermal Elec.	160,100	112,500	272,600	205,000	-	67,600	272,600
187, Barani Thermal Elec.	22,100	-	22,100	13,100	-	9,000	22,100
196, Durgapur Thermal Power	34,300	120,000	154,300	34,300	-	120,000	154,300
197, Kanpur Thermal Elec.	9,500	-	9,500	9,500	-	-	9,500
198, Barapani Hydroelectric	140,800	6,900	147,700	64,000	-	83,700	147,700
199, Trombay Fertilizer Plant	134,300	-	134,300	134,300	-	-	134,300
020, Rihand Valley Dev.	89,000	8,000	97,000	56,300	-	40,700	97,000
220, Cambay Thermal Elec.	152,000	119,200	271,200	90,200	-	181,000	271,200
208, Birsinghpur Power	76,800	-	76,800	66,700	-	10,100	76,800
221, Bandel Thermal Elec.	84,000	-	84,000	84,000	-	-	84,000
207, Talcher Thermal Power	85,400	200,000	285,400	85,400	-	200,000	285,400
134, IDBI (RCI)	612,000	-	612,000	362,000	-	250,000	612,000
238, Satpura	148,000	200,000	348,000	-	-	348,000	348,000
190, Pamba-Kakki	184,000	-	184,000	-	-	184,000	184,000
237, Delhi "C"	83,000	-	83,000	-	-	83,000	83,000
236, Ramagundam	37,000	-	37,000	-	-	37,000	37,000
268, Trombay Fertilizer/ Methanol	10,000	-	10,000	-	-	10,000	10,000

\* Requirements through 31 March 1964; obligation of future requirements pending Mission review of USAID continued association with this project.

\*\* This constitutes FY 1965 obligation schedule.

AID FORM 10-112 (7-62)	DATE PREPARED 1 November 1964	COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	MULTI-YEAR LISTING	TOTAL PROGRAM	E-4
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Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year	Operational Year	Budget	Budget +1	Budget +2	Budget +3	Budget +4	All Subsequent Years	Total All Years
				FY 1964	FY 1965	FY 1966	FY 1967	FY 1968	FY 1969	FY 1970		
386-AA	Energy Development	DL	385,200	96,000	97,193	8,000	-	-	-	-	-	490,393
		DG	4,536	74	64	-	-	-	-	-	-	4,600
		SA	-	-	-	-	-	-	-	-	-	-
		480	188,654	50,610	326,323	-	-	-	-	-	-	514,977
		L/C	55	16	15	-	-	-	-	-	-	70
		Coop. C.	-	-	-	-	-	-	-	-	-	-
386-AB	Transport Development	DL	225,632	15,850	45,800	-	-	-	-	-	-	271,432
		DG	2,875	-	-	-	-	-	-	-	-	2,875
		SA	-	-	-	-	-	-	-	-	-	-
		480	42,610	835	11,780	-	-	-	-	-	-	54,390
		L/C	-	-	-	-	-	-	-	-	-	-
		Coop. C.	-	-	-	-	-	-	-	-	-	-
386-AC	Agricultural Production	DL	30,000	-	60,950	-	-	-	-	-	-	90,950
		DG	23,317	1,436	2,002	2,281	2,289	2,147	1,773	1,193	424	35,426
		SA	-	-	-	-	-	-	-	-	-	-
		480	55,584	5,525	53,869	8,000	6,000	4,000	4,000	2,000	-	133,453
		L/C	45,541	703	2,093	2,163	2,255	2,110	1,694	990	393	57,239
		Coop. C.	-	-	-	-	-	-	-	-	-	-
386-AD	Foreign Private Investment in India	DL	-	-	-	-	-	-	-	-	-	-
		DG	577	-	-	-	-	-	-	-	-	577
		SA	-	-	-	-	-	-	-	-	-	-
		480	47,315	38,798	54,172	-	-	-	-	-	-	101,487
		L/C	140	-	-	-	-	-	-	-	-	140
		Coop. C.	-	-	-	-	-	-	-	-	-	-
386-AE	Health	DL	-	-	-	-	-	-	-	-	-	-
		DG	65,516	506	498	596	546	271	-	-	-	67,427
		SA	-	-	-	-	-	-	-	-	-	-
		480	198,764	60,196	29,492	-	-	-	-	-	-	228,256
		L/C	758	137	199	221	192	76	25	-	-	1,471
		Coop. C.	-	-	-	-	-	-	-	-	-	-

SECURITY CLASSIFICATION  
UNCLASSIFIED

AID FORM 10-112 (7-62)	DATE PREPARED 1 November 1964	COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION		MULTI-YEAR LISTING		TOTAL PROGRAM					E-4		
			UNCLASSIFIED											
Goal Code or Activity Code	Title of Goal or Activity		\$ 1,000 Oblig- ations	Cumulative Through Actual Year	Actual Year FY 1964	Operational Year FY 1965	Budget FY 1966	Budget +1 FY 1967	Budget +2 FY 1968	Budget +3 FY 1969	Budget +4 FY 1970	All Subsequent Years	Total All Years	
386-AF	Education		DL	-	-	-	2,340	2,804	3,984	3,980	3,630	1,000	17,738	
			DG	17,421	2,913	4,507	6,928	7,429	8,166	8,614	7,285	4,875	65,225	
			SA	-	-	-	-	-	-	-	-	-	-	-
			480	106,734	-	117,018	-	-	-	-	-	-	-	223,752
			L/C	2,931	982	1,383	2,547	3,487	4,102	4,600	4,231	3,568	26,849	
			Coop. C.	-	-	-	-	-	-	-	-	-	-	-
			Other	-	-	-	-	-	-	-	-	-	-	
386-AG	Minerals		DL	17,000	12,800	37,500	-	-	-	-	-	-	54,500	
			DG	-	-	-	-	-	-	-	-	-	-	-
			SA	-	-	-	-	-	-	-	-	-	-	-
			480	-	-	-	-	-	-	-	-	-	-	-
			L/C	-	-	-	-	-	-	-	-	-	-	-
			Coop. C.	-	-	-	-	-	-	-	-	-	-	-
			Other	-	-	-	-	-	-	-	-	-		
386-AH	Town-Centered Small Scale Industries		DL	10,000	-	-	-	-	-	-	-	-	10,000	
			DG	-	-	-	-	-	-	-	-	-	-	
			SA	-	-	-	-	-	-	-	-	-	-	
			480	-	-	-	-	-	-	-	-	-	-	
			L/C	-	-	-	-	-	-	-	-	-	-	
			Coop. C.	-	-	-	-	-	-	-	-	-	-	
			Other	-	-	-	-	-	-	-	-			
386-AI	Management and Administration		DL	-	-	-	-	-	-	-	-	-	-	
			DG	4,219	685	1,458	1,933	1,621	1,521	497	100	79	10,428	
			SA	-	-	-	-	-	-	-	-	-	-	
			480	154	154	-	-	-	-	-	-	-	-	154
			L/C	1,962	270	928	753	753	616	547	60	40	5,659	
			Coop. C.	-	-	-	-	-	-	-	-	-	-	
			Other	-	-	-	-	-	-	-	-			
386-AJ	Labor		DL	-	-	-	-	-	-	-	-	-	-	
			DG	1,227	94	123	125	110	101	104	-	-	1,787	
			SA	-	-	-	-	-	-	-	-	-	-	
			480	57,231	38,432	16,355	-	-	-	-	-	-	-	73,586
			L/C	428	55	434	432	432	282	281	-	-	2,289	
			Coop. C.	-	-	-	-	-	-	-	-	-	-	
			Other	-	-	-	-	-	-	-	-			

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BEST AVAILABLE

AID FORM 10-112 (7-62)	DATE PREPARED 1 November 1964	COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED		MULTI-YEAR LISTING		TOTAL PROGRAM					E-4			
			Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year FY 1964	Operational Year FY 1965	Budget FY 1966	Budget +1 FY 1967	Budget +2 FY 1968		Budget +3 FY 1969	Budget +4 FY 1970	All Subsequent Years
386-AK	Foreign Exchange and the Essentials of Long Range Investment Allocation Strategy	DL	824,204	225,000	209,717	225,000	225,000	-	-	-	-	-	-	1,483,921	
		DG	**18,366	-	-	-	-	-	-	-	-	-	-	-	18,366
		SA	-	-	-	-	-	-	-	-	-	-	-	-	-
		480	117,387	41,774	73,105	-	-	-	-	-	-	-	-	-	190,492
		L/C	-	-	-	-	-	-	-	-	-	-	-	-	-
		Coop. C.	-	-	-	-	-	-	-	-	-	-	-	-	-
		Other	-	-	-	-	-	-	-	-	-	-	-	-	-
386-AL	General (only Technical Support project; see pages AL-1 thru AL-28)	DL	-	-	-	-	-	-	-	-	-	-	-	-	
		DG	13,491	1,533	1,611	1,354	1,600	-	-	-	-	-	-	18,056	
		SA	-	-	-	-	-	-	-	-	-	-	-	-	
		480	-	-	-	-	-	-	-	-	-	-	-	-	
		L/C	5,737	1,869	1,891	1,787	1,900	-	-	-	-	-	-	11,315	
		Coop. C.	-	-	-	-	-	-	-	-	-	-	-	-	-
		Other	-	-	-	-	-	-	-	-	-	-	-	-	-
386-AM	Projects not addressed to any Goal	DL	7,800	7,800	6,300	-	-	-	-	-	-	-	-	14,100	
		DG	2,098	117	-	-	-	-	-	-	-	-	-	2,098	
		SA	-	-	-	-	-	-	-	-	-	-	-	-	
		480	-	-	2,089	-	-	-	-	-	-	-	-	2,089	
		L/C	284	26	-	-	-	-	-	-	-	-	-	284	
		Coop. C.	-	-	-	-	-	-	-	-	-	-	-	-	
		Other	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS : AID GOALS		DL	1,499,836	357,450	457,460	435,000*	227,804	3,984	3,980	3,630	1,000	-	-	2,632,694	
		DG	**153,643	7,358	10,263	13,217	13,595	11,206	10,985	8,578	5,378	-	-	226,865	
		SA	-	-	-	-	-	-	-	-	-	-	-	-	
		480	814,433	236,324	684,203	8,000	6,000	4,000	4,000	2,000	-	-	-	1,522,636	
		L/C	57,836	4,058	6,943	7,903	9,019	7,186	7,147	5,281	4,001	-	-	105,316	
		Coop. C.	-	-	-	-	-	-	-	-	-	-	-	-	-
		Other	-	-	-	-	-	-	-	-	-	-	-	-	-
		DL													
		DG													
		SA													
		480													
		L/C													
		Coop. C.													
		Other													

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\* Includes \$199,660 for projects to be determined later; see explanatory note page K-1a  
 \*\* Includes \$ 18,366 for TC-L

AID 10204 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	JUSTIFICATION TO	MANPOWER PROGRAMMING ANNEX
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Advice of Personnel Ceiling, INDIA # 3-FY-1965 provided for a ceiling of 30 admin funded and 80 program funded U.S. positions by the end of FY 1965.

The Mission has completed a thorough review of its current and anticipated direct hire U.S. employee staffing needs. Listed hereunder are the additional positions required over and above the current ceiling and those that can be accommodated within the current ceiling.

List of Additional U.S. Direct Hire Position Requirements (Over and Above Current Ceiling).

Ser. No.	Title	Admin Funds	Prog. Funds
<u>OFFICE OF THE ASSISTANT DIRECTOR FOR MANAGEMENT</u>			
<u>Secretarial Support Branch</u>			
1.	Secretary (Agriculture Division)		X
<u>Communications Media Branch</u>			
2.	Comm. Media Adv. (Utilization, Training & Research)		X
3.	Comm. Media Advisor (Films & Film Strips)		X
<u>OFFICE OF THE REGIONAL LEGAL ADVISOR</u>			
4.	Legal Advisor	X	
<u>OFFICE OF THE ASSISTANT DIRECTOR-CONTROLLER</u>			
<u>Budget &amp; Accounting Branch</u>			
5.	Accountant	X	
<u>Audit Branch</u>			
6.	Auditor/Bombay	X	
7.	Auditor/Calcutta	X	
8.	Auditor/Madras	X	
<u>OFFICE OF THE ASST. DIRECTOR FOR PROGRAM &amp; FINANCE</u>			
9.	Industrial Advisor (Resources)		X
<u>Program Operations Branch</u>			
10.	Asst. Program Officer (Oprns) 515/479 (Philip Merrill)		X

Ser. No.	Title	Admin Funds	Prog. Funds
<u>Program Operations Branch (Cont'd)</u>			
11.	Program Analyst 514/487 (Joseph Story)		X
<u>Loan Development Division</u>			
12.	Development Loan Officer		X
13.	Development Loan Officer		X
<u>Economic Analysis Staff</u>			
14.	Economist (Transportation)	X	
15.	Statistician (Manpower & Demographic Analysis)	X	
<u>OFFICE OF THE ASSISTANT DIRECTOR FOR HUMAN RESOURCES</u>			
<u>Education Division</u>			
16.	Deputy Chief Education Advisor		X
Plus 13 Direct Hire Indian National Positions for the Education Division			
<u>Agriculture Division</u>			
17.	Agriculture Economist		X
<u>OFFICE OF THE ASSISTANT DIRECTOR FOR PHYSICAL RESOURCES</u>			
<u>Management Division</u>			
18.	Public Admin Advisor		X
TOTAL:		<u>ADMIN</u> 7	<u>PROGRAM</u> 11

*Paulson*  
Henry W. Paulson  
Chief, Personnel Branch  
10/17/64

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List of New U.S. Direct-Hire Positions to be accommodated within current ceiling:

Ser. No.	Title of Position	Admin	Program	Remarks
<u>OFFICE OF THE DIRECTOR</u>				
1.	Special Assistant		X	Position to be respared from seq. 446/486.
<u>OFFICE OF ASSISTANT DIRECTOR FOR MANAGEMENT</u>				
2.	Management Analyst	X		In lieu of position 409/151
<u>Secretarial Support Branch</u>				
3.	Secretary (ED)		X	Position 469/225 to be assigned to Education Div.
<u>OFFICE OF ASSISTANT DIRECTOR FOR PROGRAM &amp; FINANCE</u>				
4.	Program Officer		X	In lieu of position 390/481.
<u>OFFICE OF ASSISTANT DIRECTOR FOR HUMAN RESOURCES</u>				
5.	Asst. Program Officer (Oprns)		X	SPAR changing current pan 334/483 to Office of Asst. Dir. for Human Rescs. under clearance.
<u>OFFICE OF ASSISTANT DIRECTOR FOR PHYSICAL RESOURCES</u>				
6.	Asst.Dev. Officer (Phy. Recs.)		X	In lieu of Secretary psn. formerly assigned to this office. However Secretary pan. 414/292 is needed in the AGR Div - See justification.
TOTAL:		<u>1</u>	<u>5</u>	

Following justification is presented in support of the additional positions:

OFFICE OF ASSISTANT DIRECTOR FOR MANAGEMENT:

One Communication Media Advisor (Utilisation, Training and Research) and one Communication Media Advisor (Films and Film Strips) are needed to augment the Communication Media staff to provide support to technical divisions and allow them to play an integral role in substantive extension and training programs. With the expanded activities of the Mission technical divisions and to support the L&S strategy, the addition of the above two positions is urgently needed.

One Management Analyst is needed to continuously monitor the staffing needs of the Mission including all types of personnel requirements, i.e. direct-hire, participant agency and contract, both short and long term. The Analyst will conduct studies concerning both current and projected manpower programming in accordance with the requirement of AID Manual Order 333.5, conduct strict tests of essentiality in determining manpower requirement in each of the activities of the Mission and assist technical divisions in analyzing their manpower requirements.

The Management Analyst will also perform assignments in developing the Mission administrative and procedural publication system and serve as Special Projects Officer to the Assistant Director for Management.

The Personnel Assistant position 409/151 will be abolished to provide manning for this new position.

OFFICE OF ASSISTANT DIRECTOR-CONTROLLER:

Justification along with SPARs for three Auditor positions and one Accountant position was forwarded to AID/W per TOAID A-615 dated October 21, 1964. The requirement of four additional positions cannot be met within the current allotment.

Requirement for 3 Auditor positions to be assigned to Congen posts is in accordance with AID/W Audit Division Recommendation No. 27 contained in the "Examination of the USAID Mission period ended March 31, 1964".

Mission FY-1965 audit schedule calls for 103 audits and the urgent assignment of 3 Auditors will reduce time

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now lost in travel and accomplish a more adequate audit coverage of the very large AID program in India.

OFFICE OF REGIONAL LEGAL ADVISOR:

The Regional Legal Advisor who is the representative in India and Nepal of the General Counsel, AID/W devotes upto 20% of his time to regional duties. He also renders legal assistance to the U.S. Embassies in New Delhi, Kathmandu and Ceylon and Peace Corps and USMSMI, as required. The complexities of the AID programs have increased. The recently established Loan Development Division in the Office of the Assistant Director for Program and Finance administers a portfolio of approximately 64 dollar loan authorizations totalling over 1.7 billion dollars and has greatly increased responsibilities in the Cooley loan area. Both the dollar and Cooley loan activities are the largest handled by any AID Mission in the world. With the increased autonomy of loan operations in India during the last one to two years, the nature of the responsibilities and activities of the Regional Legal Office, accordingly has changed drastically. The Regional Legal Advisor now has to devote no less than 80-90% of his time to this loan activity. This has been super-imposed on the already existing responsibilities of the Regional Legal Advisor. Accordingly, the addition of one more U.S. position is absolutely necessary to provide continuous legal support service to the loan activity, programming, administrative management and contractual activity and other operations of the Mission.

OFFICE OF ASSISTANT DIRECTOR FOR PROGRAM & FINANCE:

The development of the IAS and implementation of the U.S. Capital and Technical Assistance Program for India and the responsibility for country-wide economic analysis has increased the demands on the Office of the Assistant Director for Program and Finance and necessitates additional manpower assistance as indicated below in execution of the Mission's planning and program responsibilities:

Industrial Advisor - Resources: The incumbent of this position will report to the Assistant Director for Program & Finance. He will conduct research in supply and procurement operations of the GOI, monitor the industrial supply system, advise the GOI on possibilities of using dollar non-project assistance for procurement of U.S. materials and components, assist the borrowers in selecting suppliers and contractors and provide information on shipping requirements, small business notification procedures, procurement documentation and assist the Development Loan Officers in their activities relating to supply and procurement matters.

Program Officer : Psn 513/473 (in lieu of Psn 390/481)  
 Asst. Program Officer (Oprns) : Psn 515/479 (Merrill)  
 Program Analyst : Psn 514/487 (Story)

Loan Development Division:

The Loan Development Division's three Loan Officers administer a

portfolio of 63 dollar loan authorizations totalling over 1.7 billion dollars. In addition, there are 14 prospective dollar loans in various stages. In some, there is active preparation of the Capital Assistance papers. These total almost 300 million dollars. The Cooley loan portfolio consists of 49 loans authorized. The dollar-equivalent of these loans totals 101 million dollars. Cooley loans in prospect are 20 in number, with a value of 37 million dollars. A summary as of November 30, 1964 is as follows:

	<u>Number of Loans</u>	<u>Face amount in million dollars</u>
<b>Dollar Loans:</b>		
Authorized :	63	\$ 1,700
Prospective :	<u>14</u>	<u>300</u>
Total dollar loans :	<u>77</u>	<u>\$ 2,000</u>
<b>Cooley Loans:</b>		
Authorized :	49	\$ 101
Prospective :	<u>20</u>	<u>37</u>
Total Cooley Loans :	<u>69</u>	<u>\$ 138</u>
Grand Total :	<u>146</u>	<u>\$ 2,138</u>

The work of the Division has grown because of the cumulative effect of the rapid increase in the AID loan portfolio. The Loan Division is the focal point for all loan matters. Monitoring existing loans, preparation of Capital Assistance papers, investigation of loan applications, the correspondence, study, and discussions preliminary to the loan applications all have increased. Existing loans are a current source of questions and requests from present borrowers.

The Loan Division is now too thin to satisfactorily maintain its GOI, banking, and business contacts, visit prospective and existing project sites for evaluation and monitoring purposes, prepares in advance for loan discussions and negotiations, and to generally fulfill its responsibilities. The Loan Division has a large number of visiting American and Indian businessmen and finds it increasingly difficult to give them the time and attention they deserve. The addition of two Development Loan Officers will assist in the Mission Loan Development functions

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Economic Analysis Staff:

It has been determined that it would be in the best interest of the Mission to establish the following two positions in the Economic Analysis Staff of the Office of the Assistant Director for Program & Finance:

**Economist (Transportation)** - AID has a large investment in the Indian transport system and contemplates future activities in this sector. With the growth of the economy transport problems have become increasingly complex. Transportation policy and investments require careful and continuing study to ensure that the best choices are made and maximum benefits are derived from past contributions.

**Statistician (Manpower and Demographic Analyst)** - Human resources are fundamental to economic development. India, like other IDC's, faces the dual problem of mounting population pressure which threatens economic and social development and a scarcity of properly trained people to fill the ever-growing demands of the modernizing sectors. Over the next few years the highest priority must be given to programs relating to population control, training and institution building in the manpower field. Problems and activities in this area have reached the stage where great benefits could be derived from the full time services of an expert who would make studies, evaluate reports and activities and recommend programs and policy directions in this field.

OFFICE OF THE ASSISTANT DIRECTOR FOR HUMAN RESOURCES:

Agriculture Division:

The Mission believes there could be greater involvement of participating agencies, particularly the U.S. Department of Agriculture in the Agricultural program. The Mission recommends an early and independent appraisal to determine which positions and activities can be effectively converted to participant agency status. The appraisal should also include a review of additional functions which could be performed under contract, particularly with U.S. land-grant agricultural universities.

A short-term agricultural credit consultant and a similar agricultural cooperatives consultant are needed to study progress and problems in these areas and determine how these two programs can best be supported by the Mission.

The assignment of an agricultural Economist to the Agriculture Division staff is very essential to make an economic analysis of the overall agricultural aid program and coordinate Divisional activities with the Economic Analysis Staff of the Assistant Director for Program & Finance.

An additional American Secretary is needed to provide support to the expanded agricultural program. The Division's activities and workload have recently expanded two-fold. Much of the work is either classified or sensitive and premature disclosure of Mission/Division thinking on major agricultural issues may jeopardize the effectiveness of proposals or lead to misunderstanding between the Mission and the Government of India.

In addition to technical assistance, the Mission aids the agricultural sector through grants and loans, such assistance being designed to bolster certain selected agricultural efforts of the Government of India. Current activities in this category involves PL-480 food transfers, PL-480 grants and loans (river valley development, fertilizer mixer plants, agricultural universities, dairy development, foodgrain storage), PL-480 Cooley Loans, DLF Loans, etc. Other external assistance to agriculture comes from Ford Foundation, Rockefeller Foundation, Food & Agriculture Organization of the United Nations, United Nations Children Fund, Colombo Plan and other bilateral aid.

Education Division:

The Mission is attempting to mount an education program of much larger proportions than heretofore implemented. It is expected that FY-1965 financing for this program will be above \$12 million. This compares with FY-1964 program of about \$2.5 million. In future fiscal years it is tentatively planned that the program will continue at the level of magnitude comparable to that for FY-1965. The increase in planned dollar expenditures reflects increased USAID emphasis on and activity in various aspects of education: technology and vocational education, the sciences and higher education administration.

The program expansion implies, of course, a significant increase in the responsibilities and work-load which will have to be borne by the Education Division's direct-hire staff. The current staffing pattern does not provide sufficient positions or type of positions to discharge satisfactorily the heavier demands of the expanded program.

Health Division:

The Mission has six USAID program funded positions in the Nursing Program and one Nursing Education Advisor participating agency position. The Mission recommends that an independent appraisal survey team be designated to determine the feasibility and extent to which this activity should be supported. We propose that Miss Virginia Worsley, AID Liaison Officer, USPHS, Division of International Health and Miss Dotaline Allen, Dean, Nurse Educator, Indiana University be designated to make an approximate six weeks assessment for the Mission Director beginning January , 1965.

Under the LAS, Health priorities center on improvement of rural health services, especially through development of training facilities for paramedical personnel to staff primary health centers in towns and villages. An essential element in

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training and later to teach in schools where nurses and midwives are taught. Continuation of this project is designated to assist the GOI to meet the growing need for qualified nurse trainers to assist with the training and preparation of the numerous nurses required to staff the health centers and hospitals.

OFFICE OF ASSISTANT DIRECTOR FOR PHYSICAL RESOURCES:

A drastic increase in the Engineering Staff would be necessary to conduct the engineering review of contract and bidding documents as specified in the NESA Loan Handbook and in various Manual Orders. The review program is currently being conducted in accordance with the concepts stated below which the Mission believes meets legal requirements and adequately protects the Government interest. USAID will review contract documents for construction and/or procurement requiring competitive bidding and architectural, engineering or feasibility studies in the following manner:

Type-I: Projects for which an approved Consulting Engineering firm has been retained for general supervision and approval of the design and construction.

1. The review by the Mission of specifications and contracts will cover only the legal, financial and procedural aspects. To cover technical approval it will be assumed that the Consulting Engineers, have, if not actually prepared the documents, reviewed the specifications in final form and approved them. A statement from the Consulting Engineers to this effect should accompany the documents sent for our approval.

2. Review of the bids and awards will be on the same basis as (1) unless the GOI has not followed the Engineer's recommendation for award or if issues are raised by bidders that require AID's more detailed knowledge of the documents. In such case the specifications and bidding documents will be reviewed by the Mission engineers to determine the technical and price reasons for such decision or to expedite the project. The Mission engineers may consult with DGS&D, the owner, the Consulting Engineers or other to determine the reasonableness of the award. The Mission engineers will forward their recommendations to the Mission Loan Office.

Type-II: Projects for which no approved Consulting Engineering firm has been retained for general supervision and approval of designs and construction:

1. In addition to the review by the Legal and Loan Offices which will follow Type-I, the Mission engineers will review and approve:
  - a) Specifications before being sent out to bidders
  - b) List of bidders
  - c) Bids submitted, before award
  - d) Letter of award before publication
  - e) Draft contracts, before signing.

Type-III: Contracts for Architectural, Engineering and Feasibility Study Services.

1. The GOI submits to AID the name of the proposed contractors along-with scope of proposed contract for approval.
2. Mission engineers will review this information for technical coverage of the contract and their opinion of the capability of the contractor.
3. This review will be forwarded to the Loan Department for their consideration.
4. Loan Department will review and approve the draft contract.

An Assistant Development Officer (Physical Resources) is required for the effective planning, implementation and evaluation of the Mission's technical assistance programs in the field of industry, transport, minerals, power, water development. The incumbent of this position will serve as Assistant to the Chief of the Physical Resources Technical Assistance Division in the Office of the Physical Resources Development. This position is in lieu of a Secretary position formerly assigned to the Office Management Division:

Three years ago the public administrative program of the Mission was virtually non-existent. The Mission and AID/W, believing the time and circumstances were right for a vigorous effort in this field, recruited an advisor to shape a new and progressive program geared to the expanded GOI/USAID needs and desires.

A low-key program of a single project has been converted to three very significant projects: Government Operations; Executive Training and Development; and Top Management Control of Economic Enterprises. The expanded program resulted in the creation of a Public Administration, later Management Division. The cost of the effort has been enlarged to one commensurate to its impact and results with an expected program of \$1.5 million for FY-1965 (\$650 in regular budget plus \$850 supplemental).

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Net work programming (PERT-CPM) has been introduced, administrative reform has been undertaken, the Indian income tax system is being streamlined, survey research technology has been institutionalized and many important improvements in related fields in the public administration - management complex have been instituted. Technicians on board or projected for FY-65 (including short-term consultants) total 33. The number of participants per year has grown each year from the original three or four and may reach 204 this year.

A Mission staff increase necessarily followed. The single American Advisor position has grown to two. Five local-hire Indian positions were added. But this growth has not kept pace with the greatly expanded work load. All these activities required planning and implementation accompanied by a host of administrative documents. For the past year even an average overtime schedule of twenty hours per week per staff member and a redistribution of duties and responsibilities has not permitted the Division to keep properly ahead of current operations.

Most of the FY-1965 program remains to be implemented. Whether this can be accomplished with the present staff is a matter of very real concern. Even faced with this situation, additional responsibilities have been added. The Division Chief has been made Chairman of a Mission task force to map out a hard-hitting, effective Rural Public Works Program. This is one of the top priority items in the Mission's Statement of Interim Strategy.

The Division also has been given extensive responsibility in connection with an additional top priority Interim Strategy project - modernizing the industrial slum city of Howrah. The exploration of the feasibility of this project, a city of half a million people at a cost of perhaps \$70 million in rupees and dollars already has taken time and will require much more. This will continue for some months, whether the project is undertaken or not. If undertaken, an additional ten or twelve technical advisors will be needed.

The completion of these two priority assignments and the implementation of the FY-1965 program requires a minimum of an additional highly qualified Public Administration Advisor on the Mission staff at once in addition to specialized technicians or these important undertakings will be seriously impaired. Because of the responsibilities and priorities involved the additional advisor should be at the R-2 level, with a responsible and broad background, to be assigned to these Special Projects. One or more advisors with the requisite qualifications are thought to be available. One of them, Leon Wolcott may be secured through the issuance of a SPAR or on a personal services contract. The method used is less important than filling the need as soon as possible,

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	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)				(9)				(10)				(11)				(12)				
POSITION TITLE	IDENTIFICATION CODE	OCCUPATION CODE	PAY SCHEDULE AND GRADE	SOURCE OF FUNDS AND PROJECT NO.	AG. CODE	END FY	FISCAL YEAR 65				FISCAL YEAR 66				FISCAL YEAR 67				FISCAL YEAR				FISCAL YEAR					
						64	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th		
OFFICE OF THE DIRECTOR - AID DIRECT HIRE POSITIONS																												
Mission Director	AGKM	A034000	FA-03	A		1	1			1	1				1	1												
Dep Mis Dir	AGKM	A034001	FSR-01	A		1	1			1	1				1	1												
Room Adv	AGKM	A011000	FSR-01	N990000		1	1			1	1	1																
Program Analyst	AGKM	A030102	FSR-06	N990000		1	1			1	1				1	1												
Exec Asst	AGKM	A034106	FSR-06	A		1	1			1	1				1	1												
Secretary	AGKM	A031800	FSR-02	A		1	1		1	1					1	1												
Dev Off Bgr	AGKM	A034009	FSR-07	N990000		1	1			1	1				1	1												
Special Assistant	AGKM	A034004	FSR-06	N990000					1	1	1				1	1												
OFFICE OF REGIONAL LEGAL ADVISOR - AID DIRECT HIRE POSITIONS																												
Regional Legal Adv	AGKM	A090501	FSR-02	A		1	1			1	1				1	1												
Legal Advisor	AGKM	A090500	FSR-03	A		1	1			1	1				1	1												
Chief Legal Asst	AHKM	-	FSL-02	A		1	1			1	1				1	1												
Clerk-Stenographer	AHKM	-	FSL-07	A		1	1			1	1				1	1												
OFFICE OF THE ASSISTANT DIRECTOR FOR MANAGEMENT																												
Asst Director Mgmt	AGKM	A034002	FSR-01	A		1	1			1	1				1	1												
Executive Officer	AGKM	A034101	FSR-02	A		1	1			1	1				1	1												
Management Analyst	AGKM	A034300	FSR-02	A		1	1			1	1				1	1												
Admin Assistant	AHKM	-	FSL-06	N990000		1	1			1	1				1	1												
Clerk-Stenographer	AHKM	-	FSL-07	A		1	1			1	1				1	1												
Secretarial Support Branch																												
Secretary	AGKM	A031800	FSS-07	A		1	1			1	1				1	1												
Secretary	AGKM	A031800	FSS-07	A		1	1			1	1				1	1												
Secretary	AGKM	A031800	FSS-07	N990000		1	1		1																			
Secretary	AGKM	A031800	FSS-07	N990000		1	1		1	1	1				1	1												
Secretary	AGKM	A031800	FSSR-08	N990000		1	1		1	1	1				1	1												
Secretary	AGKM	A031800	FSSR-07	N990000		1	1		1	1	1				1	1												
Secretary	AGKM	A031800	FSS-07	A		1	1	1																				
Secretary	AGKM	A031800	FSS-07	A		1	1		1	1	1				1	1												
Secretary	AGKM	A031800	FSS-08	N990000		1	1		1	1	1				1	1												
Secretary	AGKM	A031800	FSS-08	N990000		1	1		1	1	1				1	1												
Secretary	AGKM	A031800	FSS-07	N990000		1	1		1	1	1				1	1												
Secretary	AGKM	A031800	FSSR-07	N990000		1	1		1	1	1				1	1												
Secretary	AGKM	A031800	FSSR-08	N990000		1	1		1	1	1				1	1												
Secretary	AGKM	A031800	FSS-07	N990000		1	1		1	1	1				1	1												
Secretary	AGKM	A031800	FSS-07	N990000		1	1		1	1	1				1	1												
(Charged to Technician pen. Asst Dev Off Pay Recd)																												
Personnel Branch																												
Pers Off	AGKM	A020100	FSR-03	A		1	1			1	1				1	1												
Pers Asst	AGKM	A020101	FSR-06	A		1	1			1	1				1	1												
(ReSPAR'd to Management Analyst pen)																												
Administrative Section																												
Admin Assistant	AHKM	-	FSL-05	N990000		1	1			1	1				1	1												
Principal Clerk	AHKM	-	FSL-07	N990000		1	1			1	1				1	1												
Indian Personnel Section																												
Sr. Personnel Asst	AHKM	-	FSL-03	A		1	1			1	1				1	1												
Personnel Asst	AHKM	-	FSL-06	A		1	1			1	1				1	1												
Clerk-Stenographer	AHKM	-	FSL-07	N990000		1	1			1	1				1	1												

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POSITION TITLE	IDENTIFICATION CODE	OCCUPATION CODE	PAY SCHEDULE AND GRADE	SOURCE OF FUNDS AND PROJECT NO.	AG. CODE	END FY. 64	FISCAL YEAR 65				FISCAL YEAR 66				FISCAL YEAR 67				FISCAL YEAR				FISCAL YEAR					
							1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th		
<b>Indian Personnel Section</b>																												
	Clerk-Stenographers	AHKM	-	FSLs-08	N990000		6	6			6	6			6	6			6									
<b>U.S. Personnel Section</b>																												
	Chief Asst (Pers)	AHKM	-	FSL-02	N990000		1	1			1	1			1	1			1									
	Personnel Asst (Prog)	AHKM	-	FSL-04	N990000		1	1			1	1			1	1			1									
	Personnel Assistant	AHKM	-	FSL-06	A		1	1			1	1			1	1			1									
	Admin Assistant	AHKM	-	FSL-06	N990000		1	1			1	1			1	1			1									
	Principal Clerk	AHKM	-	FSL-07	A		1	1			1	1			1	1			1									
	Principal Clerk	AHKM	-	FSL-07	N990000		1	1			1	1			1	1			1									
<b>Travel Section</b>																												
	Admin Assistant (Trl)	AHKM	-	FSL-04	N990000		1	1			1	1			1	1			1									
	Admin Assistant (Trl)	AHKM	-	FSL-05	A		1	1			1	1			1	1			1									
	Admin Assistant (Trl)	AHKM	-	FSL-06	N990000		1	1			1	1			1	1			1									
	Admin Assistant	AHKM	-	FSL-06	N990000		1	1			1	1			1	1			1									
<b>Field Employees</b>																												
	Area Gen Ser Asst (Bom)	AHKM	-	FSL-04	N990000		1	1			1	1			1	1			1									
	Clerk II (Warehouse)	AHKM	-	FSL-08	N990000		1	1			1	1			1	1			1									
	Chauffeur (Bombay)	AHKM	-	FSL-11	N990000		1	1			1	1			1	1			1									
	Clerk III (Inventory)	AHKM	-	FSL-09	N990000		1	1			1	1			1	1			1									
	Area Gen Ser Asst (Cal)	AHKM	-	FSL-04	N990000		1	1			1	1			1	1			1									
	Warehouseman	AHKM	-	FSL-07	N990000		1	1			1	1			1	1			1									
	Driver	AHKM	-	FSL-10	N990000		1	1			1	1			1	1			1									
	Helper	AHKM	-	FSL-12	N990000		1	1			1	1			1	1			1									
	Area Gen Ser Asst (Mad)	AHKM	-	FSL-04	N990000		1	1			1	1			1	1			1									
	Admin Asst	AHKM	-	FSL-06	N990000		1	1			1	1			1	1			1									
	Driver	AHKM	-	FSL-11	N990000		1	1			1	1			1	1			1									
	Area Gen Ser Asst (Triv)	AHKM	-	FSL-06	N990000		1	1			1	1			1	1			1									
	Warehouseman (Madras)	AHKM	-	FSL-07	N990000		1	1			1	1			1	1			1									
	Area Gen Ser Asst (Hyd)	AHKM	-	FSL-06	N990000		1	1			1	1			1	1			1									
	Driver	AHKM	-	FSL-11	N990000		1	1			1	1			1	1			1									
<b>General Services Branch</b>																												
	Gen Ser Off Housing	AGKM	A034104	FSR-05	N990000		1	1			1	1			1	1			1									
	Chief Admin Asst	AHKM	-	FSL-02	N990000		1	1			1	1			1	1			1									
	Admin Asst	AHKM	-	FSL-06	A		1	1			1	1			1	1			1									
	Principal Clerk	AHKM	-	FSL-07	N990000		1	1			1	1			1	1			1									
<b>Housing &amp; Facilities Section</b>																												
	Sr Gen Ser Asst Hous	AHKM	-	FSL-03	N990000		1	1			1	1			1	1			1									

## MANPOWER PROGRAMMING ANNEX

LINE	MPA		DATA CURRENT AS OF: November 1, 1964				COUNTRY OR ORGANIZATION INDIA				COUNTRY ORGANIZATION NO. 386				SECURITY CLASSIFICATION UNCLASSIFIED													
	(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)				(9)				(10)				(11)				(12)			
	POSITION TITLE		IDENTIFICATION CODE	OCCUPATION CODE	PAY SCHEDULE AND GRADE	SOURCE OF FUNDS AND PROJECT NO.	AG. CODE	END FY. 64	FISCAL YEAR 65				FISCAL YEAR 66				FISCAL YEAR 67				FISCAL YEAR				FISCAL YEAR			
								1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	
<b>Housing &amp; Facilities Section</b>																												
	Gen Ser Asst	AHKM	-	FSL-06	N990000		1	1			1	1			1	1												
	Clerk-Stenographer	AHKM	-	FSL-07	N990000		1	1			1	1			1	1												
	Clerk-Stenographer	AHKM	-	FSL-07	A		1	1			1	1			1	1												
<b>Maintenance &amp; Repair Section</b>																												
	Sr Gen Ser Asst	AHKM	-	FSL-03	N990000		1	1			1	1			1	1												
	Gen Ser Asst	AHKM	-	FSL-04	A		1	1			1	1			1	1												
	Gen Ser Asst	AHKM	-	FSL-06	N990000		2	2			2	2			2	2												
	Principal Clerk	AHKM	-	FSL-07	N990000		3	3			3	3			3	3												
	Accountant (Stores)	AHKM	-	FSL-06	N990000		1	1			1	1			1	1												
	Senior Clerk (Maint)	AHKM	-	FSL-08	N990000		1	1			1	1			1	1												
	Senior Carpenter	AHKM	-	FSL-09	N990000		1	1			1	1			1	1												
	Carpenter	AHKM	-	FSL-10	N990000		5	5			5	5			5	5												
	Sr Air Cond Mech	AHKM	-	FSL-08	N990000		1	1			1	1			1	1												
	Air Cond Mech/Elec	AHKM	-	FSL-09	N990000		2	2			2	2			2	2												
	Electrician	AHKM	-	FSL-10	N990000		4	4			4	4			4	4												
	Plumber Mason	AHKM	-	FSL-10	N990000		2	2			2	2			2	2												
	Painter	AHKM	-	FSL-11	N990000		2	2			2	2			2	2												
	Bearer	AHKM	-	FSL-12	N990000		1	1			1	1			1	1												
<b>Special Services Section</b>																												
	Gen Ser Asst	AHKM	-	FSL-04	N990000		1	1			1	1			1	1												
	Gen Ser Asst	AHKM	-	FSL-05	A		1	1			1	1			1	1												
	Clerk-Stenographer	AHKM	-	FSL-07	A		1	1			1	1			1	1												
	Supervisor (Watchman)	AHKM	-	FSL-08	N990000		1	1			1	1			1	1												
	Chief Tel Oper (Recp)	AHKM	-	FSL-07	N990000		1	1			1	1			1	1												
	Telephone Oper (Recp)	AHKM	-	FSL-08	N990000		3	3			3	3			3	3												
	Receptionist	AHKM	-	FSL-08	N990000		4	4			4	4			4	4												
	Mech (Recp Equip)	AHKM	-	FSL-09	N990000		1	1			1	1			1	1												
	Sr Mech Oper	AHKM	-	FSL-10	A		1	1			1	1			1	1												
	Mimeograph Operator	AHKM	-	FSL-11	N990000		4	4			4	4			4	4												
	Supv Custod (Grounds)	AHKM	-	FSL-08	N990000		1	1			1	1			1	1												
	Senior Sweeper	AHKM	-	FSL-11	N990000		1	1			1	1			1	1												
	Sweeper	AHKM	-	FSL-12	N990000		32	32			32	32			32	32												
	Sweeper	AHKM	-	FSL-12	A		1	1			1	1			1	1												
	Bearer	AHKM	-	FSL-12	N990000		3	3			3	3			3	3												
	Gardener	AHKM	-	FSL-12	N990000		5	5			5	5			5	5												
	Gardener	AHKM	-	FSL-12	A		1	1			1	1			1	1												
<b>AID Direct Contracts</b>																												
	Watchman	DH	-	-	N990000		9	12	10	2	2																	
	Admin Asst	DH	-	-	N990000						1	1																
<b>Property Management Branch</b>																												
	Gen Ser Off	AGKM	A034104	FSR-05	N990000						1	1	1		1	1												

MANPOWER PROGRAMMING ANNEX

LINE	DATA CURRENT AS OF:			COUNTRY OR ORGANIZATION			COUNTRY OR ORGANIZATION NO.				SECURITY CLASSIFICATION																	
	November 1, 1964			INDIA			386				UNCLASSIFIED																	
	(1) POSITION TITLE	(2) IDENTIFICATION CODE	(3) OCCUPATION CODE	(4) PAY SCHEDULE AND GRADE	(5) SOURCE OF FUNDS AND PROJECT NO.	(6) AG. CODE	(7) END FY. 64	(8) FISCAL YEAR 65				(9) FISCAL YEAR 66				(10) FISCAL YEAR 67				(11) FISCAL YEAR				(12) FISCAL YEAR				
							1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th		
	Chief Admin Asst	AHKM	-	FSL-02	N990000		1	1		1	1		1	1		1												
	Clerk-Stenographer	AHKM	-	FSL-07	N990000		1	1		1	1		1	1		1												
	Clerk-Stenographer	AHKM	-	FSL-08	N990000		1	1		1	1		1	1		1												
	Bearer	AHKM	-	FSL-12	N990000		1	1		1	1		1	1		1												
	<b>Stock Control Section</b>																											
	Accountant Supv	AHKM	-	FSL-05	N990000		1	1		1	1		1	1		1												
	Acct Sr Journeyman	AHKM	-	FSL-06	N990000		1	1		1	1		1	1		1												
	Principal Clerk Rec	AHKM	-	FSL-07	N990000		1	1		1	1		1	1		1												
	Princl Clk Stock Rec	AHKM	-	FSL07	N990000		1	1		1	1		1	1		1												
	Sr Clk Store Rec	AHKM	-	FSL-08	N990000		1	1		1	1		1	1		1												
	<b>Warehouse Section</b>																											
	Gen Ser Asst	AHKM	-	FSL-04	A		1	1		1	1		1	1		1												
	<b>Receiving &amp; Inventory Unit</b>																											
	Admin Asst Insp	AHKM	-	FSL-06	A		1	1		1	1		1	1		1												
	Admin Asst Prop	AHKM	-	FSL-06	N990000		1	1		1	1		1	1		1												
	Princl Clk Inventory	AHKM	-	FSL-07	N990000		1	1		1	1		1	1		1												
	<b>Supply Unit</b>																											
	Princl Clk Storage	AHKM	-	FSL-07	N990000		2	2		2	2		2	2		2												
	Bearer	AHKM	-	FSL-12	N990000		1	1		1	1		1	1		1												
	<b>Issue Unit</b>																											
	Princl Clk Inventory	AHKM	-	FSL-07	N990000		2	2		2	2		2	2		2												
	Princl Clk Issue	AHKM	-	FSL-07	N990000		1	1		1	1		1	1		1												
	Princl Clk Storage	AHKM	-	FSL-07	N990000			1		1	1		1	1		1												
	Senior Bearer	AHKM	-	FSL-11	N990000		1	1		1	1		1	1		1												
	Bearer	AHKM	-	FSL-12	N990000		13	13		13	13		13	13		13												
	<b>Storage &amp; Services Unit</b>																											
	Princl Clk Storage	AHKM	-	FSL-07	N990000		1	1		1	1		1	1		1												
	Sr Mech Equip	AHKM	-	FSL-08	N990000		1	1		1	1		1	1		1												
	Mech Air Cond(Refg)	AHKM	-	FSL-09	N990000		2	2		2	2		2	2		2												
	Carpenter Supv	AHKM	-	FSL-09	N990000		1	1		1	1		1	1		1												
	Carpenter	AHKM	-	FSL-10	N990000		1	1		1	1		1	1		1												
	Polisher	AHKM	-	FSL-11	N990000		4	4		4	4		4	4		4												
	Sweeper	AHKM	-	FSL-12	N990000		2	2		2	2		2	2		2												
	<b>Motor Transport Branch</b>																											
	Gen Ser Off	AGKM	A034104	FSR-04	N990000		1	1		1	1		1	1		1												
	Gen Ser Asst	AHKM	-	FSL-04	A		1	1		1	1		1	1		1												







## MANPOWER PROGRAMMING ANNEX

LINE	(1) POSITION TITLE	(2) IDENTIFICATION CODE	(3) OCCUPATION CODE	(4) PAY SCHEDULE AND GRADE	(5) SOURCE OF FUNDS AND PROJECT NO.	(6) AG. CODE	(7) END FY	(8) COUNTRY OR ORGANIZATION		(9) COUNTRY OR ORGANIZATION NO.		(10) SECURITY CLASSIFICATION												
								INDIA		386		UNCLASSIFIED												
								November 1, 1964		65		66		67										
						FY 64		1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	
	Development Grants & Special Audit Section																							
	Audit Supervisor	AHKM	-	FSL-03	A		1	1				1	1			1	1							
	Senior Auditor	AHKM	-	FSL-04	A		1	1				1	1			1	1							
	Auditor	AHKM	-	FSL-05	A		1	1				1	1			1	1							
	Junior Auditor	AHKM	-	FSL-06	N990000		1	1				1	1			1	1							
	Contract & Self Audit Section																							
	Senior Auditor	AHKM	-	FSLs-04	A		2	2				2	2			2	2							
	Auditor	AHKM	-	FSLs-05	A		2	2				2	2			2	2							
	OFFICE OF PROGRAM AND FINANCE - AID DIRECT HIRE POSITIONS																							
	Asst Dir	AGKM		A034002 FSR-01	A		1	1				1	1			1	1							
	Incl Adv Resources	AGKM		FSR-04	N990000							1	1			1	1							
	Program Division																							
	Program Officer	AGKM	A030100	FSR-02	N990000							1	1	1		1	1			1	(In lieu of Asst. Prog Off Oprns Psn. 390/481)			
	Program Operations Staff																							
	Asst Program Off	AGKM	A030102	FSR-03	N990000		1	1				1	1			1	1			1				
	Asst Prog Off Oprns	AGKM	A030101	FSR-05	N990000		1	1				1												
	Asst Prog Off Oprns	AGKM	A030101	FSR-04	N990000							1				1				1				
	Program Analyst	AGKM	A030102	FSR-06	N990000		1	1				1	1			1	1			1	(To be Re-Spec'd to Spec. Asst. in Office of Director)			
	Program Analyst	AGKM	A030102	FSR-06	N990000							1	1			1	1			1				
	AID Direct Contract																							
	Research Assistant	DG--	-		N990000							1				1								
	Program Mgmt Spec	AHKM	-	FSL-01	N990000		1	1				1	1			1	1			1				
	Program Analyst	AHKM	-	FSL-04	N990000		1	1				1	1			1	1			1				
	Admin Assistant	AHKM	-	FSL-06	A		1	1				1	1			1	1			1				
	Principal Clerk	AHKM	-	FSL-07	N990000		1	1				1	1			1	1			1				
	Clerk Stenographer	AHKM	-	FSLs-07	N990000		2	2				2	2			2	2			2				
	Food For Peace Staff																							
	Food for Peace Off	AGKM	A045009	FSR-02	N990000		1	1				1	1			1	1			1				
	Asst Prog Off Oprns	AGKM	A030101	FSR-04	N990000		1	1				1	1			1	1			1				
	Sr Anal Food Prog																							
	Clerk Stenographer	AHKM	-	FSL-03	N990000		1	1				1	1			1	1			1				
	Participant Training Staff																							
	Trg Off	AGKM	A171027	FSR-03	N990000		1	1				1	1			1	1			1				
	Asst Trg Off	AGKM	A171031	FSR-05	N990000		1	1				1	1			1	1			1				



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LINE	DATA CURRENT AS OF:		COUNTRY OR ORGANIZATION				COUNTRY OR ORGANIZATION NO.				SECURITY CLASSIFICATION																	
	November 1, 1964		INDIA				386				UNCLASSIFIED																	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)				(9)				(10)				(11)				(12)				
POSITION TITLE	IDENTIFICATION CODE	OCCUPATION CODE	PAY SCHEDULE AND GRADE	SOURCE OF FUNDS AND PROJECT NO.	AG. CODE	END FY	FISCAL YEAR 65				FISCAL YEAR 66				FISCAL YEAR 67				FISCAL YEAR				FISCAL YEAR					
							1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th		
<b>Agriculture Division - AID Direct Hire Positions</b>																												
	Food Agri Off	AGKM	1045000	FSR-01	N990000		1	1			1	1			1	1												
	Dep Food Agr Off	AGKM	1045001	FSR-02	N990000		1	1			1	1			1	1												
	Agricultural Officer	AGKM	1034009	FSR-03	N990000		1	1			1	1			1	1												
	Agr Economic Advisor	AGKM	1011050	FSR-03	N990000						2	2			2	2												
	Admin Asst	AHKM	-	FSL-04	N990000		1	1			1	1			1	1												
<b>Administrative Support Section</b>																												
	Admin Asst	AHKM	-	FSL-05	N990000		1	1			1	1			1	1												
	Admin Asst	AHKM	-	FSL-06	N990000		1	1			1	1			1	1												
	Clerk-Stenographer	AHKM	-	FSLs-07	N990000		2	2			2	2			2	2												
	Clerk-Stenographer	AHKM	-	FSLs-08	N990000		2	2			2	2			2	2												
<b>Agriculture Program Office</b>																												
	Program Analyst	AHKM	-	FSLs-04	N990000		3	3			3	3			3	3												
	Clerk-Stenographer	AHKM	-	FSL-07	N990000		1	1			1	1			1	1												
<b>Soil and Water Management Branch</b>																												
	Soils Adv Mgt Consv	AGKM	1047003	FSR-03	N120156		1	1			1	1			1	1												
	Soils Adv Mgt Consv	AGKM	1047003	FSR-04	N120156		1	1			1	1			1	1												
	Irrig Farm Adv	AGKM	1045004	FSR-04	N120156		1	1			1	1			1	1												
	Irrig Farm Adv	AGKM	1045004	FSR-04	N120156		1	1	1																			
	Irrig Farm Adv	AGKM	1045004	FSR-04	N120156				1		1	1			1	1												
	Agr Engr Consv	AGKM	1089004	FSR-04	N120156		1	1			1	1			1	1												
	Agr Engr Irrig	AGKM	1089005	FSR-04	N120156		1	1	1																			
	Agr Engr Irrig	AGKM	1089005	FSR-04	N120156						1	1			1	1												
	Soils Adv Mgt Consv	AGKM	1047003	FSR-04	N120156		1	1			1	1			1	1												
<b>PASA - Direct Hire</b>																												
	Hydrologist	BGKM	-	FSR-04	N120156	F					1	1	1		1	1												
	Soils Adv Mgt Consv	BGKM	1047003	FSR-04	N120156	K					1	1	1		1	1												
	Agr Engr Drainage	BGKM	1089006	FSR-04	N120156	K					1	1	1		1	1												
	Technical Asst	AHKM	-	FSL-03	N990000				1		1	1			1	1												
	Clerk-Stenographer	AHKM	-	FSL-07	N990000		1	1			1	1			1	1												
<b>Field Employees</b>																												
	Chauffeur	AHKM	-	FSLs-11	N990000		4	4			4	4			4	4												
<b>AID Direct Contracts</b>																												
	Demonstration Asst	DH	-		N990000		2	2	2																			
<b>Agriculture Production Branch</b>																												
	Agr Adv	AGKM	1045008	FSR-02	N130061		1	1			1	1			1	1												
	Soils Adv Fertl	AGKM	1047006	FSR-04	N130061		1	1			1	1			1	1												
	Agr Adv Extn	AGKM	1047007	FSR-04	N130061		1	1			1	1			1	1												
	Agr Adv Seed Imp	AGKM	1047105	FSR-04	N130061		1	1			1	1			1	1												





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LINE	MPA	DATA CURRENT AS OF:		COUNTRY OR ORGANIZATION				COUNTRY OR ORGANIZATION NO.								SECURITY CLASSIFICATION												
		November 1, 1964		INDIA				386								UNCLASSIFIED												
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)				(9)				(10)				(11)				(12)			
									POSITION TITLE	IDENTIFICATION CODE	OCCUPATION CODE	PAY SCHEDULE AND GRADE	SOURCE OF FUNDS AND PROJECT NO.	AG. CODE	END FY	FISCAL YEAR 65				FISCAL YEAR 66				FISCAL YEAR 67				FISCAL YEAR
							1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th		
		Land & Water Use	EG--					1			1				1	1												
		Student Welfare	EG--				1	1			1	1																
		Soil Science	EG--							1	1				1	1												
		Home Science	EG--														2											
		Dairy Adv	EG--							1	1				1	1												
		Basic Science	EG--											1	1													
		Admin Asst	EH--				1	1			1	1			1	1												
		Driver	EH--				3	3			3	3			3	3												
		Tech Asst	EH--				3	3			3	3			3	3												
		Bldg Evaluator	EH--				1	1			1	1			1	1												
		Clerk Steno	EH--				1	1			1	1			1	1												
		Cafeteria Supdt	EH--				1	1			1	1			1	1												
		University of Illinois																										
		Univ Admin Adv	EG--							1					1	1												
		Agr Ext Gen Adv	EG--				1	1	1																			
		Agr Ext Gen Adv	EG--												1	1												
		Ext Adv Trng	EG--							1	1				1	1												
		Agr Resc Adv	EG--						1	1	1				1	1												
		Agr Coll Adv	EG--						1	1	1				1	1												
		Vet Coll Adv	EG--						1	1	1				1	1					1							
		Campus Dev	EG--						1	1	1				1	1												
		Agr Eng Adv	EG--														1											
		Home Sc Adv	EG--														1											
		Registrar Conslt	EG--						1	1	1		1															
		Controller Conslt	EG--						1	1	1																	
		Student Welfare Con	EG--							1	1	1																
		Admin Asst	EH--				1	1			1	1			1	1												
		Secretary	EH--						1		1	1			1	1												
		Farm Planning Asst	EH--						2		2	2			2	2												
		Driver	EH--				1			4	4				4	4												
		Stenographer	EH--						1		1	1			1	1												
		Exec Asst	EH--				1	1			1	1			1	1												
		Office Asst	EH--						1		1	1			1	1												
		Ohio State University																										
		Agr Ext Admin Adv	EG--				1	1			1	1			1	1												
		Agr Res Adv	EG--				1	1			1	1			1	1												
		Agr Trng Adv	EG--							1	1				1	1												
		Agr Coll Conslt	EG--						1	1																		
		Agr Coll Advisor	EG--										1		1	1												
		Agr Eng Adv	EG--					1		1					1	1												
		Agr Eng Adv	EG--											1	1													
		Home Sc Adv	EG--							1	1	1	1		1	1												



## MANPOWER PROGRAMMING ANNEX

LINE	MPA	DATA CURRENT AS OF:		COUNTRY OR ORGANIZATION				COUNTRY OR ORGANIZATION NO.				SECURITY CLASSIFICATION																
		November 1, 1964		INDIA				386				UNCLASSIFIED																
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)				(9)				(10)				(11)				(12)			
POSITION TITLE	IDENTIFICATION CODE	OCCUPATION CODE	PAY SCHEDULE AND GRADE	SOURCE OF FUNDS AND PROJECT NO.	AG. CODE	END FY	FISCAL YEAR 65				FISCAL YEAR 66				FISCAL YEAR 67				FISCAL YEAR				FISCAL YEAR					
							1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th		
Kansas State University																												
	Univ Admin Adv	EG		N110028					1	1				1	1													
	Agr College Adv	EG		N110028		1	1			1	1			1	1													
	Agr Resc Adv	EG		N110028						1	1			1	1													
	Agr Extn Gen Adv	EG		N110028		1	1			1	1			1	1		1											
	Agr Extn Trng Adv	EG		N110028						1	1			1	1													
	Home Science Adv	EG		N110028			1			1	1			1	1													
	Campus Dev Conslt	EG		N110028			1		1																			
	Controller Conslt	EG		N110028				1		1																		
	Registrar Conslt	EG		N110028					1	1	1																	
	Horticulture Adv	EG		N110028		1	1			1																		
	Soil & Water Adv	EG		N110028												1												
	Vet Coll & Dairy Adv	EG		N110028					1	1				1	1													
	Basic Sc Adv	EG		N110028												1												
	Admin Asst	EH		N110028		2	2			2	2			2	2													
	Res Asst Poultry	EH		N110028		1	1			1	1			1	1													
	Driver	EH		N110028		7	9			9	9			9	9													
	Agr Info Off	EH		N110028		1	1			1	1			1	1													
	Survey Off	EH		N110028		1	1			1	1			1	1													
	Stenographer	EH		N110028		1	1			1	1			1	1													
	Sub Matter Spec	EH		N110028		1	1			1	1			1	1													
University of Tennessee																												
	Univ Admin Adv	EH		N110028		1	1			1	1			1	1													
	Agr Resc Adv	EG		N110028		1	1																					
	Agr Resc Adv	EG		N110028								1		1	1													
	Agr Extn Gen Adv	EG		N110028		1	1			1	1			1	1													
	Agr Extn Trng	EG		N110028						1	1			1	1													
	Agr College Adv	EG		N110028		1	1			1	1			1	1		1											
	Farm Mgt Adv	EG		N110028				1		1	1			1	1													
	Vet College Adv	EG		N110028				1		1	1			1	1													
	Controller Conslt	EG		N110028				1		1	1																	
	Registrar Conslt	EG		N110028						1	1			1	1													
	Campus Dev Conslt	EG		N110028						1	1		1															
	Home Science Adv	EG		N110028								1		1	1													
	Agr Eng Adv	EG		N110028													1											
	Soil & Water Adv	EG		N110028													1											
	Basic Conslt	EG		N110028													1											
	Admin Asst	EH		N110028		2	2			2	2			2	2													
	Driver	EH		N110028		4	4			4	4			4	4													
	Extn Asst	EH		N110028		1	1			1	1			1	1													
	Secretary	EH		N110028		1	1			1	1			1	1													

## MANPOWER PROGRAMMING ANNEX

L I N E	MPA	DATA CURRENT AS OF:		COUNTRY OR ORGANIZATION			COUNTRY OR ORGANIZATION NO.				SECURITY CLASSIFICATION																
		November 1, 1964		INDIA			386				UNCLASSIFIED																
		(1) POSITION TITLE	(2) IDENTIFICATION CODE	(3) OCCUPATION CODE	(4) PAY SCHEDULE AND GRADE	(5) SOURCE OF FUNDS AND PROJECT NO.	(6) AG. CODE	(7) END FV 64	(8) FISCAL YEAR 65				(9) FISCAL YEAR 66				(10) FISCAL YEAR 67				(11) FISCAL YEAR				(12) FISCAL YEAR		
							1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	
		<b>PASA - Direct Hire</b>																									
		Agr Credit Adv	BGKM	1011057	FSR-03	NL40282	K			1	1			1	1												
		Agr Credit Adv	BGKM	1011057	FSR-03	NL40282	K				1			1	1												
		Agr Coop Adv	BGKM	1011058	FSR-02	NL40282	K				1	1	1		1	1											
		Agr Coop Adv	BGKM	1011058	FSR-02	NL40282	K					1			1	1											
		Agr Econ Adv	BGKM	1011050	FSR-02	NL40282	K				1	1	1		1	1			1								
		Agr Econ Adv	BGKM	1011050	FSR-02	NL40282	K					1			1	1			1								
		Agr Coop Conslt	BGKM			NL40282	K				1	1															
		Agr Credit Conslt	BGKM			NL40282	K				1	1															
		<b>AID Direct Contract</b>																									
		Agr Creed & Coop Adv	BG---			NL40282						6			6	6					6						
		<b>PUBLIC HEALTH DIVISION - AID DIRECT HIRE POSITIONS</b>																									
		Chf PH Adv Physn	AGKM	5060200	FSR-01	N990000		1	1					1	1												
		<b>Medical Education Branch</b>																									
		Hosp Adm Adv	AGKM	5067000	FSR-03	N540123		1		1																	
		Hosp Adm Adv	AGKM	5067000	FSR-03	N540123				1	1	1			1	1											
		Med Edu Hosp Admin	AGKM	5060211	FSR-03	N540123		1	1					1													
		Hlth Adm Adv Med Res	AGKM	5068502	FSR-04	N540123		1	1					1													
		Program Analyst	AHKM		FSL-04	N990000		1	1					1	1												
		Admin Asst	AHKM		FSL-05	N990000		1	1					1	1												
		Admin Asst	AHKM		FSL-06	N990000		3	3					3	3												
		Clerk-Steno	AHKM		FSL-07	N990000		3	3					3	3												
		Sr Analyst	AHKM		FSL-03	N990000				1				1	1												
		Driver	AHKM		FSL-11	N990000		2	2					2	2												
		<b>PASA - Direct Hire Position</b>																									
		Chf Pub Hlth Insr	BGKM	5081908	FSR-02	N990000	N			1				1	1												
		<b>AID Direct Contract Positions</b>																									
		Med Edu Soc & Prev Med	DG---			N540123				1				1	1												
		Adv in Rural PH	DG---			N990000				1				1	1				1								
		Tissue Cult Lab Comd	DG---			N540123								1													
		<b>Nursing Branch - AID Direct Hire Positions</b>																									
		Pub Hlth Nur	AGKM	5061500	FSR-03	N540124		1	1					1	1												
		Nur Edu Adv	AGKM	5061500	FSR-04	N540124		1	1	1																	
		Nur Edu Adv	AGKM	5061500	FSR-04	N540124					1	1	1		1	1											
		PH Nur Matr Child	AGKM	5061602	FSR-05	N540124		1	1					1													
		Nur Edu Adv	AGKM	5061005	FSR-05	N540124		1	1					1	1												
		Nur Adv Med Surg	AGKM	5061001	FSR-05	N540124		1	1					1	1												
		Nur Edu Adv	AGKM	5061005	FSR-05	N540124		1	1					1	1												
		Driver	AHKM		FSL-11	N990000		3	3					3	3												





## MANPOWER PROGRAMMING ANNEX

LINE	MPA	DATA CURRENT AS OF:																								
		November 1, 1964				INDIA				386								UNCLASSIFIED								
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)				(9)				(10)				(11)				(12)	
POSITION TITLE	IDENTIFICATION CODE	OCCUPATION CODE	PAY SCHEDULE AND GRADE	SOURCE OF FUNDS AND PROJECT NO.	AG. CODE	END FY	FISCAL YEAR 65				FISCAL YEAR 66				FISCAL YEAR 67				FISCAL YEAR				FISCAL YEAR			
							1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th
		Prof Thermodyn	EG		N660027		1	1																		
		Prof Civil Eng	EG		N660226					5	5															
		Prof Mech Eng	EG		N660226					5	5															
		Prof Elec Eng	EG		N660226					5	5															
		Prof Eng Maths	EG		N660226					1	1															
		Coordinator	EG		N660226					1	1	1														
		Houston University																								
		Prof Civil Eng	EG		N660027		4	4																		
		Prof Elec Eng	EG		N660027		9	9																		
		Prof Production Eng	EG		N660027		2	2																		
		Prof Indl Eng	EG		N660027		2	2																		
		Prof Elec Eng	EG		N660226					8	8															
		Prof Mech Eng	EG		N660226					8	8															
		Prof Civil Eng	EG		N660226					8	8															
		Prof Prod Tech	EG		N660226					8	8															
		Coordinator	EG		N660226					1	1	1														
		Teachers College Columbia University																								
		Prof Chemistry	EG		N660226					24	24															
		Prof Physics	EG		N660226					24	24															
		Prof Maths	EG		N660226					32	32															
		Prof Biology	EG		N660226					14	14															
		Coordinator	EG		N660226					1	1	1														
		Edu Admin Adv	EG		N660184		1	1		1																
		Tech Edu Adv	EG		N660184		1	1		1	1	1														
		English Lang Adv	EG		N660184				1	1	1			1												
		Methodology Adv	EG		N660184		1	1		1	1															
		In Service Tng Adv	EG		N660184		1	1		1	1															
		Edu Resc Adv	EG		N660184			1		1	1															
		Edu Finance Adv	EG		N660184		1	1		1	1															
		Textbook Prod Adv	EG		N660184			1		1	1															
		Measure/Test Adv	EG		N660184		1	2		2	1	1			1	1	1									
		Pro-fessor	EG		N660184						4	8	10	16	16	18	20	20								
		Consultant	EG		N660184				1	1	2			3	3	3										
		Prof Physics	EG		N660184		10	10																		
		Prof Biology	EG		N660184		8	8																		
		Prof Chemistry	EG		N660184		10	10																		
		Prof Maths	EG		N660184		8	8																		
		Admin Secretary	EH		N660184		1	1		1	1			1	1											
		Clerk Steno	EH		N660184		4	4		4	4			4	4											
		Resc Mk Adol Psy	EH		N660184			1		1	1			1	1											
		Clerk Typist	EH		N660184		1	2		2	2			2	2											
		Driver	EH		N660184		2	2		2	2			2	2											
		Office Boy	EH		N660184		1	1		1	1			1	1											
		AID-Direct Contract																								
		Dir Adlt Lit Edu	DC		N990000		1	1		1	1			1												







## MANPOWER PROGRAMMING ANNEX

LINE	MPA		DATA CURRENT AS OF: November 1, 1964				COUNTRY OR ORGANIZATION INDIA			COUNTRY OR ORGANIZATION NO. 386				SECURITY CLASSIFICATION UNCLASSIFIED														
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)				(9)				(10)				(11)				(12)				
								FISCAL YEAR 65				FISCAL YEAR 66				FISCAL YEAR 67				FISCAL YEAR				FISCAL YEAR				
	POSITION TITLE	IDENTIFICATION CODE	OCCUPATION CODE	PAY SCHEDULE AND GRADE	SOURCE OF FUNDS AND PROJECT NO.	AG. CODE	END FY 64	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	
	Chief Technician Clerk Stern	AHKM		FSL-02	N990000						1	1			1	1			1									
		AHKM		FSL-07	N990000		1	1			1	1			1	1			1									
	AID - Direct Contract Sa Beach Consult	EG--			N990000						2	2																
	Power & Water Development Division																											
	Dev Off Power	AGKM	2113000	FSR-01	N990000		1	1			1	1			1	1			1									
	Elect Engr Power	AGKM	2085001	FSR-03	N990000		1	1			1	1			1	1			1									
	Elect Engr Power	AGKM	2085001	FSR-03	N990000		1	1			1	1			1	1			1									
	Gen Engr	AGKM	2080100	FSR-03	N990000		1	1			1	1			1	1			1									
	Gen Engr	AGKM	2080100	FSR-03	N990000							1			1	1			1									
	Chief Technician	AHKM		FSL-02	N990000						1	1			1	1			1									
	Admin Asst Tech	AHKM		FSL-04	N990000					1	1	1			1	1			1									
	Admin Asst	AHKM		FSL-04	N990000		1	1			1	1			1	1			1									
	Admin Asst	AHKM		FSL-06	N990000		1	1			1	1			1	1			1									
	Clerk Stern	AHKM		FSL-07	N990000		1	1			1	1			1	1			1									
	Transportation & Mining Development Division																											
	Mining Engr	AGKM	2088000	FSR-02	N990000		1	1			1	1			1	1			1									
	Sr Program Analyst	AHKM		FSL-03	N990000						1	1			1	1			1									
	Admin Asst	AHKM		FSL-06	N990000		1	1			1	1			1	1			1									
	Management Division																											
	PA Advisor	AGKM	7034301	FSR-01	N990000		1	1			1	1			1	1			1									
	Pub Adm Advisor	AGKM	7034301	FSR-02	N720170		1	1			1	1			1	1			1									
	Pub Adm Advisor	AGKM	7034301	FSR-02	N720170						1	1			1	1			1									
	Chief Admin Asst	AHKM		FSL-02	N990000		1	1			1	1			1	1			1									
	Program Analyst	AHKM		FSL-04	N990000		1	1			1	1			1	1			1									
	Admin Asst	AHKM		FSL-04	N990000		1	1			1	1			1	1			1									
	Secretary	AHKM		FSL-06	N990000		1	1	2		2	2			2	2			2									
	University of Michigan																											
	Survey Research Adv	EG--			N720170						1				1	1												
	Survey Research Adv	EG--			N720170							1				1	1											
	Survey Research Adv	EG--			N720170										1					1								
	PASA - Direct Hire																											
	Budget Consult	EGKM			N720170	C					1																	
	PA Advisor Tax	EGKM	7034304		N720170	C					1	1	1		1	1			1									
	PA Advisor Tax	EGKM	7034304		N720170	C					1	1	1		1	1			1									
	PA Advisor Tax	EGKM	7034304		N720170	C					1	1	1		1	1			1									

## MANPOWER PROGRAMMING ANNEX

LINE	MPA	DATA CURRENT AS OF: November 1, 1964																									
		COUNTRY OR ORGANIZATION INDIA						COUNTRY OR ORGANIZATION NO. 386								SECURITY CLASSIFICATION UNCLASSIFIED											
		(1) POSITION TITLE	(2) IDENTIFICATION CODE	(3) OCCUPATION CODE	(4) PAY SCHEDULE AND GRADE	(5) SOURCE OF FUNDS AND PROJECT NO.	(6) AG. CODE	(7) END FY <u>64</u>	(8) FISCAL YEAR <u>65</u>				(9) FISCAL YEAR <u>66</u>				(10) FISCAL YEAR <u>67</u>				(11) FISCAL YEAR _____				(12) FISCAL YEAR _____		
							1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	
		PA Advisor Tax	BGKM	7034304		N720170	C				1	1	1			1	1			1							
		PA Advisor Tax	BGKM	7034304		N720170	C				1	1	1			1	1			1							
		PA Advisor Tax	BGKM	7034304		N720170	C				1					1	1			1							
		Stock Exchange Conslt	BGLM			N720170	C			1	1	1															
		Stock Exchange Adv	BGKM			N720170	C							1	1	1											
		Stock Exchange Adv	BGKM			N720170	C							1	1	1											
		Admin Reform Conslt	BGLM			N720170	C			1																	
		Admin Reform Conslt	BGLM			N720170	C			1																	
		Admin Reform Conslt	BGLM			N720170	C			1	1																
		AID - Direct Hire Contract																									
		Stock Exchange Conslt	AG---			N720170						1	1	1													
		Admin Reform Conslt	AG---			N720170						1															
		Management Systems Corporation																									
		Chief of Party	EG---			N720242		1	1					1	1												
		Mgt Advisor	EG---			N720242		2	3					3	3												
		Mgt Trainer	EG---			N720242								1	1												
		<del>Chief of Party</del>																									
		<del>Researcher</del>																									
		AID Direct Contract																									
		Visiting Prof Mgt	EG---			N720243								5	5	6											
		Trng Adv State	EG---			N720243								1	1	1											
		Consultants	EG---			N720243								5	5	5	8	10	10	5	8	10	10				
		Visiting Prof City	EG---			N720243								4	4	4											
		Adv Inservice Civ Ser	EG---			N720243								2	2	2											
		LABOR DIVISION																									
		Lbr Tech Adv	AGKM	4011600	FSR-02	N990000		1	1					1	1												
		Lbr Edu Adv	AGKM	4011607	FSR-04	N410109		1	1					1	1												
		Chief Admin Asst	AHKM		FSL-02	N990000		1	1					1	1												
		Admin Asst	AHKM		FSL-04	N990000				1	1			1	1												
		Admin Asst	AHKM		FSL-06	N990000				1	1			1	1												
		Secretary	AHKM		FSL-06	N990000		1	1					1	1												
		PASA - Direct Hire																									
		Lbr Advisor	BGKM		FSR-03	N450161								1	1	1											
		Lbr Consultant	BGLM			N450161								1	1	1											
		AID - Direct Contract																									
		Trade Union Conslt	AG---			N410109								1	1		1										
		Workers Edu Conslt	AG---			N410109								1	1	1											
		Arbitration Med Consl	AG---			N450161								1	1	1											

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L I N E	DATA CURRENT AS OF:		COUNTRY OR ORGANIZATION				COUNTRY OR ORGANIZATION NO.				SECURITY CLASSIFICATION																	
	November 1, 1964		INDIA				386				UNCLASSIFIED																	
	(1) POSITION TITLE	(2) IDENTIFICATION CODE	(3) OCCUPATION CODE	(4) PAY SCHEDULE AND GRADE	(5) SOURCE OF FUNDS AND PROJECT NO.	(6) AG. CODE	(7) END FY 64	(8) FISCAL YEAR 65				(9) FISCAL YEAR 66				(10) FISCAL YEAR 67				(11) FISCAL YEAR				(12) FISCAL YEAR				
							1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th		
	Lbr Press Inf Consult	AG			N990000					1	1																	
	Lbr Press Coop Consult	AG			N990000					1	1																	
	Trade Union Ldr Consult	AG			N990000					1	1																	
	Apprentice Trng	AG			N990000					1	1																	
	Dunwoody Industrial Institute Contract																											
	Chf Trades Ind Adv	EG			N420179		1	1		1	1			1														
	Adv Mech Dept Adv	EG			N420179		1	1		1	1			1														
	Elect Advisor	EG			N420179		1	1		1	1			1														
	Advisor in Grinding	EG			N420179		1	1		1	1			1														
	Mech Inst Adv	EG			N420179		1	1		1	1			1														
	Adv Motor Auto Dept	EG			N420179		1	1		1	1			1														
	Sheet Metal Adv	EG			N420179					1	1	1		1	1													
	Teacher Trng Adv	EG			N420179					1	1	1		1	1													
	Welding Advisor	EG			N420179		1	1		1	1			1														
	Admin Asst	EH			N420179		1	1		1	1			1	1													
	Driver	EH			N420179		3	3		3	3			3	3													
	AID - Direct Hire																											
	Unallotted	AHRM			N990000				7		7	7			7	7												

MANPOWER PROGRAMMING ANNEX

LINE	(1) POSITION TITLE	(2) IDENTIFICATION CODE	(3) OCCUPATION CODE	(4) PAY SCHEDULE AND GRADE	(5) SOURCE OF FUNDS AND PROJECT NO.	(6) AG. CODE	(7) END FY. <u>64</u>	(8) COUNTRY OR ORGANIZATION NO. <u>386</u> FISCAL YEAR <u>65</u>				(9) FISCAL YEAR <u>66</u>				(10) SECURITY CLASSIFICATION <u>UNCLASSIFIED</u> FISCAL YEAR <u>67</u>				(11) FISCAL YEAR _____				(12) FISCAL YEAR _____																								
								1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th																					
								<b>MISSION SUMMARY:</b>																																								
<b>AID DIRECT HIRE:</b>																																																
U.S. Nationals																								110			134				134				128													
Locals																								477			520				520				520													
Third Country Nationals																								-			-				-				-													
<b>TOTAL DIRECT HIRE:</b>																								<b>587</b>			<b>654</b>				<b>654</b>				<b>648</b>													
<b>DETAILS IN:</b>																																																
<b>PARTICIPATING AGENCY EMPLOYEES:</b>																								6			24				37				39													
<b>AID DIRECT CONTRACTS:</b>																																																
Individually Contracted U.S. Nationals																								7			23				9				4													
Locals																								12			3				-				-													
Third Country Nationals																								-			-				-				-													
<b>CONTRACTOR'S EMPLOYEES:</b>																																																
U.S. Nationals																								158			276				629				705													
Locals																								126			168				162				148													
Third Country Nationals																								-			-				-				-													
<b>BORROWER/GRANTEE CONTRACT EMPLOYEES:</b>																																																

## PROJECT DATA SUMMARY — AID DOLLAR COSTS

SECURITY CLASSIFICATION  
UNCLASSIFIED

1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY India			3. PROJECT NO.				4. TITLE Goal: Energy Development							
		5. BEGIN FY 1955		END FY 1966	6. PRIOR REFERENCES											
E-1a		U.S. FUNDING:		1957	1969											
PHYSICAL WORK:																
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT
						AID	PAGA									
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC G		7,533	971	965	-	753	673	6	4,844	105	80	107		
		DL L		395,200	-	-	-	-	-	-	-	395,200	-	-	-	
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC G		74	4	-	-	4	45	-	25	-	-	-		
		DL L		96,000	-	-	-	-	-	-	96,000	-	-	-		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC G		7,451	946	965	-	730	641	6	4,819	105	80	105	280 <sup>a/</sup>	9
		DL L		156,477	-	-	-	-	-	-	156,477	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)	TC G		79	60	1	-	53	26	-	(9)	-	1	7	-	-
		DL L		65,880	-	-	-	-	-	-	65,880	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC G		82	25	-	-	23	32	-	25	-	-	2		
		DL L		238,723	-	-	-	-	-	-	238,723	-	-	-	-	-
	II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC G		64*	2*	-	-	2	62	-	-	-	-		
			DL L		97,193	-	-	-	-	-	-	97,193	-	-	-	
B. EXPENDITURES		TC G		74	26	-	-	25	42	-	6	-	-	1		
		DL L		92,576	-	-	-	-	-	-	92,576	-	-	-	-	-
C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC G		72	1	-	-	-	52	-	19	-	-	1		
		DL L		243,340	-	-	-	-	-	-	243,340	-	-	-	-	-
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TC G		-	-	-	-	-	-	-	-	-	-			
		DL L		8,000	-	-	-	-	-	-	8,000	-	-	-		
	B. EXPENDITURES	TC G		72	1	-	-	-	52	-	19	-	-	1		
		DL L		85,950	-	-	-	-	-	-	85,950	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC G		-	-	-	-	-	-	-	-	-	-	-		
		DL L		165,390	-	-	-	-	-	-	165,390	-	-	-	-	-
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/	DL L		-	-	-	-	-	-	-	-	-	-	93,754	-	
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/	DL L		-	-	-	-	-	-	-	-	-	-	71,636	-	
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC G		7,597 <sup>a/</sup>	973	965	-	755	735	6	4,844	105	80	107	6,624**	973**
		DL L		500,393 <sup>a/</sup>	-	-	-	-	-	-	500,393	-	-	-	-	500,393

## REMARKS:

1/ This is a memorandum (non-add) column.

2/ Show estimated expenditures in column i.

Refers to Annex 3 of L.A.S.

\* Excludes \$3 (thousand) provided during FY 1965 from prior year funds to cover shortfall in contract.

\*\* Dollar Expenditure.

a/ Includes closed projects - DL: \$10,000  
DG: \$ 2,997

L/C charged to \$ A/C: \$265

SECURITY CLASSIFICATION UNCLASSIFIED

PAGE NO. AA-1

AID 1020-3 (7-64)	PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES										SECURITY CLASSIFICATION UNCLASSIFIED			
E-1b	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA		3. FUNDING 1961 1965 Phys. Work 1957 1969		4. PROJECT NO.		5. TITLE Goal: Energy Development				6. PRIOR REFERENCES:	
7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED	
I CUMULATIVE THRU ACTUAL YEAR	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/		G		289		1,382			641			741	
	FA ACT (ii) TRUST FUND	Govt. Rev.	-	62	62	299	299	-	-	-	-	299	299	
	(iii) OTHER LC	Sec. 402	G	174	166	835	797	-	-	-	9	428	395	
	B. P.L. 480 LC	Sec. 104(g)	L	208,183	208,183	996,700	996,700	996,700	996,700	-	-	-	-	
TOTAL ACTUAL FY 1964	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT (ii) TRUST FUND													
	(iii) OTHER LC	Sec. 402	G	16	34	79	163	-	-	91	-	79	72	
	B. P.L. 480 LC	Sec. 104(g)	L	68,155	68,155	326,300	326,300	326,300	326,300	-	-	-	-	
II OPERATIONAL YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT (ii) TRUST FUND													
	(iii) OTHER LC	Sec. 402	G	15	16	72	77	-	-	5	-	72	72	
FY 1965	B. P.L. 480 LC	Sec. 104(g)	L	326,323	326,323	1,562,300	1,562,300	1,562,300	1,562,300	-	-	-	-	
III BUDGET YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT (ii) TRUST FUND													
	(iii) OTHER LC	Sec. 402	G	-	7	-	33	-	-	-	-	-	33	
FY 1966	B. P.L. 480 LC	Sec. 104(g)	L	-	-	-	-	-	-	-	-	-	-	
IV PLANNING YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT (ii) TRUST FUND													
	(iii) OTHER LC													
FY _____	B. P.L. 480 LC													
V ALL SUBSEQUENT FYs (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT (ii) TRUST FUND													
	(iii) OTHER LC													
	B. P.L. 480 LC													
VI TOTAL ALL YEARS (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/		G		289		1,382			641			741	
	FA ACT (ii) TRUST FUND	Govt. Rev.	-	62	62	299	299	-	-	-	-	299	299	
	(iii) OTHER LC	Sec. 402	G	189 <sup>1/</sup>	189	907	907	-	-	398	9	500	500	
	B. P.L. 480 LC	Sec. 104(g)	L	534,506 <sup>2/</sup>	534,506	2,559,000	2,559,000	2,559,000	2,559,000	-	-	-	-	

REMARKS:  
 1/ Exchange Rate: \$1 = Ru. 4.7876  
 2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a  
 Includes closed projects - PL 480 \$19,529  
 Trust Fund \$ 62  
 L/C charged to \$ A/c \$289  
 Sec. 402 \$119

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS										1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING CTRY. INDIA		3. PERSONNEL SERVICES PARTICIPANT TRAINING		4. PROJECT NO. Goal: Energy Development							
	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			a. CUM. THRU ACTUAL FY			b. ACTUAL FY 64			c. OPERATIONAL FY 65			d. BUDGET FY 66			e. PLANNING FY 67			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
				Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	41.5*	17.7*	20.3 <sup>1/</sup>	-	-	2.6	-	-	.2	-	-	-	-	-	-	-	-	-	-	41.5	17.7	20.5
	Non U.S.		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. ON BOARD	U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Non U.S.		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II. PARTICIPANTS PROGRAMMED	A. U.S.	9/2 <sup>2/</sup>	-	-	-	9	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	104	-	-
	B. THIRD CTRY.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

REMARKS:  
 1/ End of Fiscal Year  
 \*Date represents closed projects addressed to this goal.  
 1/ Includes 7.3 for closed projects addressed to this goal.  
 2/ Includes 80 for closed projects addressed to this goal.

SECURITY CLASSIFICATION UNCLASSIFIED

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AID FORM 10-112 (7-62)	DATE PREPARED 1 November 1964	COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	MULTI-YEAR LISTING	Goal: ENERGY DEVELOPMENT	E-4
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Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year	Operational Year	Budget	Budget +1	Budget +2	Budget +3	Budget +4	All Subsequent Years	Total All Years	
													FY 1964
386-11-220-045	Hot Lines Maintenance	DL											
		DG	394	-	-	-	-	-	-	-	-	-	394
		SA											
		480											
		L/C											
		Coop. C.											
386-22-220-116	Delhi Thermal Plant	DL											
		DG	4,000	-	-	-	-	-	-	-	-	-	4,000
		SA											
		480											
		L/C											
		Coop. C.											
386-22-220-166	Sharavathi Hydrel Plant I, II, III & IV	DL	26,800	-	3,100	8,000	-	-	-	-	-	37,900	
		DG											
		SA											
		480	71,957	-	49,900	-	-	-	-	-	-	-	121,857
		L/C											
		Coop. C.											
386-22-220-186	Chandrapura Thermal Plant I & II	DL	46,000	16,000	-	-	-	-	-	-	-	46,000	
		DG											
		SA											
		480	42,819	-	14,120	-	-	-	-	-	-	-	56,939
		L/C											
		Coop. C.											
386-22-220-187	Barauni Thermal Electric Power Plant	DL	3,800	-	-	-	-	-	-	-	-	3,800	
		DG											
		SA											
		480	2,736	-	1,880	-	-	-	-	-	-	-	4,616
		L/C											
		Coop. C.											

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE AA-3

AID FORM 10-112 (7-62)	DATE PREPARED 1 November 1964	COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION		MULTI-YEAR LISTING		Goal: ENERGY DEVELOPMENT					E-4			
			UNCLASSIFIED												
Goal Code or Activity Code	Title of Goal or Activity		\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year FY 1964	Operational Year FY 1965	Budget FY 1966	Budget +1 FY 1967	Budget +2 FY 1968	Budget +3 FY 1969	Budget +4 FY 1970	All Subsequent Years	Total All Years		
386-22-220-190	Sabarigiri Hydroelectric Project (Pamba-Kakki)		DL	20,200	-	-	-	-	-	-	-	-	20,200		
			DG												
			SA												
			480	-	-	38,433	-	-	-	-	-	-	-	-	38,433
			L/C												
			Coop. C.												
386-22-220-196	Durgapur Thermal Power Project I & II		DL	20,000	-	20,000	-	-	-	-	-	-	40,000		
			DG												
			SA												
			480	7,164	-	25,065	-	-	-	-	-	-	-	-	32,229
			L/C												
			Coop. C.												
386-22-220-197	Kanpur Thermal Electric Power Plant		DL	1,600	-	(87)	-	-	-	-	-	-	1,513		
			DG												
			SA												
			480	-	-	-	-	-	-	-	-	-	-	-	-
			L/C												
			Coop. C.												
386-22-220-198	Uniam Hydroelectric Power Project (Barapani)		DL	2,500	-	-	-	-	-	-	-	-	2,500		
			DG												
			SA												
			480	13,368	-	17,483	-	-	-	-	-	-	-	-	30,851
			L/C												
			Coop. C.												
386-22-220-207	Talcher Thermal Power Project I & II		DL	33,000	-	-	-	-	-	-	-	-	33,000		
			DG												
			SA												
			480	17,838	17,838	41,775	-	-	-	-	-	-	-	-	59,613
			L/C												
			Coop. C.												

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE AA-4

BEST AVAILABLE

AID FORM 10-112 (7-62)	DATE PREPARED 1 November 1964	COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	MULTI-YEAR LISTING				Goal: ENERGY DEVELOPMENT				E-4		
Goal Code or Activity Code	Title of Goal or Activity		\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year FY 1964	Operational Year FY 1965	Budget FY 1966	Budget +1 FY 1967	Budget +2 FY 1968	Budget +3 FY 1969	Budget +4 FY 1970	All Subsequent Years	Total All Years	
386-22-220-208	Birsinghpur Power Project (Amarkantak)		DL	8,400	-	-	-	-	-	-	-	-	8,400	
			DG											
			SA											
			480	13,932	13,932	2,109	-	-	-	-	-	-	-	16,041
			L/C											
			Coop. C.											
			Other											
386-22-220-220	Dhuvaran Thermal Power Project I & II (Cambay)		DL	33,600	-	32,300	-	-	-	-	-	-	65,900	
			DG											
			SA											
			480	18,840	18,840	37,806	-	-	-	-	-	-	-	56,646
			L/C											
			Coop. C.											
			Other											
386-22-220-221	Bandel Thermal Power Station		DL	38,000	-	-	-	-	-	-	-	-	38,000	
			DG											
			SA											
			480											
			L/C											
			Coop. C.											
			Other											
386-11-220-222	Power Generation & Distribution		DL											
			DG	142	74	64	-	-	-	-	-	-	206	
			SA											
			480											
			L/C	55	16	15	-	-	-	-	-	-	-	70
			Coop. C.											
			Other											
386-22-220-234	Ahmedabad Power Plant		DL	3,900	-	(120)	-	-	-	-	-	-	3,780	
			DG											
			SA											
			480											
			L/C											
			Coop. C.											
			Other											

SECURITY CLASSIFICATION

UNCLASSIFIED

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AID FORM 10-112 (7-62)	DATE PREPARED 1 Nov. 1964	COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	MULTI-YEAR LISTING	Goal: Energy Development	E-4
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Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year	Operational Year	Budget	Budget +1	Budget +2	Budget +3	Budget +4	All Subsequent Years	Total All Years
				FY 1964	FY 1965	FY 1966	FY 1967	FY 1968	FY 1969	FY 1970		
386-22-220-235	Trombay Power Plant	DL	17,900	-	-	-	-	-	-	-	-	17,900
		DG										
		SA										
		480										
		L/C										
		Coop. C.										
386-22-220-236	Ramagundam Power Plant	DL	8,400	-	-	-	-	-	-	-	-	8,400
		DG										
		SA										
		480			7,728							7,728
		L/C										
		Coop. C.										
386-22-220-237	Delhi Power Plant "C"	DL	16,000	-	-	-	-	-	-	-	-	16,000
		DG										
		SA										
		480			17,336							17,336
		L/C										
		Coop. C.										
386-22-220-238	Satpura Power Plant I & II	DL	25,100	-	42,000	-	-	-	-	-	-	67,100
		DG										
		SA										
		480			72,688							72,688
		L/C										
		Coop. C.										
386-22-980-239	Tarapur Atomic Power Station	DL	80,000	80,000	-	-	-	-	-	-	-	80,000
		DG										
		SA										
		480										
		L/C										
		Coop. C.										

SECURITY CLASSIFICATION  
UNCLASSIFIED

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AID FORM 10-112 (7-62)	DATE PREPARED 1 Nov. 1964	COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	MULTI-YEAR LISTING	Goal: Energy Development	E-4
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Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year	Operational Year	Budget	Budget +1	Budget +2	Budget +3	Budget +4	All Subsequent Years	Total All Years
				FY 1964	FY 1965	FY 1966	FY 1967	FY 1968	FY 1969	FY 1970		
		DL	385,200	96,000	97,193	8,000	-	-	-	-	-	490,393
		DG	4,536	74	64	-	-	-	-	-	-	4,600
		SA										
		480	188,654	50,610	326,323	-	-	-	-	-	-	514,977
		L/C	55	16	15	-	-	-	-	-	-	70
		Coop. C.										
		Other										
		DL										
		DG										
		SA										
		480										
		L/C										
		Coop. C.										
		Other										
		DL										
		DG										
		SA										
		480										
		L/C										
		Coop. C.										
		Other										

SECURITY CLASSIFICATION

UNCLASSIFIED

PROJECT DATA SUMMARY — AID DOLLAR COSTS

E-1a	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. PROJECT NO.			4. TITLE									
	1 November 1964		INDIA		386-11-220-045			HOT LINES MAINTENANCE									
	5. U.S. FUNDING:		6. BEGIN FY		7. END FY		8. PRIOR REFERENCES										
PHYSICAL WORK:		1955		1962													
		1957		1963													
7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
						(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	
						AID	FASA										
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		TC	G	394	297	-	-	192	2	-	44	87	51	18		
	GROSS OBLIGATIONS (ACTUAL YEAR)		TC	G	-	-	-	-	-	-	-	-	-	-	-		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		TC	G	393	296	-	-	192	2	-	44	87	51	17	15	9
	EXPENDITURES (ACTUAL YEAR)		TC	G	3	9	1	-	9	-	-	(8)	-	1	-	-	-
C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC	G	1	1	-	-	-	-	-	-	-	-	1			
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS		TC	G	-	-	-	-	-	-	-	-	-	-			
	B. EXPENDITURES		TC	G	1	1	-	-	-	-	-	-	-	-	1		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC	G													
III. BUDGET YEAR (EST.) FY _____	A. GROSS OBLIGATIONS																
	B. EXPENDITURES																
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR																
IV. PLANNING YR. (EST.) FY _____	GROSS OBLIGATIONS 2/																
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/																
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/		TC	G	394	297	-	-	192	2	-	44	87	51	18	97	297

REMARKS:

Refers to Annex 3 of L.A.S.

1/ This is a memorandum (non-odd) column.

2/ Show estimated expenditures in column 1.

Project terminated FY 1962. The Hot Line Training Schools at Bangalore and Ganguwal opened in Feb. 1958 and June 1958 respectively. Training courses at the Bangalore School are being conducted by trained Indian instructors originally assigned as understudies to American technician; Ganguwal school closed in Nov. 1961. Some of the equipment distributed among various State Electricity Boards for implementation of hot line maintenance techniques in their power systems. In 1962 the chief Indian instructor at the Bangalore school received 4 months training in the U.S. in hot-line maintenance practices. Unliquidated obligation awaiting an accounting adjustment.

AID 1020-8 (7-64)		PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES										SECURITY CLASSIFICATION UNCLASSIFIED					
E-1b		1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. Funding		BEG. FY		END FY		4. PROJECT NO.		5. TITLE		6. PRIOR REFERENCES:	
						Phys. Work								Hot Lines Maintenance			
7. OBLIGATED AND DISBURSED		a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)						
		(1) TYPE		(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED		(2) DISBURSED		(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
						(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED	OBLIGATED	DISBURSED	(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED		
I CUMULATIVE THRU ACTUAL YEAR		A. (i) LC COSTS CHGD TO \$ ACCTS. 2/															
		FA ACT (ii) TRUST FUND															
		(iii) OTHER LC															
		B. P.L. 480 LC															
TOTAL ACTUAL FY		A. (i) LC COSTS CHGD TO \$ ACCTS. 2/															
		FA ACT (ii) TRUST FUND															
		(iii) OTHER LC															
		B. P.L. 480 LC															
II OPERATIONAL YEAR (EST.)		A. (i) LC COSTS CHGD TO \$ ACCTS. 2/															
		FA ACT (ii) TRUST FUND															
		(iii) OTHER LC															
		B. P.L. 480 LC															
III BUDGET YEAR (EST.)		A. (i) LC COSTS CHGD TO \$ ACCTS. 2/															
		FA ACT (ii) TRUST FUND															
		(iii) OTHER LC															
		B. P.L. 480 LC															
IV PLANNING YEAR (EST.)		A. (i) LC COSTS CHGD TO \$ ACCTS. 2/															
		FA ACT (ii) TRUST FUND															
		(iii) OTHER LC															
		B. P.L. 480 LC															
V ALL SUBSEQUENT FYs (EST.)		A. (i) LC COSTS CHGD TO \$ ACCTS. 2/															
		FA ACT (ii) TRUST FUND															
		(iii) OTHER LC															
		B. P.L. 480 LC															
VI TOTAL ALL YEARS (EST.)		A. (i) LC COSTS CHGD TO \$ ACCTS. 2/															
		FA ACT (ii) TRUST FUND															
		(iii) OTHER LC															
		B. P.L. 480 LC															

REMARKS:  
 1/ Exchange Rate: \$1 = Rs. 4.7876  
 2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c		PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF: 1 November 1964			2. COOPERATING CTRY. INDIA			3. PERSONNEL SERVICES PARTICIPANT TRAINING			4. PROJECT NO. 386-11-220-045									
B. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		a. CUM. THRU ACTUAL FY			b. ACTUAL FY 1964			c. OPERATIONAL FY 1965			d. BUDGET FY 1966			e. PLANNING FY 1967			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. ON BOARD	U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II. PARTICIPANTS PROGRAMMED	A. U.S.	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	
	B. THIRD CTRY.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

REMARKS:  
 1/ End of Fiscal Year

PROJECT DATA SUMMARY — AID DOLLAR COSTS

E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA		3. PROJECT NO. 386-22-220-116			4. TITLE Delhi Thermal Plant								
	5. U.S. FUNDING:		6. BEGIN FY		7. END FY		8. PRIOR REFERENCES									
	PHYSICAL WORK:		1957		1957											
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a.	b.	c.	d.	e.		f.		g.		h.		i. 1/		
		APPROPRIATION TITLE	LOAN OR GRANT	TOTAL	CONTRACT 2/	PERSONNEL SERVICES		PARTICIPANTS		COMMODITIES		OTHER COSTS		LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	4,000*	400	-	-	400	-	-	3,600	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	3,981	381	-	-	381	-	-	3,600	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)	TC	G	19	20	-	-	20	-	-	(1)	-	-	-	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. EXPENDITURES	TC	G	19	19	-	-	19	-	-	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	-	-	-	-	-	-	-	-	-	-	-	-	-
III. BUDGET YEAR (EST.) FY _____	A. GROSS OBLIGATIONS															
	B. EXPENDITURES															
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
IV. PLANNING YR. (EST.) FY _____	GROSS OBLIGATIONS 2/															
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	4,000*	400	-	-	400	-	-	3,600	-	-	-	3,600	400

REMARKS:

1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

\* Includes MSP Loan amount of \$175 thousands out of Loan # ICAX-86-3.  
Refers to Annex. 3 of LAS.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-116	Delhi Thermal Plant
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### 1. The Activity Target

To increase the electric generation plant capability of the Delhi Electric Supply Undertaking by providing financial assistance for the installation of a 36 megawatt power plant. This project is essentially complete the unit having been operating since September 1963. (Under a separate project - Delhi 'C' Thermal Station Extension - 386-22-220-237 - a 187.5 MW extension is being provided to the Delhi 'C' Plant.)

Background: The Delhi Electric Supply Undertaking (DESU), a municipal utility, supplies the city of Delhi as well as most of the Union Territory of Delhi with electric power. The rapid growth of Delhi and its fringe areas has contributed to a more than average rate of growth of electric power requirements. Although Delhi is not basically an industrial city, a successful industrial estate south of Delhi and other small industrial establishments have made significant contributions to the demand for electric power. In addition, the large influx of people to the city because of its many central government activities and their related diplomatic and trade associations has drastically increased domestic and commercial electric energy requirements.

At the present time most of Delhi's power is generated at three power plants located in the same general area, the eastern edge of the city near the river Jamuna. Two of these stations, consisting of old steam and diesel units, normally would have been retired due to obsolescence but are kept operating due to the shortage of generating capacity. One other small steam station and two diesel stations distributed around Delhi are operated only occasionally.

Delhi 'C' power plant, the third of the stations referred to earlier and the project under discussion, is a modern steam-electric plant with an installed capacity of 36 megawatts. This plant has been in commercial operation since September 1963. DESU also receives substantial amounts of power from the Punjab State Bhakra Nangal Hydro system. The present commitment from this source is 60 megawatts, but additional amounts have been obtained on an "as needed and when available" basis from the Punjab system. The total supply for the Delhi system with everything running and including the Bhakra-Nangal hydro is about 160 megawatts. This year's peak demand was about 130 megawatts.

### 2. The Course of Action

Delhi 'C' Station comprises one extraction condensing turbine-generating unit having a maximum continuous rating of 36 megawatts, two 180,000 pound per hour steam generating units using pulverized coal as fuel and all auxiliary equipment and material required for a complete power station.

### 3. Progress to Date

One June 20, 1957, the Project Agreement, providing for dollar financing amounting to \$4,000,000 and GOI financing of Rs. 12,500,000 (equal to \$2,611,000) for this project, was signed. Of the dollar financing, \$174,964 was considered as a part of the Second Development Assistance Loan (\$37.5 million) and \$3,825,036 was allowed from Development Assistance grant funds.

On July 18, 1958, the Kuljian Corporation (a U.S. consulting firm with offices in India) signed an engineering contract with DESU for design of the plant, supervision of construction, and certain post-commissioning technical services. Funding of \$400,000 for the contract was provided from the \$4 million agreement for dollar financing. Major equipment suppliers were:

Turbines-generators	Mitsubishi-Westinghouse
Cooling Towers	Fluor Corporation
Steam Generating Equipment	Mitsubishi-Combustion Engineering
Combustion Control Instruments	Bailey Meter Co.
Feed Water Equipment	Mitsubishi-Westinghouse
Coal Handling Equipment	Mitsubishi
Ash Handling Equipment	United Conveyor Corp.
Switching Equipment	Mitsubishi

Delhi C power station has been in commercial operation since September 1963.

Virtually all the entire foreign exchange grant has been committed for capital equipment and spare parts. Final payments to Mitsubishi are being withheld until satisfactory performance of the turbine is demonstrated. Several extensions of payment validity periods for commodity procurement and engineering services have been granted to DESU pending DESU's satisfaction with the turbine and resolution of differences between DESU and the consulting engineer on responsibility for inspection and certification of performances.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY -- AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY India				3. PROJECT NO. 386-22-220-166 386-42-220-166				4. TITLE Sharavathi Hydrel Plant I, II, III & IV					
	5. U.S. FUNDING:		BEGIN FY 1960		END FY 1966		6. PRIOR REFERENCES									
	PHYSICAL WORK:		1960		1967											
7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT <sup>1/</sup>	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		DL	L*	26,800	-	-	-	-	-	26,800	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)		DL	L	-	-	-	-	-	-	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		DL	L*	6,874	-	-	-	-	-	6,874	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)		DL	L*	3,352	-	-	-	-	-	3,352	-	-	-	-	-
C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L*	19,926	-	-	-	-	-	19,926	-	-	-	-	-	
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS		DL	L**	3,100	-	-	-	-	-	3,100	-	-	-	-	
	B. EXPENDITURES		DL	L	13,200	-	-	-	-	-	13,200	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L	9,826	-	-	-	-	-	9,826	-	-	-	-	
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS		DL	L***	8,000	-	-	-	-	-	8,000	-	-	-	-	
	B. EXPENDITURES		DL	L	10,300	-	-	-	-	-	10,300	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L	7,526	-	-	-	-	-	7,526	-	-	-	-	
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS <sup>2/</sup>		DL	L	-	-	-	-	-	-	-	-	-	7,526	-	
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>		DL	L	-	-	-	-	-	-	-	-	-	-	-	
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>		DL	L	37,900	-	-	-	-	-	37,900	-	-	-	37,900	

## REMARKS:

- <sup>1/</sup> This is a memorandum (non-add) column.  
<sup>2/</sup> Show estimated expenditures in column i.

Refers to Annex 3 of LAS

- \* DLF Loans No. 120 and 197  
\*\* AID Loan No. 109  
\*\*\* No loan number assigned as yet.

AID 1020-S (7-64)		PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES							SECURITY CLASSIFICATION UNCLASSIFIED						
E-1b		1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		END FY		4. PROJECT NO.		5. TITLE			
		1 November 1964		India		Funding 1959		1965		386-22-220-166		Sharavathi Hydel Plant I, II, III & IV			
						Phys. Work 1960		1967		386-42-220-166		6. PRIOR REFERENCES:			
7. OBLIGATED AND DISBURSED		g. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
		(1)	(2)	(3)	(1)		(2)		(1)	(2)	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
		TYPE	SOURCE	LOAN OR GRANT	DOLLAR EQUIVALENTS (000) 1/		LOCAL CURRENCY UNITS (000)		OBLIGATED	DISBURSED	(a)	(b)	(a)	(b)	
					(a)	(b)	(a)	(b)	OBLIGATED	DISBURSED	U.S. PERS.	NON-U.S. PERS.	OBLIGATED	DISBURSED	
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC	Sec.104(g)	L		71,957	71,957	344,500	344,500	344,500	344,500	-	-	-	-	
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC	Sec.104(g)	L		-	-	-	-	-	-	-	-	-	-	
II OPERATIONAL YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC	Sec.104(g)	L		49,900	49,900	238,900	238,900	238,900	238,900	-	-	-	-	
III BUDGET YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC														
IV PLANNING YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC														
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC														
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC	Sec.104(g)	L		121,857	121,857	583,400	583,400	583,400	583,400	-	-	-	-	

## REMARKS:

1/ Exchange Rate: \$1 = Rs.4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c		PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES PARTICIPANT TRAINING			BEG. FY		END FY		4. PROJECT NO.					
6. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																					
		Non U.S.																					
B. ON BOARD	U.S.																						
	Non U.S.																						
II. PARTICIPANTS PROGRAMMED	A. U.S.																						
	B. THIRD CTRY.																						

## REMARKS:

1/ End of Fiscal Year

SECURITY CLASSIFICATION UNCLASSIFIED

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AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-166 386-42-220-166	Sharavathi Hydel Plant I, II, III & IV
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### 1. The Activity Target

To increase the electric generating capability of the Southern Region by providing financial assistance for the installation of the first three stages of the Sharavathi hydro-electric project.

Backgrounds: Compared to other countries, most Indian electric power systems show a disproportionately large share of energy sales to industrial consumers. This proportion is even larger in the Mysore State Electricity Board system, where about 77 percent of total sales goes to the industrial category. There are several factors contributing to this situation, notably, a comparatively long industrial history in the State and an influx of new industry during the early 1950s, partly on the basis of a temporarily abundant power supply. In recent years local restrictions have been imposed on domestic and commercial consumers for the benefit of industrial consumers, and industrial consumers have been required to stagger working hours and working days to hold down the system peak demand. The result has been that, although energy requirements and generation have risen steadily, the peak demand has increased only slightly over the last several years and now is about 190 megawatts. Illustrative of this fact is the annual system's load factor which is in excess of 0.7 and daily load factors on the order of 0.85.

The Mysore State Electricity Board system at present has an installed capacity of 253 megawatts hydro-electric power, with a minimum coincident capability of 214 megawatts plus 20 megawatts of gas turbine capacity and 6 megawatts of diesel power, making a total of 240 megawatts of power available to the network. The gas turbine installation of two 10 megawatt net capability units on the outskirts of Bangalore was completed during the last year. Fortunately, the hypothetical adverse combination of hydro capability has not occurred during the last several years and the actual capability has been barely adequate to cope with the peak demand.

Hydrologic and geographic conditions in Mysore State are particularly favorable for hydro-electric power development. The Western Ghats which rise sharply from sea level along the western coast of Mysore State help to precipitate the high annual rainfall and provide the sharp drops in elevation which this water must take on its journey back to

the sea. For these reasons, electric power generation in Mysore is all hydro-electric, except for small stop-gap installations of diesel and gas turbine generating capacity; it is likely that this situation will continue for some time. Another hydro project north of Sharavathi near Goa has been investigated. This scheme, Kalinadi, proposes a capacity in the order of 800 to 1,000 megawatts.

The population center in Mysore State is in the southern part. Consequently, most of the electric transmission and subtransmission is to be found there. However, the comparatively recent Tungabhadra irrigation and power scheme in north Mysore State (total capacity 72 megawatts—Mysore share 41 megawatts) comprises a small sub-system which will be interconnected with the main system by lines being built as part of the Sharavathi Project. At the same time, the transmission and subtransmission networks in both areas are being extended.

A considerable share of the State-wide transmission extensions comes under the Sharavathi Project. Aside from this, the State Electricity Board has under construction, or materials on order for, an extensive network of 66, 33 and 11 KV lines which will cover virtually the entire State. Availability of abundant central station power will greatly assist in developing the rich mineral resources of north Mysore State. Electric irrigation pumping will receive increasing amounts of power as a result of the Sharavathi Project and the coordinated development of transmission and distribution facilities.

The Sharavathi Valley Project ultimately will harness the entire flow of the Sharavathi River, about four million acre-feet of water annually, with a drop of 1,500 feet at the main plant and lesser available potential drops at the base of the storage dam and at a tailrace dam site below the main plant. When the latter plant is built, the water leaving it will be nearly at sea level and virtually the entire power potential of the Sharavathi River will have been utilized. The topographic situation which makes for such excellent hydro power sites on the Western Ghats does not allow for irrigation development. There are no arable lands to be used and no valuable property to protect from floods, consequently, the Sharavathi Project is single purpose. Although this project includes some very large and costly civil works, the total energy and energy production per unit of water volume more than compensate for these costly features, and the resultant cost of energy production is among the lowest in India.

As presently defined, the Sharavathi Project consists essentially of a hydro-electric generation station with an ultimate capacity of 891 MW in ten units and associated water storage and conveyance features which are now nearing completion in the Western Ghats not far from the 120-megawatt Mahatma Gandhi Hydro-electric Power Plant, plus a network of 220 KV transmission lines and main substations. Project water storage and

1 November 1964

conveyance features include a main reservoir Linganamakki Dam, a channel and free-flow Telakalali Balancing Reservoir, an inlet pressure tunnels leading to two surge tanks from each of the surge tanks to ten pens to ten 89.1 MW turbine-generating units at the base of the main dam and the near dam site plant are future features, not of the project. The decision as to whether to be built will hinge upon their production to those of the Kalinadi scheme.

The Sharavathi Valley Project works administration of Mysore State and have major civil works under control of the Sharavathi Valley Project - Kargal, and electrical works and associated civil works Engineer, Hydro-electric Construction Division. This division places the main dam, the balancing reservoir and pressure tunnels Chief Engineer, with the Chief Engineer, for the surge tanks, penstocks, power plant. As the project's major features become completed be turned over to the Mysore State Electricity will operate it thereafter.

Mysore State, with the longest history of power development of any state in India, considerable degree of sophistication in the design and operation of electric power systems. The 1,000 megawatt Mahatma Gandhi Hydro Power Plant installed without foreign assistance. The Sharavathi Valley Project is being designed by the two State engineering agencies designated. Suppliers of major equipment are furnished installation supervision in all cases.

## 2. The Course of Action

The Sharavathi Project has been divided into a succession of several stages as follows:

AID 1020-4 (7-84)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-166 386-42-220-166	Sharavathi Hydel Plant I, II, III & IV
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Dollar financing for imported components of Stage I was requested by the Government of India in March 1959; DLF Loan Number 120 of June 30, 1960, for \$8.4 million, was made in response to the GOI request. Subsequently, the project decided to implement five more generating units, and requested U.S. financing of \$21.5 million for these and the additional transmission and substation facilities. The "Buy America" provision was in force on DLF loans by this time and the project officials, finding that French credits were available for a repeat order extending the original one for two turbines (DLF 120 financed), asked that the equivalent amount (\$3.1 million) be withdrawn from DLF loan - reducing the amount of DLF Loan #197 to \$18.4 million.

In 1962 it was decided to complete the sanctioned capacity of eight units and the GOI asked that the de-obligated amount of \$3.1 million be re-obligated. Financing of the eighth generating unit by a new loan was considered more appropriate. AID Loan Number 109 was approved in June 1964 and the loan agreement draft is expected to be in effect by the time this document is published. The remaining foreign exchange necessary to finance the eighth unit is being supplied under French credits.

Sanction for the fourth stage is still pending at the State government level, but the intent of the project authorities is to secure State and Center sanction in time for work to proceed without interruption on Units No. 9 and No. 10. No request for U.S. financing has been received as yet for the final stage (IV). A foreign exchange component of up to \$8.0 million would be associated with the fourth stage. Project continuity would best be served by U.S. financing of Stage IV in FY 1966.

Two U.S. PL-480 rupee loans of Rs.344.5 million (equiv.\$71.95 million), covering about 53 percent of the estimated local costs for stages I and II, have been made. A request for additional PL-480 loan of Rs.238.9 million (equiv.\$49.9 million) is under consideration by the Mission for FY 1965 obligation. Details are given under Section 4 - Funding Requirements.

Current Cost Estimates as furnished by the Project on May 30, 1964 (Foreign exchange in millions of dollars. Rupee costs in millions of dollar equivalent)

	Stage I Units 1 & 2			Stage II Units 3,4,5,6,7		
	Local	Foreign Exchange	Total	Local	Foreign Exchange	Total
Civil Works - Kargal	77.18	1.33	78.51	6.40	0	6.40
Civil Works - H.E.C.P.	11.06	0	11.06	7.45	0.40	7.85
Hydraulic & Electrical	10.55	4.27	14.82	5.98	17.95	23.93
Machinery						
Transmission Lines	6.62	0.46	7.08	5.78	1.39	7.17
Sub-stations	3.80	2.82	6.62	2.46	2.31	4.77
<b>Totals</b>	<b>109.21</b>	<b>8.88</b>	<b>118.09</b>	<b>28.07</b>	<b>22.05</b>	<b>50.12</b>

	Stage III Unit 8			Totals Stages I, II & III Units 1 to 8 incl.		
	Local	Foreign Exchange	Total	Local	Foreign Exchange	Total
Civil Works - Kargal	0	0	0	83.58	1.33	84.91
Civil Works - H.E.C.P.	2.04	0	2.04	20.55	0.40	20.95
Hydraulic & Electrical	2.69	3.63	6.32	19.22	25.85	45.07
Machinery						
Transmission Lines	0.88	0.16	1.04	13.28	2.01	15.29
Sub-stations	0.07	0.21	0.28	6.33	5.34	11.67
<b>Totals</b>	<b>5.68</b>	<b>4.0</b>	<b>9.68</b>	<b>142.96</b>	<b>34.93</b>	<b>177.89</b>

3. Progress to Date

Intensive construction work started in early 1960. At present, construction is approximately twenty-three months behind the original schedule, which called for initial operation of Unit No. 1 by December 1962. As of September 1964, the first unit has been observed under test,

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-166 386-42-220-166	Sharavathi Hydrel Plant I, II, III & IV
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and inauguration ceremonies are scheduled during December 1964. Unit No. 2 should come on the line in March or April 1965, Nos. 3 and 4 during the balance of 1965 or early 1966, Nos. 5 and 6 during 1966, No. 7 in late 1966 or early 1967 and unit 8 in late 1967. Construction of transmission features will more or less parallel the commissioning of the generation plant with the first 220 KV circuit from Sharavathi through Shimoga to Bangalore coming into operation in November 1964 coincident with on-load operation of the first generating unit. This line is complete except for the last slack span into the power plant switch yard.

Although the Bangalore Receiving Station will not be completed by November 1964, it is expected to be in part operation to a sufficient degree to deliver power into the Bangalore area from the 220 KV line. The 220 KV switching and transformer facilities at Shimoga Sub-station also are predicted to be in part operation by November 1964. Observation bears out that these are practical predictions.

Major civil works are virtually completed, with the exception of the spillway gates at Linganamakki Dam which are being fabricated and will be installed during the dry period before either the 1965 or the 1966 monsoon. With the present gateless spillway notch, Linganamakki can store about one-third of its total volume and as of September 1964 it was spilling water.

Installation of machinery should present no problem in keeping up with the schedule given above, since the power house building and foundations are largely completed. Penstock erection probably presents the greatest challenge, but the rate of progress should accelerate now that the No. 1 penstock and parts of No.2 have been completed.

#### 4. Funding Requirements

Loan funds obligated:

	<u>\$</u>	<u>\$ equiv.</u>
FY 1959 PL 480 rupee equivalent	-	14,559,000
FY 1960 Stage I DLF No. 120	8,400,000	-
FY 1962 Stage II DLF No. 197 PL 480 rupee equivalent	18,400,000 -	- 57,398,000
FY 1965 Stage III AID No. 109 PL 480 rupee equivalent	3,100,000 -	- 49,900,000
<u>Total authorized:</u>	<u>29,900,000</u>	<u>121,857,000</u>
FY 1966 Stage IV - Dollar finance PL 480 Rupee finance	8,000,000* -	- 0*
<u>Project Grand Total: \$</u>	<u>37,900,000</u>	<u>121,857,000</u>

\* No request received from GOI.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY -- AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY India			3. PROJECT NO. 386-22-220-186 386-42-220-186			4. TITLE Chandrapura Thermal Plant I & II							
	5. U.S. FUNDING: PHYSICAL WORK:		BEGIN FY 1960	END FY 1964		5. PRIOR REFERENCES										
7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT <sup>1/</sup>	e. PERSONNEL SERVICES		f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
						(1) U.S. AGENCIES		(2)	(1) U.S. AGENCIES	(2)	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT
						AID	FASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		DL	L*	46,000	-	-	-	-	46,000	-	-	-	-	-	
	GROSS OBLIGATIONS (ACTUAL YEAR)		DL	L**	16,000	-	-	-	-	16,000	-	-	-	-	-	
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		DL	L	21,664	-	-	-	-	21,664	-	-	-	-	-	
	EXPENDITURES (ACTUAL YEAR)		DL	L	7,426	-	-	-	-	7,426	-	-	-	-	-	
C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L	24,336	-	-	-	-	24,336	-	-	-	-	-		
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS		DL	L	-	-	-	-	-	-	-	-	-	-		
	B. EXPENDITURES		DL	L	9,336	-	-	-	-	9,336	-	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L	15,000	-	-	-	-	15,000	-	-	-	-	-	
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS		DL	L	-	-	-	-	-	-	-	-	-	-		
	B. EXPENDITURES		DL	L	4,500	-	-	-	-	4,500	-	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L	10,500	-	-	-	-	10,500	-	-	-	-	-	
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS <sup>3/</sup>		DL	L	-	-	-	-	-	-	-	-	-	10,500	-	
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS <sup>3/</sup>		DL	L	-	-	-	-	-	-	-	-	-	-	-	
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>		DL	L	46,000	-	-	-	-	46,000	-	-	-	46,000	-	

## REMARKS:

Refers to Annex 3 of IAS

<sup>1/</sup> This is a memorandum (non-add) column.<sup>2/</sup> Show estimated expenditures in column i.

\* Loans DLF 125 &amp; AID 84

\*\* Loan # AID-84

AID 1020-3 (7-64)		PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES							SECURITY CLASSIFICATION UNCLASSIFIED						
E-1b		1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		END FY		4. PROJECT NO.		5. TITLE			
		1 November 1964		India		Funding 1961 1965		1960 1967		386-22-220-186 386-42-220-186		Chandrapura Thermal Plant I & II			
7. OBLIGATED AND DISBURSED		e. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
		(1)	(2)	(3)	(1)		(2)		(1)	(2)	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
		TYPE	SOURCE	LOAN OR GRANT	DOLLAR EQUIVALENTS (000) 1/		LOCAL CURRENCY UNITS (000)		OBLIGATED	DISBURSED	(a)	(b)	(a)	(b)	
					(a)	(b)	(a)	(b)			U.S. PERS.	NON-U.S. PERS.	OBLIGATED	DISBURSED	
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC	Sec-104(g)	I		42,819	42,819	205,000	205,000	205,000	205,000	-	-	-	-	
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC	Sec-104(g)	I		-	-	-	-	-	-	-	-	-	-	
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC	Sec-104(g)	I		14,120	14,120	67,600	67,600	67,600	67,600	-	-	-	-	
III BUDGET YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC														
IV PLANNING YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC														
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC														
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC	Sec-104(g)	I		56,939	56,939	272,600	272,600	272,600	272,600	-	-	-	-	

## REMARKS:

1/ Exchange Rate: \$1 = Rs 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c		PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES PARTICIPANT TRAINING			4. PROJECT NO.									
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																					
		Non U.S.																					
B. ON BOARD	U.S.																						
	Non U.S.																						
II. PARTICIPANTS PROGRAMMED	A. U.S.																						
	B. THIRD CTRY.																						

## REMARKS:

1/ End of Fiscal Year

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-186 386-42-220-186	Chandrapura Thermal Plant I & II
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## 1. The Activity Target

To increase the electric power generating capacity of the Damodar Valley Corporation by providing financial assistance for the construction of a 420-megawatt thermal electric power plant. Units 1 and 2 of 140-MW each should be ready for initial operation by the end of 1964; unit 3, also 140-megawatt, should be completed by late 1966.

Background: The area in eastern India, including the parts of Bihar and West Bengal south of the Ganges River, is served by the south Bihar-lower Bengal Power System. Comprising this system are the Damodar Valley Corporation (DVC), the Bihar State Electricity Board (BSEB), the West Bengal State Electricity Board (WSEB) and the Calcutta Electric Supply Corporation (CESC). The CESC retails in and around Calcutta, while the DVC and the WSEB between them deliver bulk supplies to almost three-dozen licensees, the largest of which is the CESC, with a total delivery from both sources (DVC and WSEB) of up to 150 megawatts. An interconnection with the Rihand Dam Power Plant (U.S. assisted) makes possible power imports of up to 100 megawatts into the south Bihar-lower Bengal system. There is also a connection with the Hirakud Dam Power Plant in Orissa, but the power now imported over this tie line is limited to about 20 megawatts by the line characteristics -- mainly its length. In one of the most industrialized areas in India, this system has one of India's heaviest concentrations of electrical generation and distribution capacity and the largest electrical system growth potential.

The Damodar Valley Corporation, a semi-autonomous government organization established for control and development of the Damodar River, is a multipurpose scheme with responsibilities for flood control, irrigation and power. Hydro-electric generating facilities have been installed at the major dams which are operated for flood control, irrigation and electric energy generation.

The Damodar Valley area is rich in natural and human resources, and possesses good road and rail transport facilities toward Calcutta and to the west. As a result, industry has developed rapidly and the Corporation's hydro-electric system could not meet the demand within its service area. Thus it is necessary to supplement the hydro-electric power installations with thermal power plants, the first of which came into operation in late 1953. Scheduled generating capacity additions (including Chandrapura units 1 and 2), allowing for retirements of obsolete

capacity, will supplement net capability in the area by about 1,000 megawatts by March 1966 (end of the Third Plan), while projected increases in peak load will add approximately 700 megawatts to the demand during that same period. The Chandrapura Power Plant units 1 and 2 will represent almost 30 percent of this increase in generating capacity; unit 3 will become operational during the Fourth Plan.

Other U.S. assisted power plants in this area are Bandel and Durgapur. Aspects of these plants and their relationship to the area picture will be found in their individual E-is.

Description of Project: The Chandrapura Thermal Power Station, whose first stage consists of two 140-megawatt turbine-generators and whose Stage II calls for a third identically rated unit, is being built in the Damodar Valley area, about 20 miles northeast of the DVC Bokaro Thermal Plant. (Bokaro, which began operation in 1953, was then the largest thermal plant in south Asia; its present capacity is 225 megawatts.)

The Chandrapura power plant eventually will get its fuel supply in the form of middlings from the Dugda Coal Washery, about 8,000 feet away. This 600-ton per hour coal washery, one of a number now going into operation in this area of India, is owned and operated by the Hindustan Steel Corporation primarily to provide washed coal of metallurgical grade for steel plants in the area. Its first stage is operating and a second stage, under implementation, will double the capacity. Unloading, storage and handling facilities being built into Chandrapura will allow run-of-mine coal to be used as necessary until washery capacity builds up.

Stage I of the Chandrapura Project provided for additions to the DVC 132-KV transmission system. Aside from lines directly connecting the Chandrapura Power Plant, the DVC transmission system is being "heavied up" to assure satisfactory operation over its entire area, taking into account the additional power to be available from the Chandrapura third unit and from other power plant extensions going into the system. Additions to the 33-KV subtransmission system and substation facilities also are included under Stage I.

## 2. The Course of Action

Financing: On June 30, 1960, DLF Loan No. 125 was signed providing \$30 million to meet foreign exchange costs of units Nos. 1 and 2 of the Chandrapura Thermal Station and additions to the transmission and sub-transmission system and existing sub-stations, and some new sub-stations.

On October 21, 1963, AID Loan Agreement No. 84 was signed providing for \$16 million to meet the foreign exchange costs of the third unit in Chandrapura.

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-186 386-42-220-186	Chandrapura Thermal Plant I & II
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On April 3, 1961, under Project Agreement No. 102, Rs.205 million (equivalent to \$42.8 million) of PL-480 Sec.104 (g) loan were provided to meet local currency costs of Stage I. A second PL-480 loan of Rs.67.6 million, (equiv. to \$14.12 million) will be provided in FY 1965 to meet additional local currency costs of the project.

**Engineering:** Gibbs and Hill, a U.S. consulting firm is responsible for advisory services in design engineering, supervision of construction and initial operation for the entire first stage; Burris and Roe were awarded the contract for similar services on the third unit.

Major suppliers of equipment to Chandrapura Stage I are as follows:

Turbine-generators and main power transformers	-	General Electric
Coal Handling	-	Hewitt-Robins
Boilers	-	Combustion Engineering
Condensers	-	Allis-Chalmers
Cooling Towers	-	Balcke-West Germany

Cost Estimate - in millions of dollars

<u>Stage I</u>	<u>Foreign Exchange</u>	<u>Local Costs \$ equiv.</u>	<u>Total \$</u>
2 boilers	7.5	28.8	36.3
2 turbine generators	6.5		
2 condensers, coal and ash plant transformers, switchgear	9.3		
engineering	4.6		
Subtotal	27.9	28.8	56.7
Transmission equipment	2.1	10.7	12.8
Miscellaneous	-	3.3	3.3
<b>Total - Stage I</b>	<b>30.0</b>	<b>42.8</b>	<b>72.8</b>

Stage II - Cost Estimate - in millions of dollars

	<u>Foreign Exchange</u>	<u>Local costs \$ equiv.</u>	<u>Total \$</u>
1. Site Preparation and Improvements	-	.2	.2
2. Civil Works & Construction	-	2.6	2.6
3. Equipment & Erection	14.4	4.1	18.5
4. Engineering & Testing	.4	.2	.6
5. Establishment & Overheads	-	1.2	1.2
6. Contingencies	.4	.2	.6
7. Miscellaneous Buildings	-	.6	.6
8. Special Tools & Parts	.8	.4	1.2
<b>Total - Stage II</b>	<b>16.0</b>	<b>9.5</b>	<b>25.5</b>

3. Progress to Date

Stage I, Units 1 and 2: Construction of civil works has been done by various Indian contractors under departmental supervision of DVC. Erection of major equipment items such as boilers, turbine generators, and coal handling plant have been done by the suppliers. Other works such as the ash handling plant, condenser, boiler feed pumps have been handled by DVC under supervision of suppliers. Other jobs have been done either by DVC departmentally or entirely by suppliers.

As of September 1964, unit No. 1 is virtually ready for initial operation. Preliminary boiler tests have been completed, the boiler is ready for boil-out and initial operation is scheduled for October 1964. Unit No. 2 should be ready for initial trial operations by the end of December. Main transmission inter-connections as well as switchyard and controls are ready for operation, allowing the units to be loaded into the DVC transmission system. Most of the materials and equipment have been procured for the 33-KV substations and sub-transmission additions which are part of this project, and this work should be completed within about one year. In the meantime, Chandrapura generation can be distributed adequately through existing facilities.

Stage II - Orders have been placed for major equipment items including the turbine generator and boiler. Structural steel and other frame portions of the boiler are ready for shipment as of end September 1964. Letters of credit for these items, held up pending finalization of the engineering services contract and submission of equipment contracts for AID review, can now be issued. Since the third unit is a duplicate of

AID 10204 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-186 386-42-220-186	Chandrapura Thermal Plant I & II
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the first two, much of the basic engineering has been done. Detailed engineering, to be done largely by DVC, has been under way for some time. Burns and Roe, consultants, will now officially review existing engineering and procurement work and issue a project report within the next two months. Physical work at the site for unit 3 will wait until Units 1 and 2 are in commercial operation. No official commissioning date for unit No. 3 has been established, but allowing 24 months for completion would set this at about October 1966.

#### 4. Funding Requirements

Funding for this project has been obligated as follows:

FY 60, DLF Loan No. 125	\$30,000,000
FY 64, AID Loan No. 84	\$16,000,000
FY 61, Project Agreement No. 102	
PL 480 Rupees equivalent to:	\$42,319,000

Additional local currency equivalent to \$14,120,000 will be required for Stages II and III and a request for this amount is anticipated.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY India			3. PROJECT NO. 386-22-220-187 <del>386-42-220-187</del>				4. TITLE Barauni Thermal Electric Power Plant						
	5. U.S. FUNDING:		BEGIN FY 1960		END FY 1960		6. PRIOR REFERENCES									
	PHYSICAL WORK:		1960		1965											
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		DL	I*	3,800	-	-	-	-	-	3,800	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)		DL	I*	-	-	-	-	-	-	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		DL	I*	3,021	-	-	-	-	-	3,021	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)		DL	I*	216	-	-	-	-	-	216	-	-	-	-	-
C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	I*	779	-	-	-	-	-	779	-	-	-	-	-	
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS		DL	L	-	-	-	-	-	-	-	-	-	-	-	
	B. EXPENDITURES		DL	L	779	-	-	-	-	-	779	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L	-	-	-	-	-	-	-	-	-	-	-	-
III. BUDGET YEAR (EST.) FY _____	A. GROSS OBLIGATIONS															
	B. EXPENDITURES															
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
IV. PLANNING YR. (EST.) FY _____	GROSS OBLIGATIONS 2/															
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/		DL	I*	3,800	-	-	-	-	-	3,800	-	-	-	3,800	-

## REMARKS:

1/ This is a memorandum (non-add) column.

2/ Show estimated expenditures in column i.

\* Loan DLF-122

A portion of this may be deobligated rather than spent, when final costs of the project are determined.

Refers to Annex 3 of IAS

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

7. OBLIGATED AND DISBURSED	e. FUNDS		(3) LOAN GRANT	b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE		(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
			(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED	OBLIGATED	DISBURSED	(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED	
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	Sec. 104(g) L	2,736	2,736	13,100	13,100	13,100	13,100	-	-	-	-	
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	Sec. 104(g) L	-	-	-	-	-	-	-	-	-	-	
II OPERATIONAL YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	Sec. 104(g) L	1,880	1,880	9,000	9,000	9,000	9,000	-	-	-	-	
III BUDGET YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
IV PLANNING YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	Sec. 104(g) L	4,616	4,616	22,100	22,100	22,100	22,100	-	-	-	-	

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES PARTICIPANT TRAINING			BEG. FY	END FY	4. PROJECT NO.								
	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS	
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract		
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																					
		Non U.S.																					
B. ON BOARD	U.S.																						
	Non U.S.																						
II. PARTICIPANTS PROGRAMMED	A. U.S.																						
	B. THIRD CTRY.																						

REMARKS:

1/ End of Fiscal Year

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-187 386-42-220-187	Barauni Thermal Electric Power Plant
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### 1. The Activity Target

To increase the electric generating capability of the State of Bihar and particularly the area north of the Ganga River in the locality of Barauni, by the installation of two 15 megawatt electric power generating units, at Barauni. The United States is assisting in the realization of this target by financing the foreign exchange costs of the imported electrical generating and transmission equipment and of the related engineering services required for the project, and by providing local currency financing for indigenous materials and for construction costs of the project.

Description of the Project: Barauni Thermal Power Project is located on the north bank of the Ganga River about 250 miles northeast of Calcutta and 75 miles east of Patna in Bihar. The project includes two 15-MW thermal generating units, coal handling equipment, station switchyard and 33-KV cable connections which carry the power across the Ganga and to the Mokameh Substation of the South Bihar system. The plant is designed and constructed on the unit system, with each 15-megawatt turbine generating unit connected to a 160,000 pound per hour steam generating unit using either pulverized lower grade coal or refinery residuals to be supplied by the nearby Barauni Refinery as fuel.

Background: The State of Bihar is divided into two sections, one lying north and the other south of the Ganga River, as far as electrical transmission and distribution is concerned. With the implementation of this project, the first electrical tie across the river Ganga was effected. A modern steel bridge across the River Ganga at Barauni made it possible to lay 33-KV transmission cables on the support structure and establish a tie between the Barauni Power Station and the Mokameh Substation on the south edge of the River Ganga. This bridge also made possible a supply of South Bihar coal to the Barauni Power station.

The installation of the Barauni Power Station will provide a more firm and economical power supply to the Barauni-North Bihar area and back-up power for power distribution facilities in the Southern part of Bihar, which includes the capital city of Patna, some 75 miles to the west. Before operation of the project, the north section of Bihar received power from various diesel sets, whose capacity totalled approximately 15,000 KW. With power availability now being assured in North Bihar, industrial complexes are being developed, as is an extensive tube well irrigation system for improved agriculture.

### 2. The Course of Action

Financing: DLF Loan No. 122, signed on June 30, 1960, provided \$3,800,000 to finance the cost of foreign exchange items required for the Barauni Thermal Plant. Project Agreement No. 103, signed on April 3, 1961, provided Rs.13.1 million (dollar equivalent \$2.74 million) to meet local currency costs of the project. The GOI has informally proposed an additional loan of Rs.9,000,000 (equiv. of \$1.88 million) in FY 1965 from PL-480 Section 104(g) funds; if an official request is received, it will receive the usual review by the Mission.

The project is essentially completed and has met the activity target objectives.

Engineering: The Kuljian Corporation, a U.S. consulting firm with offices in India, contracted to design the civil works and provide supervision of plant construction. The consulting engineers' fees were payable in local currency.

### 3. Progress to Date

Unit No. 1 and Unit No. 2 went into commercial operation in October and November of 1963. According to information given to the USAID representatives during a site visit in March 1964, the only work still to be completed was the final stages of erection and placing into operation of the coal tippler and coal car moving equipment. It was estimated then that this would be finished by May or June 1964. According to that same information, a third 15-megawatt unit, financed by Yugoslavian credits, was to be placed in commercial operation during September or October of 1964. The Engineers noted that further plant expansion was under way, by the installation of two 50-megawatt units supplied under Polish credits; it was expected that these units would be in service by mid-1966. They will bring the total plant capacity to 145 MW.

Financing: Against DLF Loan No. 122 for \$3.8 million, expenditures as of July 31, 1964 were \$3.021 million. Further expenditure is expected to be incurred during FY 1965 for spare parts and miscellaneous items; the balance (to be determined later) will be deobligated.

The local currency funds, Rs.13.1 million have all been disbursed.

While the project is nearing completion, the Mission has received a GOI request for an additional loan of Rs.9 million (equiv. of \$1.88 million) from PL-480 Section 104(g) funds to complete the construction and other ancillary activities on the project. This request is under consideration and a final decision will depend upon receipt of requisite details.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY India				3. PROJECT NO. 386-22-220-190 386-42-220-190				4. TITLE Saberigiri Hydroelectric Project (Pamba-Kakki)					
	b. U.S. FUNDING:		BEGIN FY 1962		END FY 1962		6. PRIOR REFERENCES									
	PHYSICAL WORK:		1962		1967											
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		c. APPROPRIATION TITLE	b. LCAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS 1/	
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	DL	L*	20,200	-	-	-	-	-	-	20,200	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)	DL	L	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	DL	L*	6,183	-	-	-	-	-	-	6,183	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)	DL	L*	6,183	-	-	-	-	-	-	6,183	-	-	-	-	-
C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L*	14,017	-	-	-	-	-	-	14,017	-	-	-	-	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS															
	B. EXPENDITURES	DL	L	6,400	-	-	-	-	-	-	6,400	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L	7,617	-	-	-	-	-	-	7,617	-	-	-	-	-
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS															
	B. EXPENDITURES	DL	L	5,800	-	-	-	-	-	-	5,800	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L	1,817	-	-	-	-	-	-	1,817	-	-	-	-	-
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/	DL	L	-	-	-	-	-	-	-	-	-	-	-	1,817	-
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	DL	L	20,200	-	-	-	-	-	-	20,200	-	-	-	20,200	-

## REMARKS:

- 1/ This is a memorandum (non-odd) column.  
2/ Show estimated expenditures in column i.

\* Loan AID-34

Refers to Annex 3 of LAS.

AID 1020-S (7-64)	PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES										SECURITY CLASSIFICATION UNCLASSIFIED		
E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		END FY		4. PROJECT NO.		5. TITLE		
	1 November 1964		India		Funding 1965 Phys. Work 1962		1965 1967		386-22-220-190 386-42-220-190		Sabarigiri Hydroelectric Project (Pamba-Kakki)		
7. OBLIGATED AND DISBURSED	e. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
TOTAL ACTUAL FY _____	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
II OPERATIONAL YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
FY 1965	B. P.L. 480 LC	Sec.104(g)	L	38,433	38,433	184,000	184,000	184,000	184,000	-	-	-	-
III BUDGET YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
FY _____	B. P.L. 480 LC												
IV PLANNING YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
FY _____	B. P.L. 480 LC												
V ALL SUBSEQUENT FYS (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC	Sec.104(g)	L	38,433	38,433	184,000	184,000	184,000	184,000	-	-	-	-

REMARKS:  
 1/ Exchange Rate: \$1 = Rs.4.7876  
 2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS										1. DATA CURRENT AS OF:		2. COOPERATING CTRY.		3. PERSONNEL SERVICES PARTICIPANT TRAINING		BEG. FY		END FY		4. PROJECT NO.		
	8. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYS			g. TOTAL ALL YEARS		
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
				Non U.S.																			
	B. ON BOARD	U.S.																					
		Non U.S.																					
II. PARTICIPANTS PROGRAMMED	A. U.S.																						
	B. THIRD CTRY.																						

REMARKS:  
 1/ End of Fiscal Year

SECURITY CLASSIFICATION UNCLASSIFIED

PAGE NO. AA-2/1

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-190 386-42-220-190	Sabarigiri Hydroelectric Project (Pamba-Kakki)
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### 1. The Activity Target

To increase the electric generating capability of the State of Kerala and the Southern Region (III) by providing financial assistance for the installation of six 50-MW hydroelectric generating units, with associated transmission lines, on the Mooshiyar River, 75 miles northeast of Trivandrum.

Background: The power generating facilities in Kerala, both existing and under construction, are predominantly hydro-electric. These are:

#### Existing:

Pallivasal	37.5 MW
Mengulam	48.0 MW
Poringalkuthi	32.0 MW
Panniyar	30.0 MW
Meriamangalam	45.0 MW
Diesel	4.7 MW (Small isolated stations)
<b>Total</b>	<b>197.2 MW</b>

#### Under Construction:

Sholayar	54 MW (18 MW—fall 1964) (36 MW—1965)
Sabarigiri	300 MW #1 unit—Dec. 1965 #2-#6 at 3-4 month intervals
<b>Total</b>	<b>354 MW</b>

The Western Ghats which run practically all the way from north to south in the State of Kerala and the ridge of which roughly defines the eastern border of Kerala State, intercept both the southwest and the northeast monsoons. The southwest monsoon is the predominant one, however, and as a result in most of the western slope precipitation occurs from April to October. The steep western slopes of the Western Ghats provide many relatively high-head hydro-electric development potentials, but at the same time do not provide the desirable wide and flat valleys which make good reservoir sites. Consequently, existing hydro-electric developments have been constructed with sufficient installed capacity to utilize most of the seasonal water run-offs, which considerably exceed the average run off. Although storage has been provided in their hydro projects, their volume has not been sufficient to regulate the available water to a constant withdrawal throughout a water year.

With the installed capacity of the existing hydro plants related primarily to the peak seasonal run-off, the available energy is not uniform throughout the year, tending to drop off after the monsoon when the system must be operated on the stored water until the onset of the next monsoon. The result is that the considerable consumer commitments exceed the dry-period capability of the system and consumption cuts have been imposed—mostly on the large industrial users—during such periods. Restrictions on electric energy consumption of up to 40 percent were imposed during 1964 from February to June.

An energy deficiency such as described above can be defined in several different ways. However, the way in which it affects the Kerala system can best be illustrated by computing the effective peak generation capability from the available energy during this deficient period. By operating the system at its normal plant factor, the system maximum capability works out to about 105 megawatts. This capability compared to the present peak requirement of 145 megawatts shows the magnitude of average power deficiency on the Kerala system at the present time. This deficiency will increase at the rate of 7 to 10 percent per year until Sabarigiri Project comes into operation at the end of 1965. A total of approximately 17 megawatts of central station diesel-electric capacity is in operation in several locations throughout Kerala main system, but this capacity is additive only to the 105 megawatt figure, as it is operated only during times of hydro-energy deficiencies. The 4.7 MW of scattered diesel capacity shown is operated the year around, as it is isolated from the hydro system.

With the limitations imposed upon existing industry, it is evident that the Sabarigiri Project is vital to the economic welfare of Kerala. The Sabarigiri Project has considerably better storage capacity facilities as related to its installed generating capacity than do the other plants on the system. Consequently, the contribution of the Sabarigiri Project to the Kerala State Electricity Board power system will be enhanced by its ability to complement the existing hydro generation pattern, thereby firming up other generation in addition to its own production.

Description of Project: The project is located in the southwestern part of Kerala about 75 miles from Trivandrum, the State capital. The principal features of the project include a 171 foot high stone masonry dam on the Pamba River; diversion of Pamba water through a 10,500-foot tunnel to a reservoir formed by a 352-foot high concrete dam on the Kakki River; a flanking dam and spillway on a small tributary to the Kakki River; a 16,800-foot power tunnel leading to six steel penstocks 8,500 feet in length, dropping the water through an average height of 2,500 feet; a power plant with six 50-MW units on the right bank of the Mooshiyar River; and 100 miles of 220 KV double-circuit transmission line to Alwaye, together with substation facilities.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-190 386-42-220-190	Sabaringiri Hydroelectric Project (Pamba-Kakki)
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## 2. The Course of Action

**Financing:** To provide \$20.2 million in dollar development loan financing to meet the foreign exchange cost of the Sabaringiri Hydroelectric project, and to finance local currency costs of Rs.184 million (equiv. of \$38.43 million) through a PL 480 Section 104(g) rupee loan.

**Engineering:** Design and supervision of construction is largely in the hands of the Kerala State Electricity Board staff, with advice and assistance available from the Central Water and Power Commission in New Delhi. A Consulting Board to provide expert advice on design and construction on the major civil features of the project has been formed. Members of this Board are:

Dr. A.N. Khosla (Indian), Chairman; Dr. F.A. Nickell (American), Francis Slitcher (American), D.J. Rieffuss (American) and N.G.K. Murthy (Indian)

This Board meets approximately every six months and submits a report to the State Electricity Board with copies to Central Water and Power Commission and AID. Three meetings have been held so far with particular attention paid to dam abutment and other geologic conditions on the flanking dam as well as on both of the main dams.

The six 50-megawatt turbine-generators, main power transformers, indoor and outdoor switchgear are being designed, built, and will be installed by the Allis-Chalmers Company. American manufacturers also are furnishing construction equipment and penstock steel.

Cost Estimate  
(amounts in millions of dollars)

Item	Cost Estimate		Total \$ (\$ equiv.)
	Foreign Exchange	Local Currency	
Dams and Tunnels including construction equipment	\$ 2.1	\$22.0	\$24.1
Penstocks	3.6	4.4	8.0
Powerhouse	-	1.4	1.4
Electrical Generating Equipment	13.0	0.8	13.8
Transmission	1.5	3.7	5.2
Land, Roads, Bridges, Misc., Overhead, Contingencies	-	6.1	6.1
	<u>\$20.2</u>	<u>\$38.4</u>	<u>\$58.6</u>

## 3. Progress to Date

After some setbacks due to procurement problems, good progress now is being made on the Pamba and Kakki dams. Operation of the concrete batching plant at Kakki is in full swing and, before the monsoon shut down in mid-June, placement of concrete was on schedule with 20 percent having been poured in a little over four months. With the commissioning of the new sand plant for mortar and operation of the cableway for transporting masonry, the tempo of work at Pamba dam has now increased. Work got under way on the flanking dam in June 1964, after approval of the foundation by the Board of Consultants.

Status of construction on major project features as of September 1964 is as follows:

Feature	Status	Expected date of completion
Pamba Masonry Dam	60% completed	to elev. 3220' by Dec. 1965 <sup>(1)</sup> to elev. 3241' by Dec. 1966 (complete)
Kakki Dam	25% completed	to elev. 3100' by Dec. 1965 <sup>(1)</sup> to elev. 3230' by Dec. 1966
Flanking Dam	Foundation excavation completed.	Dec. 1966
Interconnecting Tunnel	Driving completed. Lining 65% complete.	Jan. 1965
Penstocks	Anchor blocks being poured.	No. 1 by Dec. 1965
Power Tunnel	Driving completed. Lining 40% complete	June 1965
Power Plant Building	10% completed.	No.1 unit under cover by May 1965

(1) Initial operation before completion is feasible.

Present schedules predict operation of No. 1 unit by December 1965. This is felt to be realistic, provided no more delays occur and that the project experiences reasonably good luck in fabrication and erection of penstocks and machinery. Initial operation of the project is possible and most likely will be necessary without completion of the main dam and the flanking dam. Succeeding generating units are expected to come in at three or four-month intervals after commissioning of the first unit. Material is on order for transmission lines and main substations.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-190 386-42-220-190	Sabarigiri Hydroelectric Project (Pamba-Kakki)
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4. Funding Requirements

Dollar financing for this project has been provided through AID Loan No.034 in amount of \$20,200,000 signed June 28, 1962.

Local currency costs of Rs.184 million (equiv. \$38.43 million) will be financed in FY 1965 through a PL-480 Section 104 (g) rupee loan.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY India			3. PROJECT NO. 386-22-220-196 386-42-220-196				4. TITLE Durgapur Thermal Power Project						
	5. U.S. FUNDING:		BEGIN FY 1961		END FY 1965		6. PRIOR REFERENCES									
	PHYSICAL WORK:		1961		1968											
7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIA- TION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR  FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		DL	L*	20,000	-	-	-	-	-	20,000	-	-	-		
	GROSS OBLIGATIONS (ACTUAL YEAR)		DL	L	-	-	-	-	-	-	-	-	-	-		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		DL	L*	14,205	-	-	-	-	-	14,205	-	-	-		
	EXPENDITURES (ACTUAL YEAR)		DL	L*	2,833	-	-	-	-	-	2,833	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L*	5,795	-	-	-	-	-	5,795	-	-	-		
II. OPERATIONAL YEAR (EST.)  FY 1965	A. GROSS OBLIGATIONS		DL	L	20,000	-	-	-	-	-	20,000	-	-	-		
	B. EXPENDITURES		DL	L*	5,795	-	-	-	-	-	5,795	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L	20,000	-	-	-	-	-	20,000	-	-	-		
III. BUDGET YEAR (EST.)  FY 1966	A. GROSS OBLIGATIONS															
	B. EXPENDITURES		DL	L	7,500	-	-	-	-	-	7,500	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L	12,500	-	-	-	-	-	12,500	-	-	-		
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/														9,500	-
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/														3,000	-
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/		DL	L	40,000	-	-	-	-	-	40,000	-	-	-	40,000	-

## REMARKS:

1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

\* Loan DLF-130

Refers to Annex 3 of LAS

<b>E-1b</b>	<b>1. DATA CURRENT AS OF:</b> 1 November 1964		<b>2. COOPERATING COUNTRY:</b> India		<b>3. FUNDING:</b> 1961 1965 1961 1968		<b>4. PROJECT NO.:</b> 386-22-220-196 386-42-220-196		<b>5. TITLE:</b> Durgapur Thermal Power Project				<b>6. PRIOR REFERENCES:</b>						
	<b>7. OBLIGATED AND DISBURSED</b>			<b>a. FUNDS</b>				<b>b. TOTALS</b>				<b>c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)</b>		<b>d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)</b>					
			(1) TYPE		(2) SOURCE		(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED		(2) DISBURSED		(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
								(a) OBLIGATED		(b) DISBURSED		(a) OBLIGATED		(b) DISBURSED		(a) U.S. PERS.		(b) NON-U.S. PERS.	
<b>I CUMULATIVE THRU ACTUAL YEAR</b>			A. (i) LC COSTS CHGD TO \$ ACCTS. 2/																
			FA ACT (ii) TRUST FUND																
			ACT (iii) OTHER LC																
			B. P.L. 480 LC		Sec. 104(g) L			7,164 7,164		34,300 34,300		34,300 34,300		-		-		-	
<b>TOTAL ACTUAL FY 1964</b>			A. (i) LC COSTS CHGD TO \$ ACCTS. 2/																
			FA ACT (ii) TRUST FUND																
			ACT (iii) OTHER LC																
			B. P.L. 480 LC		Sec. 104(g) L			-		-		-		-		-		-	
<b>II OPERATIONAL YEAR (EST.)</b>			A. (i) LC COSTS CHGD TO \$ ACCTS. 2/																
			FA ACT (ii) TRUST FUND																
			ACT (iii) OTHER LC																
			B. P.L. 480 LC		Sec. 104(g) L			25,065 25,065		120,000 120,000		120,000 120,000		-		-		-	
<b>III BUDGET YEAR (EST.)</b>			A. (i) LC COSTS CHGD TO \$ ACCTS. 2/																
			FA ACT (ii) TRUST FUND																
			ACT (iii) OTHER LC																
			B. P.L. 480 LC																
<b>IV PLANNING YEAR (EST.)</b>			A. (i) LC COSTS CHGD TO \$ ACCTS. 2/																
			FA ACT (ii) TRUST FUND																
			ACT (iii) OTHER LC																
			B. P.L. 480 LC																
<b>V ALL SUBSEQUENT FYs (EST.)</b>			A. (i) LC COSTS CHGD TO \$ ACCTS. 2/																
			FA ACT (ii) TRUST FUND																
			ACT (iii) OTHER LC																
			B. P.L. 480 LC																
<b>VI TOTAL ALL YEARS (EST.)</b>			A. (i) LC COSTS CHGD TO \$ ACCTS. 2/																
			FA ACT (ii) TRUST FUND																
			ACT (iii) OTHER LC																
			B. P.L. 480 LC		Sec. 104(g) L			32,229 32,229		154,300 154,300		154,300 154,300		-		-		-	

REMARKS:  
1/ Exchange Rate: \$1 = Rs. 4.7876  
2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

<b>E-1c</b>	<b>PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS</b>			<b>1. DATA CURRENT AS OF:</b>			<b>2. COOPERATING CTRY.:</b>			<b>3. PERSONNEL SERVICES PARTICIPANT TRAINING</b>			<b>BEG. FY END FY</b>			<b>4. PROJECT NO.</b>										
	<b>5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS</b>			<b>a. CUM. THRU ACTUAL FY</b>			<b>b. ACTUAL FY</b>			<b>c. OPERATIONAL FY</b>			<b>d. BUDGET FY</b>			<b>e. PLANNING FY</b>			<b>f. ALL SUBSEQUENT FYs</b>			<b>g. TOTAL ALL YEARS</b>				
			Direct		PASA		Contract		Direct		PASA		Contract		Direct		PASA		Contract		Direct		PASA		Contract	
<b>I PROJECT PERSONNEL</b>			A. MAN YEARS		U.S.																					
			Non U.S.																							
			B. ON BOARD		U.S.																					
			Non U.S.																							
<b>II PARTICIPANTS PROGRAMMED</b>			A. U.S.																							
			B. THIRD CTRY.																							

REMARKS:  
1/ End of Fiscal Year

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-196 386-42-220-196	Durgapur Thermal Power Project
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### 1. The Activity Target

To increase the electric generation capability of the Durgapur Projects Limited Power Plant by providing financial assistance for the addition of two 75-megawatt units.

**Background:** The area in eastern India, including the parts of Bihar and West Bengal, south of the Ganges River is served by the south Bihar-lower Bengal Power System. Comprising this system are the Damodar Valley Corporation (DVC), the Bihar State Electricity Board (BSEB), the West Bengal State Electricity Board (WBSEB) and the Calcutta Electric Supply Corporation (CESC). The Calcutta Electric Supply Corporation retails in and around Calcutta, while between them the DVC and the WBSEB deliver bulk supplies to almost three-dozen licensees, the largest of which is the CESC which receives up to 150 megawatts from both sources (DVC and WBSEB). An interconnection with the Rihand Dam Power Plant (U.S.assisted) has enabled power imports of up to 100 megawatts into the south Bihar-lower Bengal system. A connection also exists with the Hirakud Dam Power Plant in Orissa, but the amount of power presently imported over this tie line is limited by the line characteristics - mainly its length.

The project is an extension to an existing power plant which is owned and operated by the Durgapur Projects Limited (DPL), whose basic objective is the development of coal related industries such as coke and coke by-products, tar distillation, gas generation and electric power production. In a decade, the area around Durgapur has been changed from jungle land to an impressive industrial complex, including coke ovens, steel plants, a boiler manufacturing plant, a carbon black plant, an ophthalmic glass plant and a number of others. Through its interconnection into the DVC 132 KV transmission system, the DPL plant serves other customers, domestic as well as industrial, over a wide area in Bihar and West Bengal, including the city of Calcutta and an industrialized belt north of Calcutta. In this area, a power demand increase of over 700 megawatts between the present time (September 1964) and the end of the third Five Year Plan is predicted. To meet this demand and to allow for reserve capacity and retirements of obsolete generating capacity requires installation in the area of over 1,000 megawatts. Durgapur Projects Limited capacity would be part of this total.

Other U.S. assisted power plants in this area are Bandel and Chandrapura. These plants and their relationship to the area picture will be found in their individual E-1s.

**Description of Project:** The Durgapur Projects Limited industrial complex is Durgapur, which is on the grand trunk road and the main near Calcutta-Delhi railroad line about 80 miles northwest of Calcutta. The power plant itself is located in the heart of the industrial complex, immediately adjacent to a coke oven battery, on the other side of which a coal washery is under construction, whose middlings will be fed directly into the power plant.

The two existing 30-megawatt units which have been operating for several years were partly financed under non-project DLF Loan #21. This present project covers Units No. 3 and 4 of 75 megawatts each. Another 75-megawatt unit financed by German and Japanese credits is in an early stage of construction. An additional 150 MW unit has been proposed for USAID financing.

The Durgapur Projects Limited authorities propose to install, as the sixth unit, a 150-megawatt turbine-generator and associated switching. A comprehensive project report has been submitted to USAID for consideration of financing this unit. The proposed new unit is an extension of the existing plant. Coal handling, ash handling and cooling water facilities would be largely but not entirely separate from the existing plant. The estimated installed capacity cost of Rs.1,000 (\$210) per kilowatt is somewhat higher than for the two 75-megawatt units, since a 380-KV step-up sub-station is included in the plan. Estimated construction costs of the sixth unit are approximately \$20 million in foreign exchange and \$25 million in local currency.

The case for such a plant at the chosen location appears to be well supported from the standpoints of system requirements and site location with respect to fuel, cooling water and load center. USAID is reviewing the report and investigating the ramifications of the 380-KV transmission system and its interconnection with the existing system described briefly in an earlier paragraph.

The DPL power plant is interconnected with the Durgapur plant of the Damodar Valley Corporation through a four-mile double-circuit 132-KV line. As part of this project, a double-circuit 132-KV line has been built to the vicinity of the partially erected Bandel Power Plant of the West Bengal State Electricity Board, terminating at a nearby switchyard. From this switchyard, a double-circuit 132-KV line goes to a 132-KV termination and switching station near the DVC Howrah Substation, from which point power is fed to the Calcutta Electric Supply Corporation. In effect, the DPL power is transmitted and marketed by the West Bengal State Electricity Board.

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-196 386-42-220-196	Durgapur Thermal Power Project
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## 2. The Course of Action

Financing: To provide \$20 million in development loan financing to meet the foreign exchange costs of the 150-MW Durgapur thermal plant expansion and Rs.34.3 million (dollar equivalent \$7.16 million) to meet local currency costs of the project through a PL 480 Section 104(g) loan.

To provide in FY 1965 a second loan of \$20 million in development loan financing to meet foreign exchange costs of the proposed installation of a 150-MW sixth unit, and Rs.120.0 million (equivalent to \$25.06 million) through a second loan of PL-480 Section 104(g) rupees to meet local currency costs of the proposed extension.

FY 65 150 megawatt extension

\$20,000,000 loan application received in October 1964.

Local currency requirements are approximately Rs.120 million (equivalent to \$25.06 million), for which a request is anticipated.

## 3. Progress to Date

As of September 1964, unit No. 3 is carrying practically full load, delivering up to 50 megawatts into the Calcutta Electric Supply system plus about 25 megawatts into the DVC system while undergoing final tests. Unit No. 4 should be ready for performance and acceptance tests by the end of September 1964.

## 4. Funding Requirements

Funding for this project has been obligated as follows:

FY 60, DLF Loan No. 130, signed  
June 30, 1960 \$20,000,000

FY 61, Project Agreement No.105  
signed April 3, 1961 for  
Rs.34,300,000 (PL 480 rupees)  
equivalent to: \$ 7,164,000

The original estimated total cost was \$28.2 million (dollar equivalent), of which the foreign exchange component was estimated to be \$20 million. The estimated local currency cost was subsequently reduced to \$7.16 million (dollar equivalent), corresponding to an estimated total cost of \$27.16 million.

As of September 1964, all the plant equipment has been purchased with the exception of a few spare parts. The final expenditure figure will come very close to the cost estimate and there is expected to be no surplus or over-run on the \$20 million loan figure.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY India			3. PROJECT NO. 386-22-220-197 386-22-220-197 **				4. TITLE Kanpur Thermal Electric Power Plant						
	U.S. FUNDING:		BEGIN FY 1961		END FY 1961		6. PRIOR REFERENCES									
	PHYSICAL WORK:		1961		1965											
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS 1/	
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		DL	L*	1,600	-	-	-	-	-	1,600	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)															
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		DL	L*	1,482	-	-	-	-	-	1,482	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)		DL	L*	359	-	-	-	-	-	359	-	-	-	-	-
C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L*	118	-	-	-	-	-	118	-	-	-	-	-	
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS		DL	L	(87)	-	-	-	-	-	(87)	-	-	-	-	
	B. EXPENDITURES		DL	L*	31	-	-	-	-	-	31	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L	-	-	-	-	-	-	-	-	-	-	-	-
III. BUDGET YEAR (EST.) FY _____	A. GROSS OBLIGATIONS															
	B. EXPENDITURES															
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
IV. PLANNING YR. (EST.) FY _____	GROSS OBLIGATIONS 2/															
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/		DL	L	1,513	-	-	-	-	-	1,513	-	-	-	1,513	-

## REMARKS:

1/ This is a memorandum (non-odd) column.  
2/ Show estimated expenditures in column i.

\* Loan DLF-140

\*\* Rs.9.5 million of PL-480 Section 104(g) obligated in FY 1961 and disbursed; no unliquidated balance as of 6/30/64

Refers to Annex 3 of LAS

SECURITY CLASSIFICATION UNCLASSIFIED

PAGE NO. AA-35

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-197	Kanpur Thermal Electric Power Plant
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### 1. The Activity Target

To increase the electric generating capability of the State of Uttar Pradesh by the addition of a fifth 15-megawatt thermal power generating unit at the Kanpur Electric Supply Administration Power Station in Kanpur, U.P. The United States is assisting in realization of this target by financing the foreign exchange costs of the imported electrical generating and transmission equipment and local currency costs of the project engineering and construction.

The generating unit financed under the project was placed into operation in October 1963 and has been carrying full load a major part of the time since. The plant management is well satisfied with the equipment procured under the loan. This project has been essentially accomplished.

Background: The project is located in Kanpur, Uttar Pradesh, in the existing Riverside Power Station on the south side of the Ganges River. Kanpur is approximately 45 miles southwest of Lucknow, the Capital of Uttar Pradesh and the headquarters for the Uttar Pradesh Electricity Board. The completed Station contains two 3-MW, two 7.5-MW, one 12.5-MW and five 15 MW-units, for a total nameplate capacity of 108.5 MW. One 3-MW unit, long inoperable, has been cannibalized; other units are missing blades and complete stages. Plant management considers the firm plant capability to be 74 MW; the station peak load reached 71.5 in December 1963.

### 2. The Course of Action

DLF Loan No. 140 financed the last plant expansion for the Riverside Power Station, including acquisition and installation of one 15-MW turbine generator and related boiler, switch gear and ancillary transmission and distribution facilities. Work remaining to be completed on the 15 MW addition to the Riverside Station is the installation of two 30-KV underground cable circuits between the Riverside Power Station and the Panki Substation. Additional expansion of the KESA power system is being arranged through a Yugoslavian Trade Agreement financing two units of 32.5 MW each, which will be installed at a site adjacent to the Panki Substation and to a large irrigation canal which will supply the cooling water requirements. They probably will begin generation in 1966.

### 3. Progress to Date

The project is essentially completed and a final report has been requested. Loan expenditures as of August 31, 1964 were recorded as \$1,513,000 and Rs.9,500,000 (equiv. to \$1.98 million). A Mission letter of July 7, 1964, advised the Government of India of deobligation of remaining funds.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY -- AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY India			3. PROJECT NO. 386-22-220-198 386-42-220-198				4. TITLE Umiam Hydroelectric Power Project (Barapani)						
	5. U.S. FUNDING:		BEGIN FY 1961		END FY 1961	6. PRIOR REFERENCES										
	PHYSICAL WORK:		1961		1965											
7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS 1/	
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		DL	I*	2,500	-	-	-	-	-	2,500	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)		DL	L	-	-	-	-	-	-	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		DL	I*	1,117	-	-	-	-	-	1,117	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)		DL	I*	663	-	-	-	-	-	663	-	-	-	-	-
C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	I*	1,383	-	-	-	-	-	1,383	-	-	-	-	-	
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS		DL	L	-	-	-	-	-	-	-	-	-	-	-	
	B. EXPENDITURES		DL	L	1,383	-	-	-	-	-	1,383	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L	-	-	-	-	-	-	-	-	-	-	-	
III. BUDGET YEAR (EST.) FY _____	A. GROSS OBLIGATIONS															
	B. EXPENDITURES															
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
IV. PLANNING YR. (EST.) FY _____	GROSS OBLIGATIONS 2/															
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/		DL	I*	2,500	-	-	-	-	-	2,500	-	-	-	2,500	-

## REMARKS:

- 1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

\* Loan DLF-141

Refers to Annex 3 of LAS

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO. AA-37



AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-198 386-42-220-198	Uiam Hydroelectric Power Project (Barapani)
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### 1. The Activity Target

To increase the electric power generating capacity of the State of Assam by providing financial assistance for the construction of a 36-MW hydro-electric project on the Uiam River, near Shillong, by the end of 1964.

Background: Assam is the major tea producing state in India and it has the older and larger (in production) of India's two oil fields. But, partly because of its isolated location, Assam has tended to lag behind other Indian states in industrial development. In electric power development, Assam is far behind other Indian States. The state's installed generating capacity in 1962-63 was 38 MW, less than 1% of the total for the country, and average annual per capita consumption of electricity in Assam was only 4 kw-hrs, about one tenth of the all-India average and one thousandth of that in the U.S.

Assam, Nagaland and the adjacent Union Territories, comprising a separate North Eastern Electric Power Region, probably will continue through the Fourth Five Year Plan period to be largely isolated from the remainder of India in electric power development. Fortunately the state has a large undeveloped hydro-electric power potential and fuel resources (coal, oil and gas) which are adequate to meet the state's thermal power needs. The Barapani Project is the second hydro-electric development of the Assam State Electricity Board, the first being a Canadian financed 8.4 MW "run of the river" plant on the Umtru River near Gauhati, completed in 1957. These two plants will be linked together in the Umtru-Uiam Power System, serving Shillong, Gauhati and adjacent areas. Concurrently with construction of the Barapani Project, the generating capacity of the separate Naharkatiya Power System in the northeastern section of the State is being greatly increased by an Export-Import Bank-financed gas turbine installation of 69 MW. During the five year period of 1962-63 to 1967-68, Assam's installed generating capacity is scheduled to increase five-fold.

Description: The principal features of the project are a concrete dam, approximately 250 feet high and two earthfill saddle dams impounding a reservoir with a live storage capacity of 115,000 acre-feet on the Uiam River, about 9 miles north of Shillong; a nine-mile relocation of a national highway to "lift" the highway out of the reservoir area; a 7,000-foot tunnel and two 1,700-foot steel penstocks; a power plant with four 9-MW Japanese-made generating units (only 3 units financed by the U.S.); and 105 miles of transmission lines connecting the power plant with the existing power system.

The Uiam River is a tributary of the Umtru River. Between the Barapani and Umtru Power Plants there is a drop of 2,500-feet. Water stored at Barapani ultimately may be used in a series of power plants making use of the entire drop. The second stage of the Uiam Project, now under construction (but without U.S. assistance), will develop the upper 250-feet of the potential 2,500-foot head.

### 2. The Course of Action

U.S. assistance has consisted of providing a \$2.5 million loan to finance the foreign exchange costs of construction equipment, three generating units, switchgear and transmission equipment, and PL-480 loans to finance the local currency costs of construction. The dollar loan was made before the advent of the "buy American" restriction and U.S. funds are being used to finance commodities from Japanese and European sources as well as from the U.S.

### 3. Progress to Date

Construction: Relocation of the National Highway and construction of the two earthfill saddle dams are complete. The main concrete dam is about 90 percent complete; the power tunnel, penstocks and power plant structure are substantially complete; and installation of Generating Unit No. 1 is well advanced. Initial power generation is scheduled in December 1964.

Financing: DLF Loan No. 141, for \$2.5 million was made in December, 1960 and Rs.64 million (equivalent to \$13.37 million) were provided in FY 1961 to meet local currency costs of the project through PL-480 Sec. 104(g) loan.

As of June 30, 1964, orders had been placed for commodities costing a total of approximately \$2 million. Almost all of the equipment required for the project had then been delivered but additional orders for spare parts and ocean freight costs may raise the total foreign exchange expenditures above the \$2 million. The local currency funds have all been disbursed.

The scope of the project has been increased from that originally planned by raising the height of the dams 10 feet and increasing the installed generating capacity from 27 MW to 36 MW. Due to these changes, plus some inflation of construction costs and other factors, the local currency costs of the project have increased greatly. An unofficial revised estimate gives the total (rupee and foreign exchange) cost of the project as Rs.160 million.

Government of India request for additional PL-480 Section 104(g) loan of Rs.83.7 million (equiv. of \$17.48 million) is anticipated for FY 1965 obligation.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India			3. PROJECT NO. 386-22-220-207 386-42-220-207				4. TITLE Talcher Thermal Power Project							
	5. U.S. FUNDING:	BEGIN FY 1962	END FY 1962		6. PRIOR REFERENCES											
	PHYSICAL WORK:	1963	1967													
7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. L/CAN OR GRANT	c. TOTAL	d. CONTRACT <sup>1/</sup>	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. <sup>1/</sup> LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	DL	I*	33,000	-	-	-	-	-	33,000	-	-	-	-	-	
	GROSS OBLIGATIONS (ACTUAL YEAR)	DL	I	-	-	-	-	-	-	-	-	-	-	-	-	
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	DL	I*	10,989	-	-	-	-	-	10,989	-	-	-	-	-	
	EXPENDITURES (ACTUAL YEAR)	DL	I*	10,816	-	-	-	-	-	10,816	-	-	-	-	-	
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS															
	B. EXPENDITURES	DL	L	12,000	-	-	-	-	-	12,000	-	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L	10,011	-	-	-	-	-	10,011	-	-	-	-	-	
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS															
	B. EXPENDITURES	DL	L	6,000	-	-	-	-	-	6,000	-	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L	4,011	-	-	-	-	-	4,011	-	-	-	-	-	
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS <sup>2/</sup>	DL	L	-	-	-	-	-	-	-	-	-	-	4,011	-	
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>	DL	L	33,000	-	-	-	-	-	33,000	-	-	-	33,000	-	

## REMARKS:

- <sup>1/</sup> This is a memorandum (non-add) column.  
<sup>2/</sup> Show estimated expenditures in column i.

\* Loan DLF 190

Refers to Annex 3 of LAS

AID 1020-3 (7-64)	PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		END FY		4. PROJECT NO.		5. TITLE				
	1 November 1964		India		Funding 1964 Phys. Work 1963		1965 1967		386-22-220-207 386-42-220-207		Talcher Thermal Power Project				
7. OBLIGATED AND DISBURSED	e. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)					
	(1) TYPE	(2) SOURCE	(3) LOAN LOAN GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1)		(2)		(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED	OBLIGATED	DISBURSED	(a) U.S. PERS.	(b) NON- U.S. PERS.	(a) OBLIGATED	(b) DISBURSED		
	I CUMULATIVE THRU ACTUAL YEAR	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/													
FA ACT		(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC	Sec. 104(g)	L	17,838	17,838	85,400	85,400	85,400	85,400	-	-	-	-	-	
TOTAL ACTUAL FY 1964	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC	Sec. 104(g)	L	17,838	17,838	85,400	85,400	85,400	85,400	-	-	-	-	-	
II OPERATIONAL YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC	Sec. 104(g)	L	41,775	41,775	200,000	200,000	200,000	200,000	-	-	-	-	-	
III BUDGET YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC														
IV PLANNING YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC														
V ALL SUBSEQUENT FYs (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC														
VI TOTAL ALL YEARS (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC	Sec. 104(g)	L	59,613	59,613	285,400	285,400	285,400	285,400						

REMARKS:  
 1/ Exchange Rate: \$1 = Rs. 4.7876  
 2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES PARTICIPANT TRAINING			4. PROJECT NO.												
	B. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
I PROJECT PERSONNEL	A. MAN YEARS	U.S. Non U.S.	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract		
																								B. ON I/ BOARD	U.S. Non U.S.
II. PARTICIPANTS PROGRAMMED	A. U.S.																								
	B. THIRD CTRY.																								

REMARKS:  
 1/ End of Fiscal Year

AID 1020-1 (7-84)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-207	Talcher Thermal Power Project
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1. The Activity Target

To increase the electric generating capability of the State of Orissa by providing financial assistance for the installation of a 250-megawatt thermal electric power plant located 70 miles northwest of Bhubaneshwar.

Background: The States of Orissa, West Bengal and Bihar comprise the eastern power region. Although Orissa shares with West Bengal and Bihar, the rich iron ore and coal deposits in its northern region, it is comparatively undeveloped industrially, a situation to which low population density and inadequacy of educational, transport, communications and power systems are contributing factors. Public utility generating capacity in the State by the end of the First Five Year Plan was only about 10 megawatts.

At the present time there are two sub-systems in Orissa, the Hirakud sub-system in the north and the Machkund sub-system in the south. These will be inter-connected with each other by 220-kv and 132-kv transmission lines, part of which are being built under the Talcher project. The capability of the Hirakud system, including Hirakud Dam Power Plant and its satellite down-stream power plant, Chiplima, along with small and obsolete steam-electric capacity, totals 276 megawatts at the present time. The Machkund system, the power source of which is just across the Orissa-Andhra Pradesh State line in Andhra Pradesh has a capability of 34 megawatts. Coincident with or soon after full operation of Talcher, these two sub-systems will be inter-connected. Peak load on the Hirakud system during the current year is about 150 megawatts and on the Machkund system it is about 12 megawatts. Around the time that Talcher comes into full operation and the two sub-systems are integrated, the combined maximum demand will be in the order of 435 megawatts with a combined power system capability of 422 megawatts. The power and energy deficiencies, evident from the foregoing figures, are due in large measure to the proposed rapid rate of industrial development in Orissa. It is possible that by exploiting the advantages of system inter-connection, the Bihar-West Bengal and Orissa systems could show a net firm capacity sufficient to carry the estimated peak load in 1967 and 1968. Implementation of such inter-connections is one of the tasks facing the eastern region electricity board.

Description of Project: The Talcher project consists primarily of the 250-megawatt thermal power plant about 70 miles northwest of Bhubaneshwar; a 4 $\frac{1}{2}$ -mile belt conveyor

from a mine being developed by the National Coal Development Corporation to the power plant; 92 miles of 220-KV double-circuit transmission line, 62 miles of 132-KV double-circuit transmission lines and two main sub-stations.

2. The Course of Action

Financing: A \$33 million development loan to meet foreign exchange costs of the Talcher Thermal Power Projects and a PL-480 section 104(g) loan of Rs.85.4 million (equivalent \$17.83 million) to meet local currency costs have been made.

An additional loan of Rs.200 million (equiv. of \$41.77 million) from PL-480 section 104(g) funds is proposed for FY 1965 obligation to meet local currency costs of the power plant extension.

Cost Estimate:

	<u>Foreign Exchange</u>	<u>Local Currency</u> (\$ equivalent)
Turbine-generators, boilers, feed pumps, coal handling, ash handling, cooling towers, condensers, etc.	\$ 26,800,000	\$ 10,700,000
Indoor switchgear	840,000	2,788,000
Outdoor switchgear and sub-station equipment	3,570,000	
Transmission line material	1,100,000	4,350,000
Engineering Services	690,000	
<b>Total Costs</b>	<b>\$ 33,000,000</b>	<b>\$ 17,838,000</b>

(contd)

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-207	Talcher Thermal Power Project
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Suppliers of Principal Equipment are as follows:

Turbine generators	General Electric
Boilers	Babcock and Wilcox, U.S.A.
Boiler Feed pumps	Pacific Pumps
Condensers	Worthington
Cooling Towers	Marley
Main Power Transformers	Heavy Electricals - India
Structural Steel	United States sources
Coal handling	McNally Bird (letter of intent only)

### 3. Progress to Date

A substantial amount of equipment and material for this project has been delivered. Two of the turbine-generators which are a part of a bulk purchase arrangement, have been delivered, parts of unit 3 turbine-generator have been received and unit 4 should reach the site soon. Boiler structural steel has been received, about 40 percent of other boiler parts are on site. Letters of intent or contracts have been issued for most of the rest.

Procurement is generally about six months behind schedule, due primarily to delays in making awards of contracts.

Practically all excavation and levelling work is completed, turbine-generator foundations have been poured and erection of power plant building structural steel and boiler structural steel has begun.

Although the project schedules initial operation of the first unit by December 1965, it is felt that a date of June 1966 would be more realistic.

### 4. Funding Requirements

FY 62 DLF Loan No. 190	\$33,000,000
FY 64 PL-480 rupee loan \$ equiv.	\$17,838,000
FY 65 PL-480 rupee loan \$ equiv.	\$41,775,000

The Government of India proposes a 280-megawatt addition to the Talcher power plant, the estimated foreign exchange requirements of which would be \$30 million. A project report is under preparation and should be ready by November or December, 1964.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY India			3. PROJECT NO. 386-22-220-208 <del>386-42-220-208</del>				4. TITLE Birsinghpur Power Project (Amarkantak)						
	B. U.S. FUNDING: 1962		BEGIN FY 1962		END FY 1962		6. PRIOR REFERENCES									
	PHYSICAL WORK: 1962		1962		1965											
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		g. APPROPRIATION TITLE	h. LOAN OR GRANT	i. TOTAL	j. CONTRACT 1/	k. PERSONNEL SERVICES			l. PARTICIPANTS		m. COMMODITIES		n. OTHER COSTS		o. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS 1/	
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	DL	I*	8,400	-	-	-	-	-	-	8,400	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)	DL	I	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	DL	I*	4,173	-	-	-	-	-	-	4,173	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)	DL	I*	2,617	-	-	-	-	-	-	2,617	-	-	-	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	I*	4,227	-	-	-	-	-	-	4,227	-	-	-	-	-
	A. GROSS OBLIGATIONS	DL	I	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. EXPENDITURES	DL	I*	4,227	-	-	-	-	-	-	4,227	-	-	-	-	-
III. BUDGET YEAR (EST.) FY _____	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	I	-	-	-	-	-	-	-	-	-	-	-	-	-
	A. GROSS OBLIGATIONS															
	B. EXPENDITURES															
IV. PLANNING YR. (EST.) FY _____	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	DL*	I*	8,400	-	-	-	-	-	-	8,400	-	-	-	8,400	-

## REMARKS:

- 1/ This is a memorandum (non-odd) column.  
2/ Show estimated expenditures in column i.

Refers to Annex 3 of LAS

\* DLF Loan #191

SECURITY CLASSIFICATION UNCLASSIFIED

PAGE NO. AA-44

AID 1020-3 (7-64)		PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES										SECURITY CLASSIFICATION UNCLASSIFIED			
E-1b		1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		END FY		4. PROJECT NO.		5. TITLE			
		1 November 1964		India		Funding 1964 1965		1962 1965		386-42-220-208		Birsinghpur Power Project (Amarkantak)			
						Phys. Work 1962 1965				386-22-220-208		6. PRIOR REFERENCES:			
7. OBLIGATED AND DISBURSED		g. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
		(1)	(2)	(3)	(1)		(2)		(1)	(2)	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
		TYPE	SOURCE	LOAN GRANT	DOLLAR EQUIVALENTS (000) 1/		LOCAL CURRENCY UNITS (000)		OBLIGATED	DISBURSED	(a)	(b)	(a)	(b)	
					(a)	(b)	(a)	(b)			U.S. PERS.	NON-U.S. PERS.	OBLIGATED	DISBURSED	
I CUMULATIVE THRU ACTUAL YEAR		A. (i) LC COSTS CHGD TO \$ ACCTS. 2/													
		FA ACT (ii) TRUST FUND													
		FA ACT (iii) OTHER LC													
		B. P.L. 480 LC		Sec. 104(g) I*	13,932	13,932	66,700	66,700	66,700	66,700	-	-	-	-	
TOTAL ACTUAL FY 1964		A. (i) LC COSTS CHGD TO \$ ACCTS. 2/													
		FA ACT (ii) TRUST FUND													
		FA ACT (iii) OTHER LC													
		B. P.L. 480 LC		Sec. 104(g) I*	13,932	13,932	66,700	66,700	66,700	66,700	-	-	-	-	
II OPERATIONAL YEAR (EST.)		A. (i) LC COSTS CHGD TO \$ ACCTS. 2/													
		FA ACT (ii) TRUST FUND													
		FA ACT (iii) OTHER LC													
		B. P.L. 480 LC		Sec. 104(g) I	2,109	2,109	10,100	10,100	10,100	10,100	-	-	-	-	
III BUDGET YEAR (EST.)		A. (i) LC COSTS CHGD TO \$ ACCTS. 2/													
		FA ACT (ii) TRUST FUND													
		FA ACT (iii) OTHER LC													
		B. P.L. 480 LC													
IV PLANNING YEAR (EST.)		A. (i) LC COSTS CHGD TO \$ ACCTS. 2/													
		FA ACT (ii) TRUST FUND													
		FA ACT (iii) OTHER LC													
		B. P.L. 480 LC													
V ALL SUBSEQUENT FYs (EST.)		A. (i) LC COSTS CHGD TO \$ ACCTS. 2/													
		FA ACT (ii) TRUST FUND													
		FA ACT (iii) OTHER LC													
		B. P.L. 480 LC													
VI TOTAL ALL YEARS (EST.)		A. (i) LC COSTS CHGD TO \$ ACCTS. 2/													
		FA ACT (ii) TRUST FUND													
		FA ACT (iii) OTHER LC													
		B. P.L. 480 LC		Sec. 104(g) I	16,041	16,041	76,800	76,800	76,800	76,800	-	-	-	-	

REMARKS:  
 1/ Exchange Rate: \$1 = Rs. 4.7876  
 2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c		PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS										1. DATA CURRENT AS OF:		2. COOPERATING CTRY.		3. PERSONNEL SERVICES PARTICIPANT TRAINING		BEG. FY		END FY		4. PROJECT NO.			
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS					
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract			
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																							
		Non U.S.																							
B. ON BOARD	U.S.																								
	Non U.S.																								
II. PARTICIPANTS PROGRAMMED		A. U.S.																							
		B. THIRD CTRY.																							

REMARKS:  
 1/ End of Fiscal Year \* Part of Loan # AID-86-12

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-208 386-42-220-208	Birsinghpur Power Project (Amarkantak)
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### 1. The Activity Target

To increase the electric generating capability of the northeast section of the State of Madhya Pradesh, by the addition of 60 megawatts of thermal electric generation facilities at the Amarkantak Power Station. The United States is assisting in financing the foreign exchange costs of the imported electrical generating and transmission equipment and local currency costs of the project engineering and construction.

Background: The Amarkantak Power Plant, formerly called the Birsinghpur Power Plant, is near Amlai, in eastern Madhya Pradesh on the Southeastern Railway between Katni and Bilaspur. Before final selection of the present site, several others were considered; the most seriously thought of alternate location was at Birsinghpur about 35 miles northwest of Amlai, which led to the project's being called Birsinghpur for some time. The present name, Amarkantak Power Station, honors a village shrine at the headwaters of the Narmada River some 25 miles from the power plant site.

Madhya Pradesh is the largest State in India in terms of area, 171,217 square miles. Its population density is less than 200 persons per square mile, making it one of India's most sparsely populated states. Several areas of the State are served by interconnected distribution systems, composed of 33 and 66 KV transmission circuits. These lower voltage class transmission circuits have been set up to serve three independent sub-systems: One in the eastern part of the State, to which the Amarkantak Station is connected; another in the central area which connects with part of the eastern Maharashtra system; and the third in the western part of the State, which connects to the eastern Rajasthan system. Steps are being taken at this time to integrate the three systems with 220 KV and 132 KV main transmission circuits.

The coal field belt which plays such a prominent part in the economy of West Bengal and Bihar extends to the east-central and southern parts of Madhya Pradesh. Amarkantak Power Plant is in the Rewa Colliery Area; thus it was no surprise that coal was found when the foundations for the power plant were dug. In southeastern Madhya Pradesh are the Bhilai steel mill project and the 100-MW Korba thermal plant, both recently commissioned. The Bhilai steel plant is connected to Korba by double-circuit 132 KV line, which will serve as a sub-transmission feature when a double-circuit 220 KV line to Bhilai and south to Bailadilla goes into operation. North of Jabalpur are several cement factories and one diamond mine. Jabalpur,

headquarters of the Madhya Pradesh Electricity Board, at present is dependent upon 13.5 MW of old steam capacity and 1.5 MW of diesel. An ordnance center dating back almost 100 years, Jabalpur is experiencing an upsurge in manufacturing activity as a result of the change in military posture since the late 1962 northern border crisis.

The Gandhi Sagar Hydroelectric/Irrigation Scheme, which serves areas in both Rajasthan and Madhya Pradesh, at present has 92 MW of capacity operating, of which 46 MW are reserved for Madhya Pradesh. This power is being delivered into the Ujjain-Indore-Bhopal area by 132 KV transmission. The Gwalior area in the extreme northern part of Madhya Pradesh also is receiving power from Gandhi Sagar.

Description of Project: The Amarkantak Project combines generation, transmission and sub-transmission features. The equipment has come from worldwide sources, including Austrian boilers and coal-handling equipment; AEG (German) turbine-generators, consisting of 2-30 MW units; a Westinghouse auxiliary supply transformer; switchgear from ASEA, and Oerlikon (Swiss); Brown-Boveri carrier communications equipment (Swiss); Italian transformers; and Japanese line-insulators and hardware. Although the boiler equipment is Austrian, boiler controls are being supplied by Siemens (Germany).

Coal will be brought to the plant by rail from nearby collieries in the Amlai and Birsinghpur areas; cooling water will come from small reservoir, covering roughly 1,300 acres, formed by an earthfill/rock-fill dam, 3,390 feet in length, maximum height 67 feet, built on the Sathna Nullah (which joins the Narmada River just below the dam). Cooling will be effected by the circulation, heat radiation and evaporative cooling in the lake.

Transmission features include a 132 KV line from Amarkantak east to Chirimiri, about 50 miles; a 132 KV line from Chirimiri to the existing Korba Thermal Plant; and certain line sections north of Jabalpur to load centers along the railway leading to Allahabad. The line sections with which DLF financing is directly involved are the Amarkantak-Chirimiri and the Katni-Kymore-Satna lines, plus miscellaneous 33 KV sub-transmission lines. Most of the higher voltage switching equipment and some of the control and communications equipment are DLF financed. Basic design for the power plant was done by the Madhya Pradesh Electricity Board with detailed design, supply, erection and commissioning of the turbine-generator, condenser, and piping being accomplished by the supplier. Similarly, detailed design, supply and erection of the boiler, coal handling, and hydraulic ash handling equipment are the responsibility of the Austrian firm, Simmering-Graz-Pauker. Powerhouse steel design, detailing, fabrication and erection is to be done by an Indian engineering firm.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-208 386-42-220-208	Birsinghpur Power Project (Amarkantak)
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## 2. The Course of Action

Financing: To provide a dollar development loan of \$8,400,000 to meet the foreign exchange cost of the Amarkantak Power Plant, including the turbine generator, boiler, coal and ash handling equipment as well as imported equipment for substations inclusive of switchgear and some transformers, and a PL 480 Section 104(g) loan of Rs.66.7 million (equivalent to U.S. \$13.93 million) to meet local currency costs of the project.

An additional PL 480 Section 104(g) loan of Rs.10.1 million (equiv. \$2,109,000) is proposed for FY 1965 obligation to meet increased costs in local currency.

## 3. Progress to Date

Financing: DLF Loan No. 191 for \$8,400,000 was signed August 16, 1961. Project agreement No. 113, signed June 1, 1962, provided Rs.66,700,000 (equiv. to \$13.93 million).

Cost Estimates: It was estimated originally that the project would cost \$8.4 million in foreign exchange and Rs.66.7 million (equiv. to \$13.93 million) in local currency. Because of increased local currency costs of the project a second PL 480 loan of Rs.10.1 million (equiv. to \$2,109,000) is proposed for FY 1965 obligation. An official request for this additional loan is anticipated which will be reviewed and approved by the Mission before obligation of funds is made.

As of September 30, 1964, disbursements made by the Mission were: \$4,370,000 and PL 480 Rs.66,700,000. Any dollar loan funds not required for the project will be deobligated.

Construction: As of July 31, 1964, the Amarkantak Power Plant is estimated to be more than 95 percent completed. The site inspection by Mission personnel in July 1964 showed the powerhouse super-structure completed, all boilers hydrostatically tested and the better part of the boiler control installation completed; the No. 1 turbine, which had been assembled and then dismantled for a bearing lube-oil pump modification, was being re-assembled, and the first turbine-generator unit was scheduled for rolling during the first week of September 1964. Boiler and piping clean-out was going on during the site visit, and all four

boilers were to be fired and blown down by the end of October. Initial operation of the first unit is expected to be in mid-October. The most questionable feature of the project has been the availability of circulating cooling water to be obtained from a lake formed by a small dam on the nearby Suthma Nullah. Monsoon rains at the time of site visit had not been heavy enough to provide sufficiently high water in the lake for plant operation. However, a report dated September 30 advises that the lake (or reservoir) has been filled and is ready to support plant operation. At the time of the July 29 inspection the substation control building was about 80 percent complete and mechanical and electrical installations were under way in the substation control building, which is adjacent to the switchyard and not in the power station proper. Progress on the transmission lines varies from completion of the Amarkantak-Chirimiri 132 KV line to less than 30 percent on the Kymore-Satna line. Construction on the various substations is not as far advanced as project construction but the station switchyard is expected to be sufficiently near completion during September 1964 to permit station generation to feed into the existing Amarkantak-Chirimiri 132 KV line and on into the transmission network. The target activity should be achieved by the end of 1964.

AID 1020-2 (9-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-22-220-220 386-42-220-220				4. TITLE Dhuvaran Thermal Power Project I & II. (Cambay)						
	5. U.S. FUNDING:		BEGIN FY 1962		END FY 1965		6. PRIOR REFERENCES									
	PHYSICAL WORK:		1963		1968											
7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT <sup>1/</sup>	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		DL	I*	33,600	-	-	-	-	-	33,600	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)		DL	I	-	-	-	-	-	-	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		DL	I*	30,771	-	-	-	-	-	30,771	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)		DL	I*	5,505	-	-	-	-	-	5,505	-	-	-	-	-
C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	I*	2,829	-	-	-	-	-	2,829	-	-	-	-	-	
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS		DL	I	32,300	-	-	-	-	-	32,300	-	-	-	-	
	B. EXPENDITURES		DL	I*	2,000	-	-	-	-	-	2,000	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	I	33,129	-	-	-	-	-	33,129	-	-	-	-	
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS		DL	I	-	-	-	-	-	-	-	-	-	-	-	
	B. EXPENDITURES		DL	I	5,000	-	-	-	-	-	5,000	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	I	28,129	-	-	-	-	-	28,129	-	-	-	-	
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS <sup>2/</sup>		DL	I	-	-	-	-	-	-	-	-	-	12,000	-	
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>		DL	I	-	-	-	-	-	-	-	-	-	16,129	-	
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>		DL	I	65,900	-	-	-	-	-	65,900	-	-	65,900	-	

## REMARKS:

<sup>1/</sup> This is a memorandum (non-odd) column.<sup>2/</sup> Show estimated expenditures in column i.

\*Loan DLF-215

Refers to Annex 3 of IAS.

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

SECURITY CLASSIFICATION  
UNCLASSIFIED

E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		END FY		4. PROJECT NO.		5. TITLE			
	1 November 1964		INDIA		Funding 1964		1965		386-42-220-220		Dhuvanan Thermal Power Project I & II (Cambay)			
					Phys. Work 1963		1968		386-22-220-220		6. PRIOR REFERENCES:			
7. OBLIGATED AND DISBURSED	g. FUNDS			j. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED	
I CUMULATIVE THRU ACTUAL YEAR	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT (ii) TRUST FUND													
	(iii) OTHER LC													
	B. P.L. 480 LC	Sec. 104(g)	I*	18,840	18,840	90,200	90,200	90,200	90,200	-	-	-	-	
TOTAL ACTUAL FY 1964	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT (ii) TRUST FUND													
	(iii) OTHER LC													
	B. P.L. 480 LC	Sec. 104(g)	I*	18,840	18,840	90,200	90,200	90,200	90,200	-	-	-	-	
II OPERATIONAL YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT (ii) TRUST FUND													
	(iii) OTHER LC													
	B. P.L. 480 LC	Sec. 104(g)	I.	37,806	37,806	181,000	181,000	181,000	181,000	-	-	-	-	
III BUDGET YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT (ii) TRUST FUND													
	(iii) OTHER LC													
	B. P.L. 480 LC													
IV PLANNING YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT (ii) TRUST FUND													
	(iii) OTHER LC													
	B. P.L. 480 LC													
V ALL SUBSEQUENT FYs (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT (ii) TRUST FUND													
	(iii) OTHER LC													
	B. P.L. 480 LC													
VI TOTAL ALL YEARS (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT (ii) TRUST FUND													
	(iii) OTHER LC													
	B. P.L. 480 LC	Sec. 104(g)	I.	56,646	56,646	271,200	271,200	271,200	271,200	-	-	-	-	

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS		1. DATA CURRENT AS OF:		2. COOPERATING CTRY.		3. PERSONNEL SERVICES PARTICIPANT TRAINING		BEG. FY		END FY		4. PROJECT NO.											
PROJECT PERSONNEL	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
	A. MAN YEARS	U.S.	Non U.S.	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
B. ON BOARD	U.S.																							
	Non U.S.																							
II. PARTICIPANTS PROGRAMMED	A. U.S.																							
	B. THIRD CTRY.																							

REMARKS:

1/ End of Fiscal Year

\*Parts of Loans AID-86-11 and AID-86-12.

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO. AA-49

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-220 386-42-220-220	Dhuvaran Thermal Power Project I & II (Cambay)
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1. The Activity Target

Stage I

To increase the electric generating capability of the State of Gujarat and the Western Region by providing financial assistance for the installation of four 63.5 MW electric generating units and associated auxiliary equipment and transmission lines. The plant, formerly named "Cambay", is located on the tidewater section of the Mahi River where it empties into the Bay of Cambay on the Arabian Sea.

Stage II

To further increase the generating capability of Gujarat State and the Western Region by providing financial assistance for installation of two units of 125/140 MW each.

Background: With the bifurcation of the former Bombay State in 1960, Gujarat State Electricity Board (GSEB) was constituted with responsibility for promoting the coordinated development of generation, supply and distribution of electricity within the new Gujarat State. The creation of the new State has given added impetus to the industrialization of the area; the availability of power is a critical factor in this industrialization. Prominent among industrial projects is the development of the recently discovered oil deposits near Cambay (between Broach and Ahmedabad). The increase in the State's generating capacity from the Dhuvaran station will allow expansion of existing industry as well as implementation of new industries such as refineries, cement, textiles, heavy manufacturing and chemicals.

The GSEB transmission and distribution system will serve all of Gujarat State and will be interconnected with Ahmedabad (the area grid of the Ahmedabad Electricity Company, which operates a 187.5 MW thermal plant on the edge of the Sabarmati River, on the outskirts of Ahmedabad City. The Company recently completed the installation of a 30-MW unit, financed in part by DLF Loan No.121 (See Project 386-24-220-234).

The Gujarat power system is part of an area defined as the Western Region or Region II of five into which India has been divided for the purpose of power system planning and integration. Eventually the system will operate as a totally interconnected system with the proposed Nuclear Power Station at Tarapur (Project 386-22-980-239), the Tata-Central Railways-Koyna system (Projects 386-24-220-235 and 386-12-250-011), and the Chambal-Satpura system (Projects 386-12-250-011 and 386-22-220-238) of Madhya Pradesh.

At present there is an acute power shortage in Gujarat State, so severe that for the last three years a curtailment of peak load, amounting to 20 to 50 MW, has been enforced.

With the implementation of the four units of 63.5 MW each (Stage One), now in its later stages of completion, a second phase of development is being planned by the Gujarat State Electricity Board. The proposed Stage Two is to consist of a station extension of two units of 125/140 MW.

With the GSEB having selected the Tata-Ebasco firm to provide engineering consulting services for the extension, it is expected that site preparation and foundation work will begin during January 1965 making operation likely in July 1967.

Description of Project: Dhuvaran Station is located on the Mahi River at Dhuvaran in Gujarat, on a site selected for the following considerations:

- Availability of water supply from Mahi River. (Tide water)
- Proximity of oil fields and refineries with opportunity to utilize petroleum and gas as fuel.
- Load center location.
- Rail transport system from coal mines in Madhya Pradesh.
- Available waste lands for ash disposal.

Stage I of the Dhuvaran Station comprises four condensing turbine generating units each having a maximum continuous rating of 63.5 MW; nine 300,000 pound per hour steam generating units using pulverized coal, residual oil, or natural gas as fuel, either singly or in combination; and all auxiliary equipment and material required for a complete power station.

Stage II expansion will add two 125/140-MW generating units and associated switching and transmission equipment.

The Stage I project comprises, in addition to the Dhuvaran Station, 215 miles of double circuit and 30 miles of single circuit 132 KV transmission lines; two 112.5-MVA, one 90-MVA, and one 52.5-MVA stepdown sub-stations; and a switching structure.

An interesting feature of the project plan is that 1,415 tons of aluminum ingots and 1,218 tons of steel core wire will be furnished from U.S. sources for fabrication into ACSR conductor wire in India.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-220 386-42-220-220	Dhuvaran Thermal Power Project I & II (Cambay)
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## 2. The Course of Action

### Financing

Stage I: DLF Loan No. 215 of February 1962 provided \$33.6 million in dollar financing to meet the foreign exchange cost of the Dhuvaran Thermal Electric Power Project and a PL-480 Section 104(g) loan in August 1963 of Rs. 90.2 million (equivalent to \$18.84 million) assisted in meeting local currency costs.

An additional PL-480 loan of Rs. 54.1 million (equivalent to \$11.3 million) is proposed in FY 1965 to provide for the cooling pond and to meet other increased costs for completion of Stage I.

Stage II: The Gujarat State Electricity Board (GSEB) has applied for additional U.S. financing to assist in extending the Dhuvaran Power Station by installation of two units of 125/140 MW. Assistance requested for FY 1965 is approximately \$32.30 million in foreign exchange and Rs. 126.9 million (equivalent to \$26.5 million) of PL 480 loan funds.

### Engineering:

Stage I: The Kuljian Corporation, a U.S. consulting firm with offices in India, is responsible for:

- Review of equipment specifications prepared by GSEB.
- Assisting in evaluation of tenders.
- Preparation of mechanical flow diagrams, electrical single-line diagrams, plot plans and equipment layout drawings.
- Review and approval of manufacturers detailed drawings.
- Design of civil works.
- Network study of electrical characteristics of the generating and transmission system.
- Supervision of construction and erection of Dhuvaran station.
- Supervision of initial operation of the Station.

Stage II: GSEB has engaged the firm of Tata-Ebasco to provide:

- A project feasibility report (which has reportedly been under preparation for several months is expected to be submitted soon).
- Complete project engineering with specifications and drawings.
- Bid evaluations
- Construction supervision
- Factory inspection
- Start-up and initial operation supervision.

Prime Contractor for the project (Stage I) is the International General Electric Co. who will provide all construction and equipment with the exception of the main power transformers which were procured under a separate contract.

Suppliers: The major U.S. supplier-contractors are:

Structural Steel Fabrication	International General Electric
Electrical & Mechanical Equipment	International General Electric
Steam Generating Equipment	Foster Wheeler & Co. (As sub-contractor to I.G.E.)
Power Transformers	Westinghouse Electric Intl.Co.
7.5 MVA Transformers	National Electrical Industries
Dredge	Ellicott Corporation

### Cost Estimate:

The original and revised (June 1964) cost estimates for the Stage I are:

(Amounts in millions of dollars)

Item	1961		1964	
	Original Estimate		Revised Estimate	
	Local Currency	Foreign Exchange	Local Currency	Foreign Exchange
Cambay Station	\$14.58	\$29.1	*	\$30.5
132 KV Transmission Lines	2.18	1.8	*	0.6
Stepdown Stations	1.58	2.1	*	1.9
Consulting Services	0.50	0.6	*	0.6
	<u>\$18.84</u>	<u>\$33.6</u>	<u>\$30.14</u>	<u>\$33.6</u>

(\*Breakdown not available)

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-220- 386-42-220-220	Dhuvaran Thermal Power Project I & II (Cambay)
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Recent revisions in design to assure a dependable circulating cooling water supply to the station, are being made at an estimated cost of Rs.7.0 million (equivalent to \$1.46 million). The Mahi River has meandered away from the station pumphouse and the GSEB has decided to add piping modifications and circulating water cooling ponds.

The estimated costs for Stage II are: \$32.30 million in foreign exchange and Rs.126.9 million (equiv. \$26.50 million) in local currency.

A request from the GOI is anticipated for these increases for Stages I & II.

### 3. Progress to Date

Stage I: In February 1962, DLF Loan Agreement No. 215 was signed to provide \$33.6 million in dollar financing, and Project Agreement No. 123 was signed in August 1963 to provide Rs.90.2 million (equiv. to \$18.84 million) to meet local costs.

Site activities began in December 1960-January 1961. Lummus & Co. (India) are subcontractors to I.G.E. for plant erection; the Shah-Gammon Co. (India) holds the majority of the contracts for civil works. Construction progress to September 30, 1964, is shown below:

- No. 4 Unit has been operated without load
- No. 3 Unit will be ready to operate by November 1, 1964
- No. 2 Unit will be ready to operate by December 1, 1964
- No. 1 Unit will be ready to operate by December 31, 1964

Construction of a cooling pond to provide condensing water for two units (as a substitute for the river tide-water channel supply which has moved away from the power station intake, making cooling water from the river not available during periods of low tide) is scheduled to be completed by December 31, 1964. Additional pondage will be undertaken in early 1965 to provide cooling water and cooling area for the two remaining units of Stage I.

Stage II: The firm of Tata-Ebasco has been selected to provide engineering services and as of October 1964 is developing the Project Feasibility Report. USAID has requested that studies be made as to fuel transport costs and circulating water supply systems to assist in determining proper site location for Stage II. GSEB has assured USAID that the plant expansion will be fired with refinery residuals available from the Baroda Refinery for the life of the power station.

GSEB has approached USAID through CWPC for assistance on the Stage Two extension to the Dhuvaran Project.

The USAID Mission representatives met with CWPC and GSEB and reviewed the Tata-Ebasco Engineering services contract prior to its execution. This coordination was carried out so that should AID finance the Stage Two Extension, the foreign exchange costs of the engineering services could be reimbursable. The Mission is now awaiting receipt of the project feasibility report.

### 4. Funding Requirements

#### Stage I:

Funding for this project has been obligated as follows:

FY 62, DLF Loan No. 215	\$33,600,000
FY 63, ProAg No. 123, PL 480 rupee equiv.	\$18,840,000

#### Stage II:

Funding for project expansion is scheduled as follows:

FY 65, AID Loan Stage II	\$32,300,000
FY 65, PL-480 rupee loan equiv. (Increased cost of Stage I & II)	\$37,806,000

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1c	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY India			3. PROJECT NO. 386-22-220-221 386-42-220-221**				4. TITLE Bandel Thermal Power Station						
	5. U.S. FUNDING:		BEGIN FY 1962		END FY 1962		6. PRIOR REFERENCES									
	PHYSICAL WORK:		1962		1966											
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT
						AID	PASA									
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		DL	I*	38,000	-	-	-	-	-	38,000	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)															
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		DL	I*	28,265	-	-	-	-	-	28,265	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)		DL	I*	14,737	-	-	-	-	-	14,737	-	-	-	-	-
C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	I*	9,735	-	-	-	-	-	9,735	-	-	-	-	-	
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS															
	B. EXPENDITURES		DL	I*	7,400	-	-	-	-	-	7,400	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	I*	2,335	-	-	-	-	-	2,335	-	-	-	-	-
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS															
	B. EXPENDITURES		DL	I*	2,335	-	-	-	-	-	2,335	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
IV. PLANNING YR. (EST.) FY	GROSS OBLIGATIONS 2/															
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/		DL	I*	38,000	-	-	-	-	-	38,000	-	-	-	38,000	-

## REMARKS:

1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column I.

\* Loan AID-14

\*\* Rs. 84 million of PL-480 Section 104(g) obligated in FY 1964 and disbursed; no unliquidated balance as of 6/30/64.

Refers to Amex 3 of IAS.

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-221	Bandel Thermal Power Station
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### 1. The Activity Target

To increase the electric generating capability of the State of West Bengal and the Eastern Region (IV) by providing financial assistance for the installation of four 88.9-MW electric generating units and associated auxiliaries at Bandel on the Hooghly River north of Calcutta.

Background: The area in eastern India including the parts of Bihar and West Bengal south of the Ganges River is served by the south Bihar-lower Bengal Power System. Comprising this system are the Damodar Valley Corporation (DVC), the Bihar State Electricity Board (BSEB), the West Bengal State Electricity Board (WBSEB) and the Calcutta Electric Supply Corporation (CESC). The Calcutta Electric Supply Corporation retails in and around Calcutta while the DVC and the WBSEB deliver bulk supplies to almost three dozen licensees, the largest of which is the CESC with a total delivery from the two sources of up to 150 MW. An interconnection with the Rihand Dam Power Plant (U.S. assisted) has enabled power imports of up to 100 MW into the south Bihar-lower Bengal system. A connection also exists with the Hirakud Dam Power Plant in Orissa, but the amount of power presently imported over this tie line is limited by the line characteristics - mainly its length.

Scheduled generating capacity additions, allowing for retirements of obsolete capacity, will supplement net capability in the area by about 1,000 megawatts by March 1966 (end of the Third Plan) while projected increases in peak load will add approximately 700 megawatts to the existing demand during that same period. Other U.S. assisted power plants in this area are Chandrapura and Durgapur. Aspects bearing upon these plants and their relationship to the area picture will be found in their individual E-1 treatments.

Description of Project: Bandel Station is on the Hooghly River, about 35 miles north of Calcutta, alongside the Bandel-Baharwa line of the Eastern Railway and near the load center of the highly industrialized area of West Bengal. Bandel will be connected into a double-circuit 132-kv line now in operation between Durgapur and the Howrah Substation of WBSEB near the DVC Howrah Substation, across the Hooghly River from Calcutta.

The Bandel Power Station is to comprise four turbine-generator units, each having a maximum continuous rating of 88.9 MW, four 625,000 pound per hour steam generating units, all auxiliary equipment and material required for a complete power station.

### 2. The Course of Action

Financing: This project will finance foreign exchange costs of engineering design and construction services and imported electrical generating equipment for this station by providing a \$38 million development loan and by meeting the local currency costs of construction through a PL 480 Section 104 (g) loan of Rs.84 million (equal to \$17.54 million).

Engineering: The Kuljian Corporation, a U.S. consulting firm with offices in India, is responsible for complete design engineering and for supervision of construction and initial operation. The feasibility report was submitted by Kuljian on July 15, 1960; work at the site commenced with test boring on September 25, 1961.

Suppliers: Westinghouse Electric International is furnishing, erecting and commissioning all major power equipment and, in conjunction with Babcock and Wilcox, is supplying the steam generating units and boiler house equipment. Other major U.S. contractors are furnishing structural steel, reinforcing steel, elevators and architectural items.

Current Cost Estimate: All figures are in dollars or dollar equivalent:

	<u>Foreign Exchange</u>	<u>Local Costs</u>	<u>Totals</u> \$
Land and land rights	-	\$ 829,500	\$ 829,500
Structures and improvements	\$ 1,837,356	6,181,245	8,018,601
Mechanical and electrical equipment	34,891,144	15,910,965	50,802,109
Construction facilities	-	554,400	554,400
Engineering Services	1,271,500	635,000	1,906,500
<u>Total</u>	<u>\$38,000,000</u>	<u>\$24,111,110</u>	<u>\$62,111,110</u>

### 3. Progress to Date

Financing: On June 21, 1962, A.I.D. Loan Agreement No. 14 was signed, providing \$38 million to meet the foreign exchange costs of Bandel Thermal Electric Power Station.

On October 1, 1963, Project Agreement No. 124 was signed, providing Rs.84 million (equivalent to \$17.54 million) to meet local currency costs of the project as originally estimated.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-221	Bandel Thermal Power Station
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Physical: The status of construction progress on the Power Plant as obtained from the monthly report for the period ended July 31, 1964, a site visit in June 1964, and verbal unofficial information from visiting construction officials is as follows:

	<u>Percent complete</u>
Miscellaneous equipment foundations	99%
Structural steel erection	99%
Intake structure	50%
Wagon Tippler	12%
Crusher house	20%
Boiler No. 1	93%
Turbine-generator No. 1	90%
Condenser No. 1	98%
132 KV substation	60%

In general, work at Bandel has progressed very well. Principal problems have been involved in securing foundations for the cooling water intake pump house and the wagon tippler. Everything considered, commissioning of the first unit is now about six months behind schedule and predictions are for initial operation of No. 1 unit in April 1965. Succeeding units should follow at three months' intervals thereafter.

#### 4. Funding Requirements

Funding for this project has been obligated as follows:

FY 62, A.I.D. Loan No.14	\$38,000,000
FY 64, ProAg No.124, PL 480 rupees equivalent to	\$17,545,000

The cost estimate summary shows local cost as \$24,111,110 equivalent. This is a 37 percent increase over the original and most of it is in "mechanical and electrical equipment". AID has not been requested to make up this rupee difference.

PROJECT DATA SUMMARY — AID DOLLAR COSTS

E-1a

1. DATA CURRENT AS OF:  
1 November 1964

2. COOPERATING COUNTRY  
INDIA

3. PROJECT NO.  
386-11-220-222

4. TITLE

Power Generation & Distribution

5. U.S. FUNDING:

BEGIN FY  
1963

END FY  
1965

6. PRIOR REFERENCES

PHYSICAL WORK:

1963

1966

7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)	a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT <sup>1/</sup>	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS <sup>1/</sup>	
					(1) U.S. AGENCIES		(2)	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT
					AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	CONTRACT	CONTRACT	CONTRACT	CONTRACT	CONTRACT	
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	142	56	-	-	44	61	-	25	-	-	12	
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	74	4	-	-	4	45	-	25	-	-	-	
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	80	51	-	-	40	29	-	-	-	-	11	-
	EXPENDITURES (ACTUAL YEAR)	TC	G	57	31	-	-	24	26	-	-	-	-	7	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	64*	2	-	-	2	62	-	-	-	-	-	
	B. EXPENDITURES	TC	G	54	6	-	-	6	42	-	6	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	72	1	-	-	-	52	-	19	-	-	1	
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS														
	B. EXPENDITURES	TC	G	72	1	-	-	-	52	-	19	-	-	1	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR														
IV. PLANNING YR. (EST.) FY	GROSS OBLIGATIONS <sup>2/</sup>														
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>														
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>	TC	G	206	58	-	-	46	123	-	25	-	-	12	145 58

REMARKS:

- 1/ This is a memorandum (non-add) column.
- 2/ Show estimated expenditures in column i.

This activity addresses Annex 3, Energy Development, of L.A.S.

\* Excludes \$3 (thousand) provided during FY 1965 from prior years funds to cover shortfall in contract.

**E-1b** 1. DATA CURRENT AS OF: **1 November 1964** 2. COOPERATING COUNTRY: **INDIA** 3. Funding: **1963** **1965** 4. PROJECT NO.: **386-11-220-222** 5. TITLE: **Power Generation & Distribution**

7. OBLIGATED AND DISBURSED	e. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	Govt. Revenue	G	-	-	-	-	-	-	-	-	-	-
	(ii) TRUST FUND	Sec. 402	G	55	47	264	226	-	-	147	-	112	79
	(iii) OTHER LC												
	B. P.L. 480 LC												
TOTAL ACTUAL FY 1964	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	Govt. Revenue	-	-	-	-	-	-	-	-	-	-	-
	(ii) TRUST FUND	Sec. 402	G	16	34	79	163	-	-	91	-	79	72
	(iii) OTHER LC												
	B. P.L. 480 LC												
II OPERATIONAL YEAR (EST.) FY 1965	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	Govt. Revenue	-	-	-	-	-	-	-	-	-	-	-
	(ii) TRUST FUND	Sec. 402	G	15	16	72	77	-	-	5	-	72	72
	(iii) OTHER LC												
	B. P.L. 480 LC												
III BUDGET YEAR (EST.) FY 1966	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	Govt. Revenue	-	-	-	-	-	-	-	-	-	-	-
	(ii) TRUST FUND	Sec. 402	G	-	7	-	33	-	-	-	-	-	33
	(iii) OTHER LC												
	B. P.L. 480 LC												
IV PLANNING YEAR (EST.) FY	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	(ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	(ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	Govt. Revenue	-	-	-	-	-	-	-	-	-	-	-
	(ii) TRUST FUND	Sec. 402	G	70	70	336	336	-	-	152	-	184	184
	(iii) OTHER LC												
	B. P.L. 480 LC												

REMARKS:  
1/ Exchange Rate: \$1 = **Rs. 4.7876**  
2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

**E-1c** PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS

1. DATA CURRENT AS OF: **1 November 1964** 2. COOPERATING CTRY.: **India** 3. PERSONNEL SERVICES: **1963** **1965** PARTICIPANT TRAINING: **1963** **1966** 4. PROJECT NO.: **386-11-220-222**

5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	A. MAN YEARS	e. CUM. THRU ACTUAL FY			b. ACTUAL FY <u>64</u>			c. OPERATIONAL FY <u>65</u>			d. BUDGET FY <u>66</u>			e. PLANNING FY <u>67</u>			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
I PROJECT PERSONNEL	U.S.	-	-	4	-	-	2.6	-	-	.2	-	-	-	-	-	-	-	-	-	-	-	4.2
	Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B. ON 1/ BOARD	U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II. PARTICIPANTS PROGRAMMED	A. U.S.	13	-	-	9	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	23
	B. THIRD CTRY.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

REMARKS:  
1/ End of Fiscal Year

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

SECURITY CLASSIFICATION  
UNCLASSIFIED

E-1b

1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	3. BEG. FY 1963 END FY 1965 Phys. Work 1963 1966	4. PROJECT NO. 386-11-220-222	5. TITLE Power Generation & Distribution
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7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/		G										
	FA ACT (ii) TRUST FUND	Govt. Rev.	-	2	2	8	7	-	-	-	-	8	7
	(iii) OTHER LC	Sec. 402	G	55	47	264	226	-	-	147	-	112	79
	B. P.L. 480 LC												
TOTAL ACTUAL FY 1964	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND	Govt. Rev.	-	-	-	-	-	-	-	-	-	-	-
	(iii) OTHER LC	Sec. 402	G	16	34	79	163	-	-	91	-	79	72
	B. P.L. 480 LC												
II OPERATIONAL YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND	Govt. Rev.	-	-	-	-	1	-	-	-	-	-	1
	(iii) OTHER LC	Sec. 402	G	15	16	72	77	-	-	5	-	72	72
	B. P.L. 480 LC												
III BUDGET YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND	Govt. Rev.	-	-	-	-	-	-	-	-	-	-	-
	(iii) OTHER LC	Sec. 402	G	-	7	-	33	-	-	-	-	-	33
	B. P.L. 480 LC												
IV PLANNING YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND	Govt. Rev.	-	2	2	8	8	-	-	-	-	8	8
	(iii) OTHER LC	Sec. 402	G	70	70	336	336	-	-	152	-	184	184
	B. P.L. 480 LC												

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING CTRY. INDIA	3. PERSONNEL SERVICES PARTICIPANT TRAINING	BEG. FY 1963	END FY 1965	4. PROJECT NO. 386-11-220-222											
	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			b. ACTUAL FY 64		c. OPERATIONAL FY 65		d. BUDGET FY 66		e. PLANNING FY 67			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS				
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
				-	-	4	-	-	2.6	-	-	0.2	-	-	-	-	-	-	-	-
	B. ON BOARD	U.S.																		
		Non U.S.																		
II PARTICIPANTS PROGRAMMED	A. U.S.		13	-	-	9	-	-	10	-	-	-	-	-	-	-	-	-	-	23
	B. THIRD CTRY.		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

REMARKS:

1/ End of Fiscal Year

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-220-222	Power Generation & Distribution
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## 1. The Activity Target

To assist the Government of India in implementing their electric power generation, transmission and distribution schemes by:

- a. Increasing the number of technically trained and experienced men.
- b. Upgrading technical knowledge in fields where it is most urgently needed.
- c. Providing technical data on electric power and allied fields where needed.

Expansion of electric power generation, transmission and distribution facilities in India is a rapidly increasing process in terms of both quantity and complexity.

Surveys of electric power and energy requirements have indicated that an increase of 10,970 megawatts in net capability must be achieved in all India by 1970/71. If a conservative figure of \$250 per kilowatt for generation, transmission and distribution is assumed, the capital cost comes to more than \$2,500 million, over \$1,000 million of which represents equipment and materials to be purchased with foreign exchange. Thus it can be seen that there is strong incentive for the Indian electric power agencies to plan wisely, purchase carefully and utilize fully their existing and future power facilities.

This project was started in FY 1963 with the objective of promoting more effective planning, design, construction and operation of electric power facilities by providing advisory engineering services to the Central Water and Power Commission (CWPC), U.S. training for participants from CWPC and the States, office equipment and technical reference books and periodicals for CWPC.

## 2. The Course of Action

As originally conceived, this project was to provide the services of U.S. technicians and participant training, a framework upon which additional or related power activities could be attached. The initial GOI request was for three technicians, one each in the fields of thermal power plant design-mechanical, thermal power plant design-electrical, and transmission line design. Participants were to be sent to the United States for training in the fields of thermal and hydro power plant design, transmission system planning and design and in power system coordination and operation. As explained in the 'Progress to Date' Section, the recruitment of the three technicians was not implemented.

Two other activities of prime importance to the Indian electric power picture developed during FY 1963, the Energy and the Electric Power Surveys and the technical and economic feasibility study of the proposed Tarapur Atomic Power Plant.

In the case of the Energy and Power Surveys, the course of action began with high-level talks ~~at~~ between Indian and Mission officials culminating in arrangements for two distinct but coordinated surveys to be undertaken during calendar year 1963. In view of the magnitude and highly specialized nature of these tasks it was decided that only persons of outstanding capabilities and with wide experience in this type of work be obtained. Mr. Walker Cislak, President of Detroit Edison Company and a consultant to A.I.D. Washington, was instrumental in recruiting suitable personnel; specialists in economics, coal technology, nuclear power, electric system integration, management and procurement were asked to join in the surveys, and experts from England, France, Belgium and the United States participated.

After their initial combined launching, the Electric Power Survey and the Energy Survey were carried out as separate efforts. They were coordinated with each other in the sense that electric power is one of the forms of energy studied and as one of the important consumers of fuels.

### Energy Survey:

The objectives of the Energy Survey were to advise and assist the Government of India in:

- (1) making a nation-wide survey of the past production and consumption of commercial fuels by form of fuel, (electricity, gas, oil, coal, etc.) by economic and by geographic sectors.
- (2) Compiling an inventory of energy resources and energy processing facilities by form of fuel and by geographic sector.
- (3) Assessing, by geographic area, the present and prospective future (1980) gap between indigenous production and consumption, after taking into account availability and relative price (economic cost) of the various energy fuels.
- (4) Assessing the capital requirements of a balanced development of the energy sector, taking into account the capital needs of other sectors as required by economic development goals.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-220-222	Power Generation & Distribution
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(5) Outlining emerging problems on the prospective supply of adequate energy at economic cost.

(6) Suggesting guidelines for the harmonizing of the future development of the energy sector with the Indian economy as a whole.

In view of the tremendous amount of work involved and the limited available time of the specialists, they were divided into two groups - an advisory Group and a Working Group. The Advisory Group was organized under the chairmanship of Mr. M.R. Sachdev, formerly Secretary of the Ministry of Irrigation and Power, to guide the activities of and to review periodically the data processed by the Working Group. It consisted of 13 Indian and four foreign members and two European consultants as follows:

Members:

Mr. Walker Cisler, President, Detroit Edison Co., U.S.A.  
 Prof. Austin Robinson, Sidney College, Sussex, Cambridge Univ., England.  
 Mr. Louis De Heem, Dir. Genl., Atomic Energy Comm., Belgium.  
 Mr. Jacques Desrousseaux, Dir. Research, Charbonnage De France.

European Consultants:

Mr. Kristian Laeding, (Norwegian national) OECD, Paris.  
 Mr. Lucien Gaumier, Belgian Power System, Belgium.

The Working Group consisted of five Indians and three American members assisted by technical consultants, as follows:

Members:

Mr. Arthur E. Bush - Detroit Edison Co. executive.  
 Mr. Harry Tauber - - - - - do - - - - -  
 Mr. John H. McCarthy - American consultant on utility regulations.

Consultants:

Mr. John W. Kushing - American consultant on utility tariff.  
 Mr. Lowell J. Chawner - American consultant on industrial development.

After an initial meeting at which the overall strategy was planned, the Advisory Group met at intervals of three to four months with the

Working Group (April, July, October and December of 1963). The Working Group enlisted the participation of the GOI Planning Commission, Ministry of Steel & Mines, Department of Atomic Energy, Railway Board, and the Ministry of Irrigation and Power. The Central Water and Power Commission provided logistic support in the form of technical and electrical personnel and office space. Because of its wide scope and the many Ministries concerned, Energy Survey work was geared into the framework of the Planning Commission. Further, it was felt that a greater degree of continuity would result for the type of activity initiated by the survey if it were under the auspices of the Planning Commission.

Electric Power Survey

The Electric Power Survey was conducted along the lines of the semi-annual power surveys of the U.S. carried out by the Edison Electric Institute. The objective of the survey was to develop annually, an accurate, comprehensive, but concise and easily understood picture of the present and near future status of electric power development in India; each annual report of the Electric Power Survey to include, by geographic areas, statistical data and explanatory notes and comments on:

1. Power supply and demand - - past statistics and future estimates based on construction progress and anticipated loan.
2. Scheduled installation of generating equipment for succeeding five years.
3. Indigenous production of electrical equipment.
4. Development of regional grids.

With the growth of India's installed generating capacity from 2.3 million KW at the beginning of the First Plan to 5.6 million KW at the end of the Second Plan, and with the planned increase to 12.7 million KW by 1965-66, it is essential that new installations fit in with a nation-wide integrated plan in order to promote higher efficiency of the facilities in service and to prevent imbalance.

The information provided by the Power Survey should result in more effective coordination in the operation of existing systems and better planning and scheduling of procurement and construction for future generation and transmission facilities. One of the more important contribution of the Power Survey is the pointing up of the need for system interconnections (regional grid developments).

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-220-222	Power Generation & Distribution
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A high level committee, under the Chairmanship of Mr. M.R. Sachdev, formerly Secretary, Ministry of Irrigation and Power, has guided and periodically reviewed the activities of the Working Group. The committee consisted of nine Indian and four foreign members. The foreign members were the same as those on the Energy Survey Advisory Group.

A Working Group, entirely separate from that of the Energy Survey, directed the Power Survey work. This group consisted of two American and two Indian members. The following personnel of the Detroit Edison Company were made available to serve with the Working Group:

Mr. Harold C. Reasoner - Member of Working Group  
Mr. C.G. Ogden - Consultant  
Mr. G.L. Brown - Consultant

A summary report will be issued annually for two or three years, after which the value and practicability of more frequent reports will be determined. The primary effort in the Power Survey is to systematize and streamline procedures and establish common bases upon which all the statistics coming from the various power agencies can be directly compared. Before this procedure was initiated there was no common rationale applied by the State Electricity Boards to their power and energy requirements forecasting, with the result that meaningful comparisons of future loads and available capacity were difficult to make.

Although the Central Water and Power Commission coordinated in the collection and analysis of power data, the State Electricity Boards and the major private utility agencies - - Calcutta Electric Supply Co., and Tata Hydroelectric Agencies Limited - - were direct participants in all the procedures.

The Working Group functioned continuously under the general direction of the Member-Utilization of the CWPC. This group, supplemented much of the time by a consultant from the Detroit Edison Co. and another from the Belgian Power System, directed the work of selected technicians and clerks of the Load Survey and Load Development Directorate of the CWPC. Data prepared by the reporting agencies were fed to the Working Group staff, who examined them for conformance with criteria and for possible anomalies and duplications.

#### Tarapur Atomic Power Station

In mid-1962 AID received a loan application for financing the foreign exchange portion of the Tarapur nuclear-electric power plant. The proposal to build such a plant in India presented a set of unusual technical and economic questions. A study in considerable depth was needed to explore thoroughly these questions, and since the expertise required for

such a study was not available in either the Mission or AID/W staffs, Washington decided that a consultant should make such a study. Accordingly, the firm of Burns & Roe was selected as technically qualified and free from association with equipment manufacturers. The company sent two men to India during February and March of 1963 to make an economic feasibility study of the nuclear plant compared to conventional thermal plants and the utilization of the potential production by the power systems concerned. The information gathered by these consultants was to be used in preparation of the loan paper for the Tarapur plant.

#### Participant Training

It was proposed that U.S. training of Indian engineers would be required for periods averaging from nine to 12 months in the fields of thermal power plant design, hydroelectric power plant design, and high voltage transmission systems; these participants were to be drawn from CWPC and various State Electricity Boards.

Ten participants are programmed in FY 1965, for 12 months' training in the U.S. Cost: \$62,000, plus Section 402 rupees equivalent to \$15,000. This includes \$2,000 to cover one-month extension for two of the FY 1964 participants.

Although future training of Indian power personnel could be financed out of loan funds, in conjunction with the procurement of technical advisory services for CWPC, the Mission and the GOI believe that it will be some time before arrangements can be made to train the engineers required for Third Five Year Plan priority power plant expansion programs. The FY 1965 TA-financed training program, therefore, is viewed as a transitional but essential phase of U.S. assistance to Indian power expansion programs.

#### Commodities

The amount of \$25,000 funded in FY 1964 for commodities is intended to cover costs of office equipment (\$4,600) and technical reference books, periodicals, design manuals, special publications, etc. (\$20,400), for CWPC's library and State design organizations.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-220-222	Power Generation & Distribution
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### 3. Progress to Date

#### Energy Survey:

The Energy Survey was undertaken to provide comprehensive estimates of energy demands, focus attention on critical problems of energy development and suggest ways of solving those problems. The U.S. supported the Energy Survey by financing in FY 1963 the services, all or in part, of American and European consultants who participated in the study.

The preliminary draft of the Energy Survey Report giving overall India's energy picture was released in December 1963. The Energy Survey Committee met in New Delhi during that month and made some important recommendations to be incorporated in the draft report. Accordingly, two American members of the Working Group, Arthur Bush and Harry Tauber (both of Detroit Edison), were contracted to work with Prof. Robinson and Mr. DesRousseaux, European members of the Committee, on the redrafting of the report in line with the recommendations made in December 1963 meeting. USAID financed a 6-week visit by these members to Cambridge, England, and Paris, France, during March-April 1964 and a 4-week visit in July-August 1964 to Cambridge, to complete necessary data revisions in the final draft of the Energy Survey Report which now (October 1964) has been submitted to the GOI for acceptance and release for publication. It is expected that the report will be published in November 1964 for distribution.

#### Electric Power Survey:

The First Annual Electric Power Survey of India was completed and published in July 1963. It presented a comprehensive picture of power development in all the regions of all the Indian States. It included sections on authorized additions to generating plant, indigenous production of electrical equipment and a demarcation of regions within which the sub-systems could be interconnected. In the course of compiling, digesting and presenting the data in this report, the Indian participants employed the desired techniques. In terms of quick, accurate and readily interpreted results, these techniques have demonstrated their value to the Load Survey and Load Development Directorate of the CWPC, which will continue the study on an annual basis.

The Second Annual Electric Power Survey was published in May 1964. A number of new features were added, e.g., a section on electric energy output and annual load factors, and analysis of the authorized additions to the electric generating capacity during the survey period in the various ranges under thermal and hydro power sources and by various regions as and by years, and manufacturing capacity of heavy electrical equipment and boiler equipment.

The U.S. supported this survey by financing in FY 1963 the services of American advisors in the Working Group.

#### Tarapur Atomic Power Plant Survey:

The FY 1963 funded Burns & Roe study on the proposed Tarapur nuclear power plant was completed on June 17, 1963, and copies were distributed to interested GOI officials. The findings and recommendations were used extensively in preparation of the application for the loan to finance construction of the plant. This work is complete, and there will be no further activity in this phase.

#### Design Specialists:

The project plan originally provided for furnishing to CWPC the contract engineering services of three technicians in thermal power plant design, mechanical and electrical, and design of high voltage transmission lines; attempts to recruit them were fruitless. In view of the tremendous power system planning and power plant design job ahead of the GOI and the idea was developed in discussions with CWPC and other Indian power officials of buying consulting engineering services of a broader spectrum with U.S. loan funds. CWPC has confirmed its acceptance of the use of consultancy loan funds for these services, and accordingly the funds originally provided in FY 1962 (under Project 059) for this purpose were deobligated.

#### Participant Training:

One of the FY 1963 funded participants, transferred to this project from a discontinued project (045), completed six months' training in the U.S. in 'hot lines' techniques (handling of energized electric lines and familiarization with the latest equipment for maintenance work) and is the deputy officer in charge of the CWPC Hot Line Training Center at Bangalore.

Three participants funded in FY 1963 — one deputy director and two assistant directors of CWPC — received 6 to 8 months' training in the U.S. in the fields of planning, estimating, layout and design of thermal and hydroelectric power stations, operation of a combined thermal and hydro system, utilization of machinery and equipment, scheduling of maintenance, etc. They have returned to their positions and are disseminating the knowledge and experience gained abroad to the design staff.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-220-222	Power Generation & Distribution
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Of the ten participants programmed in FY 1964, four drawn from State Electricity Boards and the CWPC attended the 14<sup>1/2</sup>-week special course in Organization and Operation of Rural Electric Cooperatives, sponsored by the International Cooperative Training Center, University of Wisconsin, and the National Rural Electric Cooperative Association (NRECA). This program has provided an opportunity for the participants to up-date and expand their practical knowledge by giving them a good understanding of American principles and practices in the development, organization and operation of electric cooperatives.

Five participants — one deputy director and four assistant directors of CWPC — are receiving 10 to 12 months' training in the U.S. in the following fields: Design, planning and operation of large thermal and hydro-electric power stations; design of boilers and turbines; combined operation of thermal and hydro power systems; utilization of machinery; scheduling for maintenance, load and frequency control of interconnected grid systems; design of electric transmission lines and related structures, etc.

One participant was withdrawn and funds were deobligated during FY 1965.

In FY 1965 ten participants have been programmed for 12 months training in the above mentioned fields.

#### Commodities:

Purchase orders for the FY-1964 \$25,000 worth of office equipment and technical reference books, periodicals, manuals, etc., for CWPC have been processed; \$4,600 worth of calculators have been delivered; of the balance \$20,400 for books, orders are in process of shipment.

#### GOI Contributions:

The GOI Central Water & Power Commission has established the Load Survey & Load Development Directorate, as an integral part of its permanent organization, to continue the annual Electric Power Surveys. Annual expenses of personnel associated directly with the Power Survey work are approximately \$20,000 (rupees equivalent). Field organizations engaged in supporting work require a total staff several times this size, with a proportionate cost of perhaps six times as much.

While the entire power engineering staffs of Central and State Governments, of course, will benefit from the operations of this project, they are not a part of the GOI project effort. No estimate is available of the total GOI administrative budget applicable to power activities.

The GOI also provided office facilities, secretarial, clerical and technical assistance, and necessary contributions to the Mission-maintained rupee reimbursement fund for the U.S. technicians assigned to the project; provided rupee funds and/or foreign exchange as required for the Energy Survey and Electric Power Survey expenditures not financed or reimbursed by the U.S. or other foreign agencies; provided for necessary with-in-India transportation of and customs duty for GOI-titled commodities; and provided for necessary within-India travel costs of selected participants.

#### 4. Funding Requirements

##### Total Requirements:

FY of Funding	Description	A.I.D. Cost		
		\$	Sec. 402 Rs. in \$ Equiv.	Total \$ Equiv.
1963	Contract Services:			
	Tarapur Atomic Power Plant (Burns & Roe) Study.	\$ 28,000	\$ 7,000	\$ 35,000
	Energy Survey & Power Survey.	24,000	26,000	50,000
	Participants (4)	16,000	6,000	22,000
1964	Contract Services:			
	Energy Survey	4,000*	-	4,000*
	Participants (10)	45,000	16,000	61,000
	Commodities	25,000	-	25,000
1965	Contract Services:			
	Energy Survey	2,000	-	2,000
	Participants (10) for 12 months each.	62,000	15,000	77,000
	<b>Total Project:</b>	<b>\$ 206,000</b>	<b>\$ 70,000</b>	<b>\$ 276,000</b>

(\* An additional amount of \$3,000 has been provided during FY 1965 from prior year funds, to cover shortfall in contract - see TQAID 671 of 9/29/64.)

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO. AA-62

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-220-222	Power Generation & Distribution
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The following personnel of the Detroit Edison Company were made available to assist in the conduct of the Energy and Electric Power Surveys. Dollar costs for their services were met by the Detroit Edison Company and the rupee costs reimbursed by the U.S. A.I.D.

Arthur E. Bush - Energy Survey  
Harry Tauber - Energy Survey  
Harold Reasoner - Power Survey  
George L. Brown - Power Survey  
Chester F. Ogden - Power Survey

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India			3. PROJECT NO. 386-24-220-234				4. TITLE Ahmedabad Power Plant							
	5. U.S. FUNDING:	BEGIN FY 1960		END FY 1960		6. PRIOR REFERENCES										
	PHYSICAL WORK:	1961		1962												
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		g. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT
						AID	PASA									
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	DL	L*	3,900	-	-	-	-	-	-	3,900	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)	DL	L	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	DL	L*	3,755	-	-	-	-	-	-	3,755	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)	DL	L*	-	-	-	-	-	-	-	-	-	-	-	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	DL	L*	(120)	-	-	-	-	-	-	(120)	-	-	-	-	-
	B. EXPENDITURES	DL	L*	25 <sup>1/</sup>	-	-	-	-	-	-	25	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L*	-	-	-	-	-	-	-	-	-	-	-	-	-
III. BUDGET YEAR (EST.) FY _____	A. GROSS OBLIGATIONS															
	B. EXPENDITURES															
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
IV. PLANNING YR. (EST.) FY _____	GROSS OBLIGATIONS <sup>2/</sup>															
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>	DL	L	3,780	-	-	-	-	-	-	3,780	-	-	-	3,780	-

## REMARKS:

1/ This is a memorandum (non-add) column.  
 2/ Show estimated expenditures in column i.

\*\* 120 deobligated on July 9, 1964  
 1/ to cover marginal adjustments  
 \* Loan DLF-121

Refers to Annex 3 of IAS

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-24-220-234	Ahmedabad Power Plant
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### 1. The Activity Target

To increase the electric generating capability of the State of Gujarat and the western region by providing financial assistance for the installation of a 30-MW generating unit as an extension to the existing privately owned Sambarmati Power Station in the city of Ahmedabad in the central region of Gujarat State.

Background: When the loan was made to the project, the existing generating facilities of the Ahmedabad Electricity Company, Ltd., consisted of the following units at the Sambarmati Thermal Power Plant:

- A Station - two 3.75-MW units
- A Station - four 7.5-MW units
- B Station - four 15-MW units
- C-1 Station - four 15-MW units

The 14 units which were installed had a total name-plate capacity of 157.5 MW. This project provided financing for C-2 Station with a capacity of 30 MW, making the total station name-plate capacity 187.5 MW.

Description of Project: The project, a 30-MW extension to the Sambarmati Plant of the Ahmedabad Electricity Company Ltd., is located on the Sambarmati River in the northern section of Ahmedabad. The main components of the 30-MW extension are as follows:

1. One turbine generator unit
2. Two steam generator units
3. 66 KV switchgear
4. Coal and ash handling equipment

Engineering: All engineering work required for the project was accomplished by the regular engineering staff of the Ahmedabad Electricity Company Ltd.

### 2. Progress to Date

Financing: DLF Loan No. 121 was signed on June 30, 1960, to provide \$3,900,000 to the Ahmedabad Electricity Company, Ltd., to cover foreign exchange costs of the 30-MW station expansion.

The construction of the 30-MW station expansion financed by this project was initiated in 1960; it was

completed and the C-2 Station placed in commercial operation during March 1962. The unit has provided reliable service in a power short area continually since then. The Ahmedabad Electricity Company subsequently added a 30-MW unit, designated as C-3 Station, privately financed and placed in operation during 1963.

### 3. Funding Requirements

DLF Loan No. 121 dated June 30, 1960, made available \$3,900,000 to assist in meeting the foreign exchange requirements for station expansion. Loan funds utilized were \$3,780,000; the balance of the loan was debilitated. The total reported costs of the project amounted to an equivalent of US \$5,534,934.61 (from the Final Report submitted in March 1964). This figure would give an installed cost of \$178 per kilowatt. The project activity target has been achieved.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY India			3. PROJECT NO. 386-24-220-235				4. TITLE Trombay Power Plant						
	5.		BEGIN FY		END FY		6. PRIOR REFERENCES									
	U.S. FUNDING:		1962		1962											
	PHYSICAL WORK:		1963		1966											
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		DL	L*	17,900	-	-	-	-	-	17,900	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)															
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		DL	L*	13,385	-	-	-	-	-	13,385	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)		DL	L*	10,580	-	-	-	-	-	10,580	-	-	-	-	-
C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L*	4,515	-	-	-	-	-	4,515	-	-	-	-	-	
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS															
	B. EXPENDITURES		DL	L	3,000	-	-	-	-	-	3,000	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L	1,515	-	-	-	-	-	1,515	-	-	-	-	-
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS															
	B. EXPENDITURES		DL	L	1,515	-	-	-	-	-	1,515	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
IV. PLANNING YR. (EST.) FY	GROSS OBLIGATIONS 2/															
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/		DL	L	17,900	-	-	-	-	-	17,900	-	-	-	17,900	-

## REMARKS:

- 1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

\* Loan AID-37

Refers to Annex 3 of L.A.S.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-24-220-235	Trombay Power Plant
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## 1. The Activity Target

To increase the electric generating capability of the State of Maharashtra and the Western Region by providing financial assistance for the installation of a 140 MW-electric generating unit, complete with the necessary auxiliary equipment, near the city of Bombay.

Background: The electric power supply to the Bombay-Poona area is furnished by the Tata consortium, consisting of Tata Power Company Ltd., Tata Hydroelectric Power Supply Company Ltd., and Andhra Valley Power Supply Company Ltd., each of which owns and operates one hydroelectric power plant and all of which jointly own and operate the Trombay Thermal Power Plant (50, 30 and 20 percent, respectively).

The Tata power system is interconnected with the State of Maharashtra Koyna Project (see Project 386-12-250-011) and with the Chola plant of Central Railway. This system eventually will be interconnected with the proposed Nuclear Power Station at Tarapur (Project 386-22-980-239), the Chambal-Satpura system (Projects 386-12-250-011 and 386-22-220-234), and the Gujarat Power system (Projects 386-22-220-220 and 386-24-220-234).

The power system operated by the Tata companies, including the 9-MW Central Railway's Chola Station, has a generating capability of 551 MW. About 120 MW are purchased from the State-owned Koyna Project. As power becomes available from Koyna Stage II (beginning in the fall of 1965), the importation of power from Koyna will increase, in stages, to about 150 MW.

The Tata system serves the Bombay-Poona region of Maharashtra State, one of India's most populous and heavily industrialized regions. Apart from commerce and shipping, the industries in this area include textile mills, oil refineries, rayon, chemical, automobile, and light engineering industries. The availability of adequate power supplies is a major pre-requisite to industrial stability and expansion in the area.

1964-65 projected peak loads, as tabulated in the Second Annual Power Survey of India (1964), in the entire area covered by the Tata-Central Railway-Koyna Power System are expected to exceed the present installed capacity (Koyna 240 MW and Tata 551 MW) by about 106 MW, which is to be furnished in the Bombay area from the present project.

Additional capacity, amounting to 150 MW, is expected to be available from the installation of the first Koyna Hydroelectric Project Stage II generators.

Description of Project: The project consists of an addition to the 187.5 MW Trombay Thermal Power Station, located about seven miles from the center of the City of Bombay. The site is adjacent to Bombay Port and is provided with road and railway service. The new unit will be the fourth in the plant and will be more than twice the capacity of any one of the three existing 62.5 MW units.

This fourth unit comprises a steam turbine generating unit having a maximum continuous rating of 140 MW driven by a 960,000 pound per hour steam generating unit using low grade pulverized coal as a primary source of fuel, and hot pitch from nearby refineries as an alternate source. In operation, the new unit will be integrated with existing ones and the power produced delivered into the system at the plant substation's 110-KV bus.

The transmission line from the Koyna Project terminates in a switchyard adjacent to the Trombay Thermal Plant and purchased power is taken at the thermal plant substation.

## 2. The Course of Action

To provide a dollar development loan of \$17.9 million to cover foreign exchange cost of the Trombay power plant.

Engineering: Ebasco Services, Inc., a U.S. firm, has been appointed as consulting engineer for the project. Ebasco was the consultant on the first two units of the existing plant and is engaged also on other work for the Tata organization. Ebasco will furnish U.S. engineers for design consultation, construction supervision, and review of engineering plans. They will also assist Tata in bid analysis and evaluation. The engineering work on the project is divided between Ebasco and Tata's own staff, many of whom have been trained in the U.S. by Ebasco.

(contd)

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-24-220-235	Trombay Power Plant
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Cost Estimate: The original and revised cost estimates (in millions of dollars) for the project are:

Item	1961		1963	
	<u>Original Estimate</u>		<u>Revised Estimate</u>	
	<u>Local</u>	<u>Foreign</u>	<u>Local</u>	<u>Foreign</u>
	<u>Currency</u>	<u>Exchange</u>	<u>Currency</u>	<u>Exchange</u>
Boiler & Fuel Handling Equipment	3.1	8.4	5.8	10.0
Turbine-Generator	0.9	5.2	2.1	5.1
Accessories and Spares	0.6	1.9	0.5	1.2
Freight	0.3	1.3	0.9	0.8
Engineering	0.1	0.5	0.2	0.5
Training	0.1	0.1	-	0.1
Contingencies	3.3	0.5	0.3	0.2
	8.4	17.9	9.8	17.9

It will be noted that cost escalation on this project is comparatively minor (about 5%), and covered by the original provision for "Contingencies". The total estimated cost has increased from \$26.3 million to \$27.7 million and the increase is confined to local costs only.

### 3. Progress to Date

Financing: On June 28, 1962, AID Loan No. 037 was signed, providing \$17.9 million in dollar financing to meet the foreign exchange cost of the Trombay Power Plant. The loan was made to the Government of India on behalf of a consortium comprising the Tata Power Company Ltd.; the Tata Hydroelectric Power Supply Co. Ltd.; and the Andhra Valley Power Supply, Ltd. to which the Government of India subsequently reloaned the funds.

Site construction activities on this project commenced in September 1962. As of August 1964, overall project construction progress was 51 percent (as compared with the scheduled 58.5 percent). The target date for commissioning is May 1965. The completion percentages for selected major portions of the project on August 1964 are shown below:

Site Preparation	60%
Plant Services	53%
Main Building	62%
Boiler Equipment	56%
Substation	39%

### 4. Funding Requirements

Funding for this project has been obligated as follows:

FY 62, AID Loan No. 037 \$17,900,000  
Expenditures as of August 31, 1964 were \$13,710,000

No further U.S.A.I.D. funding is anticipated.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED					
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY India			3. PROJECT NO. 386-22-220-236 386-42-220-236			4. TITLE Ramagundam Power Plant								
	5. U.S. FUNDING:		BEGIN FY 1963		END FY 1963		6. PRIOR REFERENCES										
	PHYSICAL WORK:		1964		1967												
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. 1/ LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
						(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	
						AID	PASA										
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		DL	L*	8,400	-	-	-	-	-	8,400	-	-	-	-	-	
	GROSS OBLIGATIONS (ACTUAL YEAR)		DL	L	-	-	-	-	-	-	-	-	-	-	-	-	
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		DL	L*	-	-	-	-	-	-	-	-	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)		DL	L*	-	-	-	-	-	-	-	-	-	-	-	-	-
C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L*	8,400	-	-	-	-	-	-	8,400	-	-	-	-	-	
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS		DL	L	-	-	-	-	-	-	-	-	-	-	-	-	
	B. EXPENDITURES		DL	L	3,000	-	-	-	-	-	3,000	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L	5,400	-	-	-	-	-	5,400	-	-	-	-	-	-
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS		DL	L	-	-	-	-	-	-	-	-	-	-	-	-	
	B. EXPENDITURES		DL	L	4,000	-	-	-	-	-	4,000	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L	1,400	-	-	-	-	-	1,400	-	-	-	-	-	-
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/		DL	L	-	-	-	-	-	-	-	-	-	-	1,400	-	
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/																
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/		DL	L	8,400	-	-	-	-	-	8,400	-	-	-	8,400	-	

## REMARKS:

1/ This is a memorandum (non-add) column.

2/ Show estimated expenditures in column i.

\* Loan AID-49

Refers to Annex 3 of LAS

**PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES**

SECURITY CLASSIFICATION  
**UNCLASSIFIED**

**E-1b**

1. DATA CURRENT AS OF: <b>1 November 1964</b>	2. COOPERATING COUNTRY <b>India</b>	3. Funding	BEG. FY <b>1965</b>	END FY <b>1965</b>	4. PROJECT NO. <b>386-22-220-236</b>	5. TITLE <b>Ramagundam Power Plant</b>
		Phys. Work	<b>1964</b>	<b>1967</b>		

6. PRIOR REFERENCES:

7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) FOR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/ (ii) TRUST FUND (iii) OTHER LC											
	B. P.L. 480 LC												
TOTAL ACTUAL FY	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/ (ii) TRUST FUND (iii) OTHER LC											
	B. P.L. 480 LC												
II OPERATIONAL YEAR (EST.) FY 1965	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/ (ii) TRUST FUND (iii) OTHER LC											
	B. P.L. 480 LC	Sec. 104(g)	L	7,728	7,728	37,000	37,000	37,000	37,000	-	-	-	-
III BUDGET YEAR (EST.) FY	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/ (ii) TRUST FUND (iii) OTHER LC											
	B. P.L. 480 LC												
IV PLANNING YEAR (EST.) FY	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/ (ii) TRUST FUND (iii) OTHER LC											
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/ (ii) TRUST FUND (iii) OTHER LC											
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/ (ii) TRUST FUND (iii) OTHER LC											
	B. P.L. 480 LC	Sec. 104(g)	L	7,728	7,728	37,000	37,000	37,000	37,000	-	-	-	-

REMARKS:

1/ Exchange Rate: \$1 = 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

**E-1c**

**PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS**

1. DATA CURRENT AS OF:	2. COOPERATING CTRY.	3. PERSONNEL SERVICES	BEG. FY	END FY	4. PROJECT NO.
		PARTICIPANT TRAINING			

5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																				
		Non U.S.																				
B. ON BOARD	U.S.																					
	Non U.S.																					
II. PARTICIPANTS PROGRAMMED	A. U.S.																					
	B. THIRD CTRY.																					

REMARKS:

1/ End of Fiscal Year

AID 10204 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-236 386-42-220-236	Ramagundam Power Plant
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### 1. The Activity Target

To increase the electric generating capability of the State of Andhra Pradesh and particularly the northeastern section of the State by addition of 62.5 MW of thermal electric generation facilities at the Ramagundam Thermal Power Station. The United States will assist in financing the foreign exchange costs of the imported electrical generating and transmission equipment and of related engineering services required for the project and by providing local currency financing for construction to the extent such assistance is requested and funds are available.

Background: Andhra Pradesh presently is served by three separate power systems: the Machkund system in the north, the Telengana system in the east, and the Tungabhadra system in the south and west. In the future development of zonal grids in India, the three systems will be interconnected by 132 KV and 220 KV high voltage links and the state-wide system will be made a part of the South Zonal Grid.

The Ramagundam Project will form a part of the existing Machkund Power System, a joint system of the States of Orissa and Andhra Pradesh serving southern Orissa and the northern portion of Andhra Pradesh. In 1961-62 this system had a capability of 87 MW. By 1965, when the Telengana and Machkund systems are scheduled to be interconnected, the total installed capacity (in Andhra Pradesh) is expected to amount to 295 MW.

There is presently (September 1964) a serious power shortage in the Machkund system area and power restrictions aggregating 33 MW or more are enforced.

The principal service area for Ramagundam is the Hyderabad-Secunderabad metropolitan area, where a major railroad division point, cement factories, paper and textile mills, and other industries are dependent on the power produced. Coal mines in the vicinity of the power station also will be served by the power station.

Description of Project: The Ramagundam Power Plant is located in the northern part of the State of Andhra Pradesh, about 150 miles north-east of Hyderabad, the State capital. The new plant originally was planned as an extension to an existing 37.5 MW installation. The turbo-generator for this project is one of 14 similar units purchased from International General Electric under a bulk purchase contract. In addition to the thermal plant, transmission and distribution facilities

covering portions of northern Andhra Pradesh are included in the project. The power plant is about six miles from the Janagach Collieries, the primary source of fuel; other producing coal mines are in the general vicinity. Water supply will be obtained from the Godavari River, four miles distant, where the existing pumping plant will be used.

Major items of the project include a 62.5 MW turbine generator, a 600,000 pound per hour coal fired steam generating unit; one 75 MVA and two 20 MVA power step-up transformers at Ramagundam; a 50 MVA transformer and two 15 MVA synchronous condensers at the Yerragadda substation at Hyderabad; 130 miles of double-circuit 132 KV transmission line from Ramagundam to Yerragadda; and distribution load center substations in the service area.

### 2. The Course of Action

To provide \$8.4 million in dollar development loan financing to meet the foreign exchange cost of the 62.5 MW Ramagundam Power Project, and a PL-480 Section 104 (g) loan to assist meeting local costs of the project.

Burns and Roe, Inc., a U.S. consulting engineering firm is to provide design assistance, review and approval or comment on detailed designs for the power station, supervision of construction, and supervision of initial plant commissioning.

### 3. Progress to Date

Financing: FY 1963 AID Loan No. 049 for \$8,400,000 was signed May 21, 1963. Local currency financing requirements of approximately Rs. 37,000,000 (equivalent to \$7.73 million) will be provided in FY 1965 from PL 480 loan funds.

Other: Site clearing and preliminary work is under way. Construction of the cooling towers is approximately 80 percent complete as of September 1964. The Burns & Roe engineering service contract was signed in July 1963 and four U.S. engineers are stationed in the Hyderabad design offices. The major portion of design work is being done by the Andhra Pradesh Electricity Board in its offices in Hyderabad. Specifications for the steam generating unit, condenser and condensate pumps, powerhouse crane, power and auxiliary transformers, bus duct, air compressors, oil conditioning equipment and evaporators were prepared and issued for bids prior to September 1964.

The scheduled target date for commissioning is December, 1966.

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-236 386-42-220-236	Remagundan Power Plant
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#### 4. Funding Requirements

Cost Estimate: The cost estimate for this project is as follows:

(in \$ thousands)

<u>Item</u>	<u>Foreign Exchange</u>	<u>Local Currency (\$ Equiv.)</u>	<u>Total</u>
Turbo-alternator set	1,288.98	116.55	1,405.53
Steam Generator	3,150.00	313.31	3,463.31
Boiler Feed Pump	195.30	14.62	209.92
Closed Feed Water Heaters	95.13	9.40	104.53
Deaerating Heater	13.23	1.04	14.27
Condenser & Condensate Pumps	420.00	41.77	461.77
Dust Collector	63.00	6.27	69.27
Coal & Ash Handling Plants	525.00	52.22	577.22
Water Treatment System	-	20.89	20.89
Evaporator	21.00	2.09	23.09
Air Compressor	-	41.77	41.77
Circulating Water Pumps, River Water Pumps, Sumps, etc.	147.00	14.62	161.62
Instruments & Controls	105.00	10.44	115.44
Valves and Insulation	21.00	2.09	23.09
Transmission Line Equipment	315.00	4,265.20	4,580.20
Transformers	525.00	52.22	577.22
Switchgear	21.00	2.09	23.09
Bus duct	42.00	4.18	46.18
Switchyard, Oil Circuit breakers and accessories	210.00	20.89	230.89
Batteries	-	20.89	20.89
Wire & Cable	21.00	20.89	41.89
Fire Protection System	-	6.27	6.27
Communication System	21.00	20.89	41.89
Coal Transport (in lieu of aerial ropeway)	735.00	73.10	808.10
Cooling Towers	-	429.65	429.65
Cranes	94.50	10.44	104.94
Powerhouse Buildings including quarters etc.	-	438.63	438.63
Reservoir	-	20.89	20.89
Railway Siding	-	41.77	41.77
Others	101.36	249.60	350.96
Contingencies	269.50	1,403.32	1,672.82
<b>TOTAL</b>	<b>\$ 8,400.00</b>	<b>7,728.00</b>	<b>16,128.00</b>

UNCLASSIFIED

SECURITY CLASSIFICATION

PAGE NO. AA-72

AID 1020-2 (8-84)	PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY India			3. PROJECT NO. 386-22-220-237 386-42-220-237				4. TITLE Delhi Power Plant "C"					
	5. U.S. FUNDING:		BEGIN FY 1963	END FY 1963		6. PRIOR REFERENCES									
	PHYSICAL WORK:		1964	1967											
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)	a.	b.	c.	d.	e.			f.		g.		h.		i. 1/	
					PERSONNEL SERVICES			PARTICIPANTS		COMMODITIES		OTHER COSTS		LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
					(1) U.S. AGENCIES		(2)	(1) U.S. AGENCIES	(2)	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT
	APPROPRIATION TITLE	LOAN OR GRANT	TOTAL	CONTRACT 1/	AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	DL	L*	16,000	-	-	-	-	-	16,000	-	-	-		
	GROSS OBLIGATIONS (ACTUAL YEAR)	DL	L	-	-	-	-	-	-	-	-	-	-		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	DL	L	-	-	-	-	-	-	-	-	-	-		
	EXPENDITURES (ACTUAL YEAR)	DL	L	-	-	-	-	-	-	-	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L*	16,000	-	-	-	-	-	16,000	-	-	-		
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	DL	L	-	-	-	-	-	-	-	-	-	-		
	B. EXPENDITURES	DL	L*	5,000	-	-	-	-	-	5,000	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L*	11,000	-	-	-	-	-	11,000	-	-	-		
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	DL	L	-	-	-	-	-	-	-	-	-	-		
	B. EXPENDITURES	DL	L*	6,000	-	-	-	-	-	6,000	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L*	5,000	-	-	-	-	-	5,000	-	-	-		
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/	DL	L*	-	-	-	-	-	-	-	-	-	-	5,000	-
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/														
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	DL	L	16,000	-	-	-	-	-	16,000	-	-	-	16,000	-

## REMARKS:

- 1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

\* Loan AID-50

Refers to Annex 3 of IAS

SECURITY CLASSIFICATION UNCLASSIFIED

PAGE NO. AA-73

AID 1020-3 (7-64)		PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES										SECURITY CLASSIFICATION <b>UNCLASSIFIED</b>			
E-1b		1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		END FY		4. PROJECT NO.		5. TITLE			
		1 November 1964		India		1965		1967		386-22-220-237		386-42-220-237		Delhi Power Plant #C*	
7. OBLIGATED AND DISBURSED		a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
		(1) TYPE		(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
					(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED	
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
		B. P.L. 480 LC													
TOTAL ACTUAL FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
		B. P.L. 480 LC													
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
		B. P.L. 480 LC		Sec. 104(g)	L	17,336	17,336	83,000	83,000	83,000	83,000	-	-	-	-
III BUDGET YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
		B. P.L. 480 LC													
IV PLANNING YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
		B. P.L. 480 LC													
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
		B. P.L. 480 LC													
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
		B. P.L. 480 LC		Sec. 104(g)	L	17,336	17,336	83,000	83,000	83,000	83,000	-	-	-	-

## REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c		PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS										1. DATA CURRENT AS OF:		2. COOPERATING CTRY.		3. PERSONNEL SERVICES PARTICIPANT TRAINING		BEG. FY		END FY		4. PROJECT NO.	
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		a. CUM. THRU ACTUAL FY			b. ACTUAL FY _____			c. OPERATIONAL FY _____			d. BUDGET FY _____			e. PLANNING FY _____			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																					
		Non U.S.																					
B. ON BOARD	U.S.																						
	Non U.S.																						
II. PARTICIPANTS PROGRAMMED	A. U.S.																						
	B. THIRD CTRY.																						

## REMARKS:

1/ End of Fiscal Year

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-237 386-42-220-237	Delhi Power Plant "C"
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### 1. The Activity Target

To increase the electric generating capability of the union territory of Delhi by providing financial assistance for the installation by 1966/1967 of three units of 62.5 MW each and the associated auxiliary equipment and transmission lines required to support the project, which formerly was called Delhi C Thermal Station Extension.

**Background:** Both the Delhi Electric Supply Undertaking (DESU) and the Punjab State Electricity Board (PSEB) are associated in this project. The extension will be constructed adjacent to the existing DESU C Station in the vicinity of New Delhi. Two of the 62.5 MW units are intended to primarily meet the requirements of DESU; the third unit will be used principally by PSEB.

Part of the DESU system is fed power from the Punjab State Electricity Board (PSEB)-Bhakra-Nangal hydro electric system at a sub-station on the north edge of Old Delhi. The rest of the urban system is supplied from the new 36.6-MW 'C' Station which began commercial operation on September 10, 1963, and the older Delhi A and B Thermal Power Stations.

Including scattered diesel units and another small thermal station, the total installed nameplate generation capacity within the Delhi-New Delhi urban area is approximately 112 MW; making allowances for some of the older equipment lowers the total reliable capacity to about 94 MW. Present agreements with PSEB allow an import of up to 60 MW from its hydro-electric system. Total reliable capacity therefore is about 156 megawatts for a system peak of 146 megawatts in 1964. From this it is seen that with all stations on the line there is a surplus of 10 MW during peak load periods. However, with the single largest unit out for maintenance there actually is a deficit of 26.6 MW to supply the peak load.

To alleviate this critical power shortage situation as soon as possible, DESU has contracted for an Austrian made package-type thermal unit of 15 MW to be installed between the A and B stations and expected to be operational by the end of 1965. As of August 1964 construction work at the site was at the point of foundation construction.

With the 60 MW of imports added to 36 MW of newly installed thermal, plus at least 15 MW more of thermal, some of the old Delhi installations (60 MW) could be relegated to stand-by status for a time. During the latter part of 1965,

an additional 40 MW of power is expected from Bhakra. At that time total available power would be about 150 MW, exclusive of the old generation, but the peak load would also be about 150 MW. The old capacity should be kept in shape to prevent the system from being power deficient until the Indraprastha Station Extension comes into operation.

The capacity situation for the DESU system is summarized in the following tabulation:

Year ending March 31	Estimated Peak Demand MW	Capability - MW					
		Total	Indra- prastha Station	Austrian Thermal	PSEB Import	Old Gen.	Indra- prastha Extension
1964	133	156	36	-	60	60	-
1965	162	171	36	15	60	60	-
1966	169	211	36	15	100	60	-
1967	200	276	36	15	100		125 (2x62.5)
1968	230	276	36	15	100		125 ( " " )

Although the PSEB system commitment to DESU is supposedly a firm one, unforeseen interruptions can occur. In view of this possibility and the above tabulation, it is obvious that an integrated operation of the PSEB and DESU systems is necessary. Although two of the Indraprastha Station Extension units are assigned to DESU and one to PSEB, they may be paralleled on one bus, making the combination available to both PSEB and DESU as needed. Furthermore, it is understood that details of a Punjab-Uttar Pradesh-Delhi Rajasthan Himachal Pradesh inter-system operation now are being studied. Diversity of generation between thermal, PSEB hydroelectric and the canal system hydroelectric of Uttar Pradesh, along with load diversity, will be a benefit to all systems as they become interconnected.

In Punjab the total generating capability (principally hydro) by 1967 will be 573 MW, including this project, with a proposed demand of 580 MW. These figures pertain to the PSEB area only and are expressed as capability rather than as capacity, since the generation of hydro-electric energy will vary with reservoir operation. The capability of the Bhakra Left Bank Station varies from 450 MW to 265 MW during the year and the Right Bank Station will vary from 600 MW to 350 MW. Likewise a portion of the Bhakra and Mangal Canal Stations output will go to Delhi, Rajasthan and Himachal Pradesh. With a capability of 573 MW, there will be a PSEB deficit of at least 8 MW during periods of peak demand. Since the DESU system is dependent upon the Bhakra turbines (5 x 120,000-MW units), it is evident that any breakdown or interruption in their operation would entail a severe cutback in power within the interconnected system.

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-237 386-42-220-237	Delhi Power Plant "C"
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To make up the 8 MW PSEB deficit, the 26.6 MW DESU deficit and to provide spinning reserve for emergency conditions, additional generating capacity will be required by 1967 within the interconnected system.

In addition to the U.S. foreign exchange contribution for the Indraprastha Station Extension, the equivalent of \$4.2 million from a United Kingdom credit will finance imported components used in the manufacture of the three boilers by ACC-Vickers-Babcock, an Indian associate of the British firm, Babcock and Wilcox Ltd.

Description of Project: Indraprastha Power Station Extension will consist of three 62.5-MW turbine generators each served by a 600,000 pound per hour boiler burning pulverized low-grade coal. Generation will be at 11 KV with provision for 220-KV interconnections with the Uttar Pradesh system and the Punjab system at Faridabad (across the Jumna River and south of Delhi). Power will be fed into the 33-KV Delhi ring and the 11-KV primary distribution system.

## 2. The Course of Action

Financing: To provide a loan of \$16.0 million to meet major foreign exchange costs of the Indraprastha Power Station Extension. A PL 480 Section 104(g) rupee loan of Rs.83,000.00 (equal to \$17.3 million) may be made to assist in covering the local costs.

Engineering: Gibbs and Hill, a U.S. consulting firm, will assist DESU and PSEB in design engineering, preparation of specifications and bidding documents, analysis of bids, construction supervision, and testing and commissioning of the completed plant.

Suppliers: International General Electric, U.S., will furnish the turbine-generators, while ACC-Vickers Babcock will supply the boilers under a bulk purchase contract issued by CWPC. Other bulk contract purchases by CWPC for this project are:

- a. Boiler feed water pumps from Pacific Pumps Co.
- b. Deaerating water heaters from Chicago Heaters Co.
- c. Closed feed water heaters from Southwestern Engineering Company.

Other supply contracts are in various stages of design and procurement.

Cost Estimate: The cost estimate for the project is:

Item	Estimated Costs (in millions of dollars)			
	Foreign Exchange (U.S.)	Foreign Exchange (U.K.)	Local Currency	Total
Site and Civil Works	\$ 0.1		\$ 3.8	\$ 3.9
Mechanical & Electrical Plant & Equipment	15.0	4.2	11.1	30.3
Engineering	0.8		0.6	1.4
Interest and contingencies			1.8	1.8
	<u>\$15.9</u>	<u>\$4.2</u>	<u>\$17.3</u>	<u>\$37.4</u>
	Rounded to \$16.0			

## 3. Progress to Date

Financing: On March 8, 1963, AID Loan Agreement No. 50 was signed, providing \$16.0 million to meet a part of the foreign exchange cost of the Indraprastha Power Station Extension.

Turbine-generator and boiler orders have been placed. The consulting engineer has been appointed and is at work on the project. Foundation piling are being driven. The present target dates for placing the units into operation was from late 1966 into 1967.

## 4. Funding Requirements

Funding for this project has been obligated as follows:

FY 63, AID Loan No. 50, \$16,000,000

A PL 480 Section 104(g) loan in the amount of Rs.83.0 million (equiv. to \$17.3 million) to meet local costs may be considered.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY India			3. PROJECT NO. 386-22-220-238 386-42-220-238			4. TITLE Satpura Power Plant I & II							
	5. U.S. FUNDING:		BEGIN FY 1963	END FY 1965		6. PRIOR REFERENCES										
	PHYSICAL WORK:		1964	1969												
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. 1/ LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	DL	L*	25,100	-	-	-	-	-	25,100	-	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)	DL	L	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	DL	L	-	-	-	-	-	-	-	-	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)	DL	L	-	-	-	-	-	-	-	-	-	-	-	-	-
C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L*	25,100	-	-	-	-	-	-	25,100	-	-	-	-	-	-
	A. GROSS OBLIGATIONS	DL	L	42,000	-	-	-	-	-	42,000	-	-	-	-	-	-
	B. EXPENDITURES	DL	L	8,000	-	-	-	-	-	8,000	-	-	-	-	-	-
C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L	59,100	-	-	-	-	-	-	59,100	-	-	-	-	-	-
	A. GROSS OBLIGATIONS	DL	L	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. EXPENDITURES	DL	L	14,000	-	-	-	-	-	14,000	-	-	-	-	-	-
C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L	45,100	-	-	-	-	-	-	45,100	-	-	-	-	-	-
	GROSS OBLIGATIONS 2/	DL	L	-	-	-	-	-	-	-	-	-	-	-	20,000	-
	GROSS OBLIGATIONS 2/	DL	L	-	-	-	-	-	-	-	-	-	-	-	25,100	-
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	DL	L	67,100	-	-	-	-	-	67,100	-	-	-	-	67,100	-

REMARKS:

1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

Refers to Annex 3 of L.A.S.  
\*Loan AID-77

AID 1020-3 (7-64)	PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES										SECURITY CLASSIFICATION UNCLASSIFIED			
E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		END FY		4. PROJECT NO.		5. TITLE			
	1 November 1964		India		Funding 1965		1965		386-22-220-238		Satpura Power Plant I & II			
					Phys. Work 1964		1969		386-42-220-238		6. PRIOR REFERENCES:			
7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED	
I CUMULATIVE THRU ACTUAL YEAR														
A. (i) LC COSTS CHGD TO \$ ACCTS. 2/														
FA ACT (ii) TRUST FUND														
ACT (iii) OTHER LC														
B. P.L. 480 LC														
TOTAL ACTUAL FY														
A. (i) LC COSTS CHGD TO \$ ACCTS. 2/														
FA ACT (ii) TRUST FUND														
ACT (iii) OTHER LC														
B. P.L. 480 LC														
II OPERATIONAL YEAR (EST.)														
A. (i) LC COSTS CHGD TO \$ ACCTS. 2/														
FA ACT (ii) TRUST FUND														
ACT (iii) OTHER LC														
FY 1965 B. P.L. 480 LC Sec. 104(g) L 72,688 72,688 348,000 348,000 348,000 348,000 - - - -														
III BUDGET YEAR (EST.)														
A. (i) LC COSTS CHGD TO \$ ACCTS. 2/														
FA ACT (ii) TRUST FUND														
ACT (iii) OTHER LC														
B. P.L. 480 LC														
IV PLANNING YEAR (EST.)														
A. (i) LC COSTS CHGD TO \$ ACCTS. 2/														
FA ACT (ii) TRUST FUND														
ACT (iii) OTHER LC														
B. P.L. 480 LC														
V ALL SUBSEQUENT FYs (EST.)														
A. (i) LC COSTS CHGD TO \$ ACCTS. 2/														
FA ACT (ii) TRUST FUND														
ACT (iii) OTHER LC														
B. P.L. 480 LC														
VI TOTAL ALL YEARS (EST.)														
A. (i) LC COSTS CHGD TO \$ ACCTS. 2/														
FA ACT (ii) TRUST FUND														
ACT (iii) OTHER LC														
B. P.L. 480 LC Sec. 104(g) L 72,688 72,688 348,000 348,000 348,000 348,000 - - - -														

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS						1. DATA CURRENT AS OF:			2. COOPERATING CTRY.		3. PERSONNEL SERVICES PARTICIPANT TRAINING		BEG. FY		END FY		4. PROJECT NO.				
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
I PROJECT PERSONNEL		A. MAN YEARS		U.S.																		
				Non U.S.																		
		B. ON BOARD		U.S.																		
				Non U.S.																		
II. PARTICIPANTS PROGRAMMED		A. U.S.																				
		B. THIRD CTRY.																				

REMARKS:

1/ End of Fiscal Year

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-238	Satpura Power Plant I & II
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1. The Activity Target

Stage I

To increase the electric generating capability of the State of Madhya Pradesh and the Western Region by providing financial assistance for the installation by 1966/67 of five units of 62.5 MW (total 312.5 MW) at Satpura in southern Madhya Pradesh.

Stage II

To increase further the generation capability in the area by providing additional financial assistance for the installation of three units of 125 MW each (total 375 MW) at the Satpura Thermal Power Station by 1968/69.

Background: The Satpura Power Plant site is in southern Madhya Pradesh, about 12 miles east of Ghoradongri, a station on the Betul-Itarsi line of the Central Railway, a site selected because of its proximity to extensive coal deposits; the feasibility of location of a barrage on the Tawa River which will form a condenser circulating water cooling pond capable of handling a plant of up to 1,000 MW capacity; and the desirability of placing substantial thermal power plant capacity toward the south-western portion of the state, since there are now several sizable installations in the eastern part. Furthermore, the State of Rajasthan will utilize the capacity of two of the five-62.5 MW Satpura units as part of an arrangement of sharing hydro capacity on the Chambal River, which separates Rajasthan and Madhya Pradesh.

Madhya Pradesh is the largest state in India in area and is India's least densely populated (189 per square mile). Nevertheless, many of the isolated distribution systems originally serving small local areas have been inter-connected by 33-KV and 66-KV subtransmission circuits to a greater degree than might be expected in so sparsely populated a region. In terms of major transmission, there now are three sub-systems, one in the eastern part of the state, another in the central sector which connects electrically with part of the eastern Maharashtra system and to which the Satpura Power Plant will be connected, and a third in the north west which connects with the Chambal Hydro system and which in turn feeds the extreme northern part of Madhya Pradesh. These systems

will be integrated within the next few years by 220-KV and 132-KV main transmission circuits. The Chambal River scheme mentioned previously includes the Gandhi Sagar Hydro-electric Plant, very close to the Madhya Pradesh-Rajasthan State boundary, which has 92 MW of capacity operating, of which 46 MW are reserved for Madhya Pradesh and are being delivered into the Ujjain-Indore-Bhopal area by 132-KV transmission lines going through Rajasthan into extreme northern Madhya Pradesh.

The coal field belt which plays such a prominent part in the economies of West Bengal and Bihar extends to east-central southern Madhya Pradesh. Coal deposits known as the Pench Valley System extend along the southern part of Madhya Pradesh, and adjacent to one of these fields Satpura Power Plant site is located. Mineral as well as coal deposits in Madhya Pradesh are assuming increasing importance with such industrial developments as the Bhilai Steel Project, put into operation in June 1962, and the several cement plants north of Jabalpur. Jabalpur, headquarters of the Madhya Pradesh Electricity Board, at present is dependent upon 13.5 MW of obsolete steam capacity and 1.5 MW of diesel capacity. An ordnance center dating back almost 100 years, Jabalpur is experiencing an upsurge in manufacturing activity as a result of the military situation in India.

Description of Project: The Satpura Thermal Power Plant Project, as defined in the existing loan description, consists of five 62.5 MW turbine-generator units, a substation with switching facilities for 220 KV and 132 KV, coal storage and coal handling facilities, ash handling facilities, a large cooling water pond and a residential colony for employees. The surrounding country is almost entirely virgin forest, the railhead at Ghordangri being the only center of any consequence in the area. In addition to the power plant itself there is a transmission network (to be financed by other than AID funds) connecting Satpura with Tawa to the north and Jabalpur to the east, plus 220 KV connections through Punasa-Indore-Ujjain and also through Bhopal to the western sub-system. These transmission lines along with others will interconnect the three separate sub-systems in Madhya Pradesh.

Stage I: Turbine-generator equipment for Satpura will come from the Government of India (CWPC) bulk purchase contract with International General Electric under which 14 such units are being procured for various projects. The boilers are being fabricated in India from raw and semi-finished material imported from the United Kingdom. Physical and electrical layout of the power plant will follow conventional practices with the boilers, turbine-generators and main power transformers being arranged on a unit system. One unique feature is the cooling water arrangement whereby a lake,

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-238	Satpura Power Plant I & II
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formed by building a barrage on the Tawa River, will virtually encompass the power plant on three sides, making it possible to have the cooling water intake directly on the lake. The cooling water discharge will go into a 2,000 cubic feet per second canal at a slightly higher elevation than the lake and will follow the contour of the lake until it reaches the vicinity of the barrage at which point it either will empty back into the reservoir or, in times of sufficient natural reservoir inflow, discharge into the river below the barrage.

(Consideration is being given to increasing the capacity of the Satpura Power Plant to 1,000 MW. Power plant design features needed by a plant of such size are being planned accordingly, including a proposed arrangement for carrying the cooling water discharge further around the artificial lake and emptying it into the lake opposite the power plant in order to obtain a longer circulatory path in the reservoir and thereby gain optimum cooling. Under this arrangement, mixing of the warm water from the turbine condensers with lake water and radiation of heat from the lake is expected to provide ample cooling for a 1,000 MW plant.)

Design, supervision of construction and responsibility for initial operation have been entrusted to the Kuljian Corporation, U.S. consulting engineers with a subsidiary office in Calcutta.

Stage II: Early implementation of Stage II is planned. It is desired that construction of the expansion be started in early 1966 in order to have the additional units in production by 1968/69.

## 2. The Course of Action

Stage I: To provide \$25.1 million through an AID development loan to meet the foreign exchange costs of installation of 312 MW including the five 62.5-MW units of turbine-generators, station electrical equipment, coal and ash handling plants, main transformers and principal switchgear equipment for the sub-station and major station service equipment. About 7.6 million dollars equivalent in Sterling credits will be provided for British-made boiler parts and equipment, independent of USAID dollar financing.

Stage II: To provide an AID development loan of \$42 million for a 375 MW expansion of the power plant (three units of 125 MW each).

To provide a PL 480 Section 104(g) loan of Rs. 348 million (equivalent of \$72.69 million) to meet local currency costs of the project.

Project planning calls for initiation of site preparation in April 1965 and initiation of procurement for long lead time items such as steam generators in April 1965 and turbine generators in September 1965. This schedule would provide for units coming into commercial operation in September 1968, March 1969 and September 1969. Meeting such a schedule will require FY 1965 funding to support the engineering services contract, which should be in operation by December 1964.

## 3. Progress to Date

Stage I: Funding for this project has been obligated as follows:

On March 8, 1963 AID Loan No. 77 was signed for \$25.1 million.

As of August 1964 all the basic plant characteristics have been determined and the detailed design work is about 80 percent complete. A road has been built from Ghoradongri Railroad Station to the power plant site, with suitable alignment, width, grade, and bridges for hauling the heavy equipment to the site. Temporary field engineering offices have been in operation since 1963, the consulting engineers' permanent offices and residences are occupied, work on colony housing and the project guest house has started and excavations and foundations for the No. 1 turbine generator have been started. Most of the boiler turbine-generator parts are at the storage yards or plant site, and much of the heavy structural steel for the power plant super-structure has been delivered. Dam exploratory and design work has been completed; dam abutment excavation and quarry development are under way. Construction power for the site has been provided from Khaparkheda in Maharashtra through Chidwara and Panara, through a 25 mile extension from the latter station. A contract has been awarded to Hindustan Corporation for the erection of the power house super-structure steel, most of which will come from Indian sources except for 1,000 tons of plates from the United States; and the company will fabricate on the site. Boiler erection is being carried out by the supplier, ACC-Vickers-Babco of India. Initial operation of the first unit should be possible in the third quarter of 1966, with subsequent units following each quarter thereafter until completion.

Stage II: The Madhya Pradesh Electricity Board has proceeded with its station expansion (stage II) plans and has prepared a Project Report, which is being reviewed informally by USAID. Stage II will provide a station extension of 375 MW (three units of 125 MW each) to give a total station capacity of 687 MW. An official request for AID loan financing of \$42 million is expected during FY 1965.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-220-238	Satpura Power Plant I & II
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Cost Estimates: (Thousands of Dollars)

<u>Item</u>	<u>Foreign Exchange</u>	<u>Local Currency</u>	<u>Total \$</u>
<u>Stage I</u>			
Civil Works and Colony	2,100	9,900	12,000
Turbine-generators	13,440	-	13,440
Boilers*	7,612*	16,948	24,560
Station Elec. Equipment	2,632	658	3,290
Miscellaneous Plant	-	360	360
Substation	2,055	505	2,560
Coal and ash plant	2,640	-	2,640
Contingencies	-	1,739	1,739
Over head and expenses	-	3,425	3,425
Consultant's fee	735	-	735
Tools, Spares, etc.	1,498	480	1,978
<b>Totals:</b>	<b>32,712</b>	<b>34,015</b>	<b>66,727</b>

\*Boiler foreign exchange financed by sterling credits.  
Net dollar requirement \$25,100,000.

<u>Item</u>	<u>Foreign Exchange</u>	<u>Local Currency</u>	<u>Total \$</u>
<u>Stage II</u>			
1. Land and land rights	-	250	250
2. Structures and improvements	-	10,000	10,000
3. Turbine generators, surface condenser (all in place)	10,500	2,200	12,700
4. Circulating water pumps	280	152	432
5. Boiler feed water heaters and evaporators	820	250	1,070
6. Steam generators	15,600	3,400	19,000
7. Ash handling	830	250	1,080
8. Coal handling	120	100	220
9. Fuel oil pumping and heating equipment	30	10	40
10. Boiler feed pumps	1,650	450	2,100
11. Controls and instruments	970	350	1,320
12. Piping and insulation	1,900	3,000	4,900
13. Water treating equipment	40	70	110
14. Miscellaneous pumps	-	73	73
15. Air compressors	-	52	52
16. Turbine room crane	-	110	110
17. Fire Fighting equipment	-	52	52
18. Electrical Equipment - control board's switchgear, conduit, cable & erection	1,300	1,700	3,000

<u>Item</u>	<u>Foreign Exchange</u>	<u>Local Currency</u>	<u>Total \$</u>
19. Power transformers and station transformers	2,200	650	2,850
20. Oil circuit breakers	830	150	980
21. Sub-station structures	20	402	422
22. Consulting engineering fee	600	450	1,050
23. Engineering supervision, erection & commissioning	4,150	2,200	6,350
24. Consulting engineering factory inspection and factory operator training	160	52	212
25. Overhead	-	4,800	4,800
26. Contingencies	-	3,000	3,000
27. Estimated interest during construction	-	4,500	4,500
<b>Total:</b>	<b>\$ 42,000</b>	<b>38,673</b>	<b>80,673</b>

Using this cost estimate for the three units of 125,000 kilowatts each, the installed cost is 215 dollars per kilowatt.

Local currency costs of Stages I & II, estimated to be Rs. 348 million (equiv. \$72.69 million), are proposed for FY 1965 financing through a PL-480 Section 104(g) loan. GOI request is anticipated for this loan which will be reviewed and approved by the Mission before funds are obligated.

4. Funding Requirements

FY 1963 Stage I, AID Loan # 077	\$ 25,100,000
FY 1965 Stage II, AID Loan (Proposed)	\$ 42,000,000
FY 1965 Stage I & II, PL-480 rupee loan equivalent to	\$ 72,688,000

AID 1020-2 (8-64)		PROJECT DATA SUMMARY -- AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED					
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY India			3. PROJECT NO. 386-22-980-239				4. TITLE Tarapur Atomic Power Station							
	5. U.S. FUNDING:		BEGIN FY 1964		END FY 1964		6. PRIOR REFERENCES										
	PHYSICAL WORK:		1965		1969												
7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRI- ATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	
I. THRU ACTUAL YEAR  FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		DL	T.*	80,000	-	-	-	-	-	80,000	-	-	-	-	-	
	GROSS OBLIGATIONS (ACTUAL YEAR)		DL	T.*	80,000	-	-	-	-	-	80,000	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		DL	T.*	593	-	-	-	-	-	593	-	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)		DL	T.*	593	-	-	-	-	-	593	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	T.*	79,407	-	-	-	-	-	79,407	-	-	-	-	-	-
			DL	T.*		-	-	-	-	-		-	-	-	-	-	-
II. OPERATIONAL YEAR (EST.)  FY 1965	A. GROSS OBLIGATIONS		DL	T.*	-	-	-	-	-	-	-	-	-	-	-	-	
	B. EXPENDITURES		DL	T.*	11,000	-	-	-	-	-	11,000	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	T.*	68,407	-	-	-	-	-	68,407	-	-	-	-	-	-
III. BUDGET YEAR (EST.)  FY 1966	A. GROSS OBLIGATIONS		DL	T.	-	-	-	-	-	-	-	-	-	-	-	-	
	B. EXPENDITURES		DL	T.*	19,000	-	-	-	-	-	19,000	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	T.*	49,407	-	-	-	-	-	49,407	-	-	-	-	-	-
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/		DL	T.*	-	-	-	-	-	-	-	-	-	-	-	22,000	-
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/		DL	T.*	-	-	-	-	-	-	-	-	-	-	-	27,407	-
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/		DL	T.*	80,000	-	-	-	-	-	80,000	-	-	-	-	80,000	-

## REMARKS:

- 1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

\* Loan AID-91

Refers to Annex 3 of LAS.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-980-239	Tarapur Atomic Power Station
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### 1. The Activity Target

To increase the electric generating capability of the State of Maharashtra and the Western Region by providing financial assistance for installation near the town of Tarapur, Maharashtra, on the Arabian Sea, of two 190 MW electric generating units powered from two nuclear reactors with the necessary auxiliary equipment.

Background: The GOI for many years has considered the advantage of nuclear power for generating electricity. The successful operation of nuclear power stations in other countries and India's own advancement in nuclear science encouraged them to build a nuclear power station. The Tarapur site was chosen, mainly because:

1. The general area has a large already well developed industrial potential at Ahmedabad, Baroda and Bombay. The Second Annual Power Survey of India (May, 1964) predicts an increase in electric power demand in the Western Region of 160 percent in the next four years.
2. This area has no coal and only a little oil, and transport of coal from the major coal areas in Bihar, a distance of a thousand miles, results in high fossil fuel costs.
3. It is not feasible to develop hydro-electric power fast enough and the short rainy season leaves a water shortage of capacity.
4. Cooling water may be obtained from the Arabian Sea.
5. A dock can be built to unload heavy machinery from barges coming from Bombay.

A June 1963 report prepared by Burns and Roe, Inc., for AID indicates that the Tarapur installation can be a profitable one. It is also necessary that the Atomic Energy Department of the GOI obtain experience in the construction and operation of nuclear power plants for future requirements. There are modest quantities of uranium and large quantities of thorium in India which eventually should be utilized to supply part of the total energy demands.

### 2. The Course of Action

Financing: To make available to the GOI and its Department of Atomic Energy U.S. dollar credits in the amount of \$80 million to meet project foreign exchange costs. These funds will be used to cover plant construction costs of \$68.9 million and fuel fabrication costs of approximately \$10.8 million. A separate financing agreement is being negotiated between the GOI and the U.S. Atomic Energy Commission by which special financing (Non-AID) by the USAEC will probably cover the initial fuel costs of about \$15 million. Local currency financing is to be provided from GOI budget funds.

The overall local currency costs are expected to total \$33.6 million for a total equivalent project cost of \$101.5 million, not including fuel or interest during construction. Overall financing (foreign and local costs) to place the plant in operation (construction cost, 10% allowance for total interest during construction, fuel cost and fuel fabrication cost) will be approximately \$141 million. While the fuel costs are normally considered operating costs, in this instance, because of the nature of the fuel, its part of long range operating costs of necessity must be financed before initial plant operation.

Description of Project: Tarapur Nuclear Power Project, to be constructed on the western coast of India, approximately 62 miles north of Bombay, is to consist of two identical power units which will be serviced by a few joint auxiliaries. The nuclear power units are to be of the boiling water reactor type, similar to those at several other operating nuclear stations in the world, but will be modified to include the recent design improvements of internal moisture separation within the reactor and vapor suppression containment.

Each reactor will deliver steam to a separate turbine-generator unit of the following characteristics:

#### TURBINE

200,000 KWe  
Tandem-Compound, Two-flow  
1500 RPM

#### GENERATOR

235,000 KVA @ 30 psi Hydrogen Pressure  
0.85 Power Factor  
12,000 Volt line to line voltage  
1500 RPM

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-980-239	Tarapur Atomic Power Station
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The guaranteed net electrical output of the total station, after taking into account station service requirements, is 380 MW. This power will be fed over high voltage (220 KV) lines from the Tarapur Nuclear Power Station switchyard into the systems of Gujarat and Maharashtra States (it has been proposed that a committee be established to develop plans for division of power, rates, and dispatching procedures). The project is scheduled for completion in October, 1968.

Engineering: International General Electric will be responsible for all phases of engineering design, project construction and start-up operations under a single encompassing "turnkey" project. The Bechtel Corporation have a sub-contract for non-nuclear engineering and design and for construction of the plant. Inasmuch as the nuclear station is similar in many respects to plants previously designed and constructed by General Electric, much time should be saved in the preparation of the Tarapur Project design; the Company has been working on various aspects of the project for several years. Engineering has progressed to the point where construction, delayed by the 1964 monsoon season, started September 12, 1964.

With International General Electric Company as prime contractor for the project, the turbine generator and the associated electrical equipment will be manufactured by the General Electric Company, U.S.A. The reactor vessel is being manufactured for IGE by the Combustion Engineering Company.

### 3. Progress to Date

AID Loan Agreement No. 386-H-091 for \$80 million was signed on December 7, 1963.

By late 1960 planning had progressed to a point where invitations to bid were issued for a Nuclear Plant on a "turnkey" basis (i.e., a single contract for design, construction and start-up) to be located at Tarapur. Bids were received in August 1961 from seven firms on different types of reactor power plants. Bid evaluation showed the proposal of International General Electric to be most suited to the needs of the proposed

project and a qualified letter of intent was issued to International General Electric by the GOI Department of Atomic Energy on September 24, 1962. The proposed contract is contingent upon receiving sufficient financial assistance from outside sources (AID) and upon obtaining agreements with the U.S. Atomic Energy Commission and USAID.

GOI prepared an "Application for loan for financing the foreign exchange requirements of the Tarapur Atomic Power Station" in November 1962 and subsequently applied to AID for such financing. AID/W engaged Burns and Roe, Inc., Consulting Engineers, in February 1963, to study the economic and technical feasibility of the proposed project. The Burns and Roe report (issued in June, 1963) and the information submitted by GOI and USAID, New Delhi, were evaluated by AID and the project was approved.

After the announcement of the price of the Oyster Creek plant in the United States, an investigation of the relative costs of the Tarapur and Oyster Creek plants were requested; Burns and Roe were employed by AID/W to make such a study. The Burns and Roe report on this matter (contract No. AID/NESA-102) was released April 15, 1964; it recommended approval of the contract between IGE and the GOI. The contract was signed May 8, 1964.

The physical work accomplished to date at the site includes construction of a water supply system, power supply (2-22 KW lines), for plant construction, workers' housing and warehouses. A railroad siding has been installed from the railway station at Boisar where materials and equipment will be unloaded and transported by road to the site about five miles away.

The access road to the site is partly built.

Construction on the power station site started September 12, 1964.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-980-239	Tarapur Atomic Power Station
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4. Funding Requirements

TARAPUR NUCLEAR POWER PROJECT  
ESTIMATED COST BREAKDOWN

<u>Purpose</u>	<u>In Dollars</u>		
	<u>Dollars</u>	<u>Rupee equiv.</u>	<u>Total</u>
1. <u>Station</u>			
(a) Contract Price for Station	59,300	24,868	84,168
(b) Capital Spares & Allowances	1,680	420	2,100
Total	60,980+	25,288	86,268
2. <u>Contingencies</u>	5,488	2,289	7,777
3. <u>Site Preparation and Administrative Costs</u>			
(a) Site Investigations, Land Acquisition, Water Access Road, Sidings, Townships, etc.	420	3,780	4,200
(b) Salaries	-	1,785	1,785
(c) Training, Experts, Inspection, etc.	840	-	840
(d) Miscellaneous Equipment, Vehicles, Office Supplies, etc.	210	315	525
Total	1,470+	5,880	7,350
4. <u>Fuel Fabrication</u>	10,768	-	10,768
5. <u>Consulting Services</u>	1,000	500	1,500
6. <u>TOTALS</u>	79,706	33,957	113,663
7. <u>BOUNDED TOTALS:</u>	\$ 80,000	34,000	114,000

NOTES: 1. The above is the latest estimate of the total cost of the Tarapur Project, including the work to be done by General Electric and the work to be done by the Government of India outside the scope of the GE contract.

According to the GE-Indian draft contract, the prices to be paid to GE by India are as follows:

Dollar Price for Station - \$59,300,000  
Rupee Price for Station - 119,057,000 Rupees (equiv. \$24,868,000)

Dollar Price for Fabrication of the First Charges of Nuclear Fuel for the Reactors - \$10,768,000

These prices are placed in parenthesis in the tabulation

The draft GE-Indian contract also provides for adjustments in both the dollar and rupee portions of the price due to such reasons as changes in the cost of materials and labor. Procedures are set down for determining these adjustments. Monetary bonus and penalty provisions also are contained in the contract.

2. Totals may not add due to rounding.

3. Dollar-Rupee conversions made at 1:4.7876.

PROJECT DATA SUMMARY — AID DOLLAR COSTS

E-1a

1. DATA CURRENT AS OF:  
1 November, 1964

2. COOPERATING COUNTRY  
INDIA

3. PROJECT NO.

4. TITLE

U.S. FUNDING:

BEGIN FY

END FY

1954

1965

PHYSICAL WORK:

1955

1967

5. PRIOR REFERENCES

Goal: TRANSPORT DEVELOPMENT

7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)	a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
					(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT
					AID	PARA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR														
	TC	G	56,250	413	102	-	208	261	55	55,430	93	44	57		
	DL	L	238,705	-	-	-	-	-	-	238,705	-	-	-		
	GROSS OBLIGATIONS (ACTUAL YEAR)														
	TC	G	-	-	-	-	-	-	-	-	-	-	-		
	DL	L	15,850	-	-	-	-	-	-	15,850	-	-	-		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR														
	TC	G	56,249	413	96	-	208	255	55	55,441	93	44	57	198	-
	DL	L	201,480	-	-	-	-	-	-	201,480	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)														
TC	G	(37)	-	-	-	-	1	-	(38)	-	-	-	-	-	
DL	L	62,156	-	-	-	-	-	-	62,156	-	-	-	-	-	
C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
TC	G	1	-	6	-	-	6	-	(11)	-	-	-			
DL	L	37,225	-	-	-	-	-	-	37,225	-	-	-			
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS														
	TC	G	-	-	-	-	-	-	-	-	-	-	-		
	DL	L	45,800	-	-	-	-	-	-	45,800	-	-	-		
	TC	G	1	-	6	-	-	6	-	(11)	-	-	-		
	DL	L	24,981	-	-	-	-	-	-	24,981	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR														
TC	G	-	-	-	-	-	-	-	-	-	-	-			
DL	L	58,044	-	-	-	-	-	-	58,044	-	-	-			
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS														
	DL	L	-	-	-	-	-	-	-	-	-	-	-		
	B. EXPENDITURES														
DL	L	41,257	-	-	-	-	-	-	41,257	-	-	-			
C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
DL	L	16,787	-	-	-	-	-	-	16,787	-	-	-			
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/														
DL	L	-	-	-	-	-	-	-	-	-	-	-	16,787	-	
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/														
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/														
	TC	G	56,250*	413	102	-	208	261	55	55,430	93	44	57	55,837	413
DL	L	284,505*	-	-	-	-	-	-	-	284,505	-	-	-	284,505	

REMARKS:

1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

\*Includes for closed projects : DG = \$53,375  
DL = \$13,073  
LC charged to \$ Account = 79



AID FORM 10-112 (7-62)	DATE PREPARED 1 November, 1964	COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	MULTI-YEAR LISTING	Goal: TRANSPORT DEVELOPMENT	E-4
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Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year FY 1964	Operational Year FY 1965	Budget FY 1966	Budget +1 FY 1967	Budget +2 FY 1968	Budget +3 FY 1969	Budget +4 FY 1970	All Subsequent Years	Total All Years	
386-12-370-024	Aviation Ground Facilities	DL											
		DG	2,875	-	-	-	-	-	-	-	-	2,875	
		SA											
		480											
		L/C											
		Coop. C.											
386-11-310-211	National Highways	DL											
		DG											
		SA											
		480	44,775	-	10,945	-	-	-	-	-	-	-	52,720
		L/C											
		Coop. C.											
386-24-390-241	Mayon Tire Cord Yarn Project	DL	9,800	-	-	-	-	-	-	-	-	9,800	
		DG											
		SA											
		480											
		L/C											
		Coop. C.											
386-24-230-244	Napco Precision Gear Plant	DL	2,300	-	-	-	-	-	-	-	-	2,300	
		DG											
		SA											
		480	835	835	835	-	-	-	-	-	-	-	1,670
		L/C											
		Coop. C.											
386-24-390-251	Premier Automobiles I & II	DL	10,200	-	-	-	-	-	-	-	-	10,200	
		DG											
		SA											
		480											
		L/C											
		Coop. C.											

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE AB-3

AID FORM 18-112 (7-62)	DATE PREPARED	COOPERATING COUNTRY	SECURITY CLASSIFICATION	MULTI-YEAR LISTING							Goal: TRANSPORT DEVELOPMENT	E-4	
	1 November, 1964	INDIA	UNCLASSIFIED										
Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Oblig- ations	Cumulative Through Actual Year	Actual Year FY 1964	Operational Year FY 1965	Budget FY 1966	Budget +1 FY 1967	Budget +2 FY 1968	Budget +3 FY 1969	Budget +4 FY 1970	All Subsequent Years	Total All Years	
386-22-330-252	Railway Modernization - I, II, & III	DL	114,982	-	-	-	-	-	-	-	-	114,982	
		DG											
		SA											
		480											
		L/C											
		Coop. C. Other											
386-22-330-253	Railways - Diesel Locomotives, IV, V, & VI	DL	58,850	15,850	7,200	-	-	-	-	-	-	66,050	
		DG											
		SA											
		480											
		L/C											
		Coop. C. Other											
386-24-390-256	Hindustan Motors Vehicle Plant, I & II	DL	15,800	-	23,000	-	-	-	-	-	-	38,800	
		DG											
		SA											
		480											
		L/C											
		Coop. C. Other											
386-24-390-257	Telco Truck Plant, I & II	DL	13,700	-	11,800	-	-	-	-	-	-	25,500	
		DG											
		SA											
		480											
		L/C											
		Coop. C. Other											
386-22-330-265	Railways VII - Diesel Shunter Locomotives	DL	-	-	3,800	-	-	-	-	-	-	3,800	
		DG											
		SA											
		480											
		L/C											
		Coop. C. Other											

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE AB-4

BEST AVAILABLE

Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year FY 1964	Operational Year FY 1965	Budget FY 1966	Budget +1 FY 1967	Budget +2 FY 1968	Budget +3 FY 1969	Budget +4 FY 1970	All Subsequent Years	Total All Years	
	TOTAL: AID Activities, Transport Development Goal.	DL	225,632	15,850	45,800	-	-	-	-	-	-	271,432	
		DG	2,875	-	-	-	-	-	-	-	-	2,875	
		SA											
		480	42,610	835	11,780	-	-	-	-	-	-	-	54,390
		L/C											
	Coop. C.												
	Other												
		DL											
		DG											
		SA											
		480											
		L/C											
		Coop. C.											
		Other											
		DL											
		DG											
		SA											
		480											
		L/C											
		Coop. C.											
		Other											

SECURITY CLASSIFICATION  
UNCLASSIFIED

## PROJECT DATA SUMMARY — AID DOLLAR COSTS

SECURITY CLASSIFICATION  
UNCLASSIFIED

E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA		3. PROJECT NO. 386-12-370-024				4. TITLE Aviation Ground Facilities								
	5. U.S. FUNDING:		BEGIN FY 1954	END FY 1961	6. PRIOR REFERENCES						7.		i.		1/		
	PHYSICAL WORK:		1955	1962	PERSONNEL SERVICES		PARTICIPANTS		COMMODITIES		OTHER COSTS		LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS				
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a.	b.	c.	d.	e.		f.		g.		h.		i.		1/	
		APPROPRIATION TITLE	LOAN OR GRANT	TOTAL	CONTRACT 1/	(1) U.S. AGENCIES		(2)	(1) U.S. AGENCIES	(2)	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	
						AID	PASA	CONTRACT									
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	2,875	-	71	16	-	125	-	2,633	-	30	-			
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	-	-	-	-	-	-	-	-	-	-	-			
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	2,874	-	65	16	-	119	-	2,644	-	30	-	59		
	EXPENDITURES (ACTUAL YEAR)	TC	G	(37)	-	-	-	-	1	-	(38)	-	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	1	-	6	-	-	6	-	(11)	-	-	-			
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	1	-	-	-	-	-	-	-	-	-	-			
	B. EXPENDITURES	TC	G	1	-	6	-	-	6	-	(11)	-	-	-			
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR																
III. BUDGET YEAR (EST.) FY _____	A. GROSS OBLIGATIONS																
	B. EXPENDITURES																
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR																
IV. PLANNING YR. (EST.) FY _____	GROSS OBLIGATIONS 2/																
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/																
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	2,875	-	87	-	-	125	-	2,633	-	30	-	2,875	-	

## REMARKS:

1/ This is a memorandum (non-odd) column.

2/ Show estimated expenditures in column 1.

33 returned participants are reported to be making effective use of their acquired skills and knowledge. AID-financed equipment, except F4U equipment now in final stages of installation at Bombay and Calcutta, is being utilized satisfactorily and has contributed significantly toward modernization of aviation facilities and to the safety and regularity of air flight. Unliquidated balance of \$1,000 is due to accounting adjustments.

UNCLASSIFIED  
SECURITY CLASSIFICATION

PAGE NO. AB-6

**PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES**

SECURITY CLASSIFICATION  
**UNCLASSIFIED**

**E-1b**

1. DATA CURRENT AS OF: <b>1 November 1964</b>	2. COOPERATING COUNTRY <b>INDIA</b>	3. Funding	BEG. FY <b>1954</b>	END FY <b>1961</b>	4. PROJECT NO. <b>386-12-370-024</b>	5. TITLE <b>Aviation Ground Facilities</b>
		Phys. Work	<b>1955</b>	<b>1962</b>		

6. PRIOR REFERENCES:

7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA (ii) TRUST FUND												
	ACT (iii) OTHER LC												
	B. P.L. 480 LC												
TOTAL ACTUAL FY	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA (ii) TRUST FUND												
	ACT (iii) OTHER LC												
	B. P.L. 480 LC												
II OPERATIONAL YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA (ii) TRUST FUND												
	ACT (iii) OTHER LC												
	B. P.L. 480 LC												
III BUDGET YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA (ii) TRUST FUND												
	ACT (iii) OTHER LC												
	B. P.L. 480 LC												
IV PLANNING YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA (ii) TRUST FUND												
	ACT (iii) OTHER LC												
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA (ii) TRUST FUND												
	ACT (iii) OTHER LC												
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA (ii) TRUST FUND												
	ACT (iii) OTHER LC												
	B. P.L. 480 LC												

REMARKS:  
1/ Exchange Rate: \$1 =  
2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF: 1 November 1964			2. COOPERATING CTRY. INDIA			3. PERSONNEL SERVICES PARTICIPANT TRAINING		BEG. FY 1954		END FY 1962		4. PROJECT NO. 386-12-370-024							
	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			a. CUM. THRU ACTUAL FY			b. ACTUAL FY 1965			c. OPERATIONAL FY 1965			d. BUDGET FY 1966			e. PLANNING FY 1966			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
	B. ON BOARD	U.S.																					
		Non U.S.																					
II. PARTICIPANTS PROGRAMMED	A. U.S.		33																		33		
	B. THIRD CTRY.																						

REMARKS:  
1/ End of Fiscal Year

UNCLASSIFIED

SECURITY CLASSIFICATION

PAGE NO. AB-7

**PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES**

SECURITY CLASSIFICATION  
UNCLASSIFIED

E-1b

1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	3. FUNDING Funding 1962 Phys. Work 1962	4. PROJECT NO. 386-31-310-211	5. TITLE National Highways
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7. OBLIGATED AND DISBURSED	g. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(e) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A. (i) LC COSTS CHGD TO S ACCTS. 2/ FA ACT (ii) TRUST FUND (iii) OTHER LC												
	B. P.L. 480 LC	Sec.104(e)	G	41,775	41,775	200,000	200,000	200,000	200,000	-	-	-	-
TOTAL ACTUAL FY 1964	A. (i) LC COSTS CHGD TO S ACCTS. 2/ FA ACT (ii) TRUST FUND (iii) OTHER LC												
	B. P.L. 480 LC	Sec.104(e)	G	-	14,764	-	70,684	-	70,684	-	-	-	-
II OPERATIONAL YEAR (EST.)	A. (i) LC COSTS CHGD TO S ACCTS. 2/ FA ACT (ii) TRUST FUND (iii) OTHER LC												
FY 1965	B. P.L. 480 LC	Sec.104(e)	G	10,945	10,945	52,400	52,400	52,400	52,400	-	-	-	-
III BUDGET YEAR (EST.)	A. (i) LC COSTS CHGD TO S ACCTS. 2/ FA ACT (ii) TRUST FUND (iii) OTHER LC												
FY	B. P.L. 480 LC												
IV PLANNING YEAR (EST.)	A. (i) LC COSTS CHGD TO S ACCTS. 2/ FA ACT (ii) TRUST FUND (iii) OTHER LC												
FY	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A. (i) LC COSTS CHGD TO S ACCTS. 2/ FA ACT (ii) TRUST FUND (iii) OTHER LC												
FY	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A. (i) LC COSTS CHGD TO S ACCTS. 2/ FA ACT (ii) TRUST FUND (iii) OTHER LC												
	B. P.L. 480 LC	Sec.104(e)	G	52,720	52,720	252,400	252,400	252,400	252,400	-	-	-	-

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

Refers to Annex 4 of L.A.S.

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c

**PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS**

1. DATA CURRENT AS OF:	2. COOPERATING CTRY.	3. PERSONNEL SERVICES PARTICIPANT TRAINING	4. PROJECT NO.
------------------------	----------------------	---	----------------

I. PROJECT PERSONNEL	A. MAN YEARS U.S. Non U.S.	B. ON BOARD U.S. Non U.S.	e. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
			Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
II. PARTICIPANTS PROGRAMMED	A. U.S.																						
	B. THIRD CTRY.																						

REMARKS:

1/ End of Fiscal Year

AID 1620-1 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	36-31-310-211	National Highways
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1. The Activity Target:

The purpose of this project is to provide local currency assistance to the GOI's National Highways program under the Third Five Year Plan, to improve the existing network through completion of important road and bridge work carried forward from the Second Plan and construction of missing links on the existing highways. National Highways constitute the main trunk roads running through the length and breadth of the country and serve as the major carrier of long distance traffic.

2. The Course of Action:

It has been decided that the 15,000 miles of roads constituting India's National Highways system be improved by constructing about 120 bridges, widening and improving the existing roads. Besides, three new schemes, estimated to cost Rs.33 million (equiv. \$6,892,800) for construction of bridges across (i) Little Rann of Kutch, Gujerat; (ii) Tersa River, West Bengal; (iii) Beas River, Punjab; have been undertaken over the Third Plan period.

A grant of PL-480 rupees totalling Rs.200 million (equiv. \$41.77 million) has been made through FY 64. An additional grant of Rs. 52.4 million (equiv. \$10.94 million) of PL-480 rupees has been requested by GOI in FY-65 to cover local currency expenditures to March 31, 1966.

3. The Progress to Date:

During the Second Five Year Plan period, 700 miles of roads were constructed to provide missing links; 40 major bridges were built; 3500 miles of roads were improved; and 800 miles were widened. Work on 47 bridges of the remaining 80 to be provided on National Highways is under way.

The first grant of Rs.200 million provided through Project Agreement No. 114 signed October 31, 1961 has been fully disbursed.

PROJECT DATA SUMMARY — AID DOLLAR COSTS

7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. PROJECT NO.				4. TITLE							
	1 November 1964		India		386-24-390-241				Rayon Tire Cord Yarn Project							
	5. U.S. FUNDING:		BEGIN FY		END FY		6. PRIOR REFERENCES									
	PHYSICAL WORK:		1962		1962											
		e.	b.	c.	d.	e.			f.		g.		h.		i.	
		APPROPRIATION TITLE	LOAN OR GRANT	TOTAL	CONTRACT 1/	PERSONNEL SERVICES			PARTICIPANTS		COMMODITIES		OTHER COSTS		LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	DL	L*	9800	-	-	-	-	-	-	9,800	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)															
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	DL	L*	5,296	-	-	-	-	-	-	5,296	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)	DL	L*	5,296	-	-	-	-	-	-	5,296	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L*	4,504	-	-	-	-	-	-	4,504	-	-	-	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS															
	B. EXPENDITURES	DL	L*	2,200	-	-	-	-	-	-	2,200	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L*	2,304	-	-	-	-	-	-	2,304	-	-	-	-	-
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS															
	B. EXPENDITURES	DL	L*	304	-	-	-	-	-	-	304	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L*	2,000	-	-	-	-	-	-	2,000	-	-	-	-	-
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 3/	DL	L*	-	-	-	-	-	-	-	-	-	-	-	-	2,000
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 3/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	DL	L*	9,800	-	-	-	-	-	-	9,800	-	-	-	-	9,800

REMARKS:  
1/ This is a memorandum (non-odd) column.  
2/ Show estimated expenditures in column i.

\* Loan AID-33  
Refers to Annex 4 of LAS

AID 1080-1 (7-84)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	Project No. 386-24-390-241	Title Rayon Tire Cord Yarn Project
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### 1. The Activity Target

To assist the Delhi Cloth and General Mills Co. Ltd. to establish a plant in Kotah, Rajasthan, to produce daily 10 metric tons of 1650 denier rayon filament yarn, five tons of tire cord fabric and 25 tons of linter pulp. Eleven tons of the pulp will be used daily in the company's own yarn manufacture; the remainder will be sold to other filament yarn producers. Associated boiler and turbine plants, a carbon bisulfide plant, and a sulfuric acid plant also will be set up. All units are expected to operate on a three-shift 360-day per year basis.

**Financing:** The total financing requirement for the project is estimated to be \$15.7 million (Rs.7.52 crores), of which \$9.8 million (Rs.4.69 crores) is in foreign exchange and the equivalent of \$5.9 million (Rs.2.83 crores) in local currency. The A.I.D. has been requested to finance the foreign exchange costs of the project. The Delhi Cloth and General Mills Company plans to raise new equity share capital of \$3.15 millions to meet the local currency requirements of the project.

### 2. Progress to Date

The applicant has employed Beaunit Mills Inc., one of the leading U.S. producers of rayon tire cord, to supply technical know-how and patents. Chemtex of New York was employed to furnish detail design and engineering of the entire facility, including layout of the civil works and supervision of installation and start-up, as well as procurement of U.S. machinery and equipment.

Management and operation of the plant will be carried out by the applicant's experienced organization, although Beaunit and Chemtex will furnish any training or expert services the Company may require. The detail designing of the civil works based on the Chemtex layout was performed by a competent Indian architectural and engineering firm. The sulphuric acid plant and the remaining units are being constructed by Indian private contractors.

The above arrangements are only for the filament and tire cord plant. Negotiations are now in progress with at least two U.S. firms -- Hercules and Buckeye Cellulose -- to provide similar know-how and patents for the cotton linter plant, Chemtex to provide the engineering.

The borrower reports that as of June 30, 1964, 58 percent of the estimated rupee cost and 68 percent of the estimated dollar cost have been spent. Almost all of the civil works are complete, most of the machinery and other imported goods have been shipped, and remaining piping, electrical, and other works are proceeding satisfactorily. The project officers expect to start testing portions of the plant in October 1964 and to be in production in February 1965.

All items of equipment have been procured or contracted for. The last consignment of equipment of U.S. origin was shipped on July 29, 1964, and should be at the site in six or seven weeks. This shipment includes four spinning machines and a number of other large machines, along with lesser items.

The linter pulp plant construction will start one to two years later with completion within 18 months.

AID 1020-2 (8-64)	PROJECT DATA SUMMARY — AID DOLLAR COSTS											SECURITY CLASSIFICATION Unclassified				
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY India			3. PROJECT NO. 386-24-230-244 <del>386-24-230-244</del>				4. TITLE Napco Precision Gear Plant						
	5. U.S. FUNDING:		BEGIN FY 1963		END FY 1963	6. PRIOR REFERENCES										
	PHYSICAL WORK:		1963		1965											
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. 1/ LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT
						AID	PASA									
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		DL	I*	2,300	-	-	-	-	-	2,300	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)		DL	I*	-	-	-	-	-	-	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		DL	I*	2,243	-	-	-	-	-	2,243	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)		DL	I*	2,243	-	-	-	-	-	2,243	-	-	-	-	-
C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	I*	57	-	-	-	-	-	57	-	-	-	-	-	
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS															
	B. EXPENDITURES		DL	I*	57	-	-	-	-	-	57	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
III. BUDGET YEAR (EST.) FY _____	A. GROSS OBLIGATIONS															
	B. EXPENDITURES															
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
IV. PLANNING YR. (EST.) FY _____	GROSS OBLIGATIONS 3/															
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/		DL	L	2,300	-	-	-	-	-	2,300	-	-	-	2,300	-

## REMARKS:

- 1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

\*AID Loan # 51.  
Refers to Annex 4 of LAS.

7. OBLIGATED AND DISBURSED	a. FUNDS		b. TOTALS <sup>1/</sup>				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000)		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
		(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley L*		835	835	4,000	4,000	4,000	4,000	-	-	-	-
TOTAL ACTUAL FY 1964	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
		(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley L*		835	835	4,000	4,000	4,000	4,000	-	-	-	-
II OPERATIONAL YEAR (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
		(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley L*		835	835	4,000	4,000	4,000	4,000	-	-	-	-
III BUDGET YEAR (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
		(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
IV PLANNING YEAR (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
		(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
		(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
		(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley L*		1,670	1,670	8,000	8,000	8,000	8,000	-	-	-	-

REMARKS:  
 1/ Exchange Rate: \$1 = Rs. 4.7876  
 2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E - 1a

E - 1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS		1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES PARTICIPANT TRAINING			BEG. FY	END FY	4. PROJECT NO.									
	8. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
	A. MAN YEARS	U.S. Non U.S.	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
I PROJECT PERSONNEL	A. MAN YEARS	U.S. Non U.S.																					
	B. ON BOARD	U.S. Non U.S.																					
II. PARTICIPANTS PROGRAMMED	A. U.S.																						
	B. THIRD CTRY.																						

REMARKS:  
 1/ End of Fiscal Year \*Cooley Loans #386-E-090 & 386-E-124

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION Unclassified	306-24-230-244 386-44-230-244	Napco Precision Gear Plant
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### 1. The Activity Target

To establish in Faridabad, near New Delhi, a precision gear plant with a normal yearly production expected to be worth \$6,760,000 of which gears worth \$2,400,000 are scheduled for export. An Indo-American joint venture in a new company, NAPCO Bevel Gear of India, Limited, will manufacture precision industrial gears and shafts for automobiles, trucks, motor scooters, road-building equipment, marine engines, power tools, aircraft, and special equipment.

Background: An essential feature of the project is the purchase and transfer to India of all the machinery, equipment, tools, and fixtures of the Detroit plant of the Detroit Bevel Gear Division of NAPCO Industries, Inc.

Description of Project: Project plans call for the erection of a main factory building with more than 12,000 square yards of floor area, together with office and other auxiliary buildings, utility lines, and highway connections. These facilities have been constructed by the borrower in accordance with designs and specifications provided by NAPCO Industries, Inc.

NAPCO was also responsible for the following equipment and services:

- a. Providing a detailed list of items to be covered by the sale price of \$2,800,000 F.A.S. U.S. port.
- b. Dismantling, reconditioning, crating, and shipping all machinery, equipment, tools, jigs, dies, and fixtures of the Detroit Bevel Gear plant in Detroit to the new plant at Faridabad, India.
- c. Procurement and shipment of supplemental equipment for tool room, U-joint and drive line department, and plant office, to fully equip the plant.
- d. Providing drawings and specifications for preparation of all necessary foundations before arrival of the machinery.
- e. Preparing in advance a detailed plant layout so that each major piece of equipment can be placed at its proper location immediately upon arrival. Included in the layout will be details for installing all utility services.
- f. Providing as needed 33 skilled supervisory personnel, engineers, and mechanics to help install the equipment, put it in good running order, and operate the plant for a period of three years. Thereafter, the number of such personnel will be reduced to five. Technical management services will be provided for a total period of eight years.

g. Providing plans, drawings, specifications, engineering data, and "know-how" required for the production of precision gears and shafts.

### 2. The Course of Action

Financing: An AID dollar development loan of \$2,300,000 was provided in FY 1963 to finance the major portion of the foreign exchange costs of the Detroit plant of the U.S. collaborator. Total capital requirements for the project amount to the equivalent of \$4,954,000. The cost of the imported equipment (\$2,800,000) were met with the proceeds of the AID loan and an equity investment of \$500,000 by NAPCO Inc.

A Cooley Amendment loan of Rs.4 million (equivalent to \$335,000) was made in July 1963 to assist the company in meeting local costs for setting up the plant.

A second Cooley loan of Rs.4 million (equivalent to \$335,000) is proposed in FY 1965 to cover financing the shortfall caused by unanticipated cost increases.

The original estimate of \$1,650,000 in local currency requirements for land, buildings, equipment installation, import duties, working capital and contingencies, were met by the equity investments of the two principal Indian owners and the Indian public.

For further details concerning this loan, see Development Loan Paper AID-DLC/P-27.

### 3. Progress to Date

The project now is scheduled to commence production in early November 1964.

However, it has experienced increased costs in carrying out the project, attributable principally to escalation in customs duties, landing charges, and inland freight and construction costs. The effect of the increased costs has been exacerbated by the failure of some equity stock subscribers to make payment due under their subscription agreements when called. Consequently, the company has experienced a total financing shortfall of Rs.50 lakhs (\$1.05 million).

The company agrees that the long run solution to its problem is to obtain additional equity financing, but is reluctant to approach the public market at the present time. Moreover, additional equity funds could not be raised in sufficient time to enable the company to go into operation as scheduled and avoid incurring a still greater financing shortfall. To meet this situation, the company has borrowed Rs.10 lakhs (\$210,000) from its U.S. partner, NAPCO

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION Unclassified	386-24-230-244 386-44-230-244	Napco Precision Gear Plant
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Bevel Gear Industries, Inc., and Rs.40 lakhs (\$835,000) as an additional Cooley loan from A.I.D. to be utilized for the costs of increased fixed assets and for other costs to be capitalized. The agreement for this second Cooley loan was signed on August 27, 1964. The term of the loan is one year from the date of the first disbursement, with interest rate at 7 percent per annum; it is expected that the loan will be disbursed fully during FY 1965. It is anticipated that additional equity funds can be raised in time to repay this Cooley loan.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY India			3. PROJECT NO. 386-24-390-251				4. TITLE Premier Automobiles I & II						
	5. U.S. FUNDING:		BEGIN FY 1962		END FY 1962	6. PRIOR REFERENCES										
	PHYSICAL WORK:		1962		1965											
7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		DL	I*	10,200	-	-	-	-	-	10,200	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)		DL	I	-	-	-	-	-	-	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		DL	I*	8,441	-	-	-	-	-	8,441	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)		DL	I*	4,016	-	-	-	-	-	4,016	-	-	-	-	-
C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	I*	1,759	-	-	-	-	-	1,759	-	-	-	-	-	
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS															
	B. EXPENDITURES		DL	I	1,759	-	-	-	-	-	1,759	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
III. BUDGET YEAR (EST.) FY _____	A. GROSS OBLIGATIONS															
	B. EXPENDITURES															
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
IV. PLANNING YR. (EST.) FY _____	GROSS OBLIGATIONS 2/															
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/		DL	I	10,200	-	-	-	-	-	10,200	-	-	-	10,200	-

## REMARKS:

- 1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

\*Loans DLF-176 &amp; AID-30.

Refers to Annex 4 of LAS.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION Unclassified	386-24-390-251	Premier Automobiles I & II
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### 1. The Activity Target

To provide facilities for production of all the sheet metal components needed to manufacture 12,000 trucks and 9,000 automobiles per year. This is expected to reduce Premier's sheet metal components costs for the 87P6 Truck from the present import cost of \$111.68 to an estimated local production cost of about \$67.33; for the 106P6 Truck from \$275.08 to \$178.92; and for the Fiat car from \$236.64 to \$225.54.

To achieve these targets 600 dies, a press shop, tool shop, assembly shop, material handling equipment, electrical equipment, and equipment for replacing and balancing existing shops must be constructed or purchased.

### 2. The Course of Action

Two development loans of \$7.2 million (Loan No. 170) and \$3.0 million (Loan No. 30) to meet all of the foreign exchange costs of the expansion. The \$7.2 million loan signed in August 1961 provides approximately \$2.07 million for replacing and balancing existing shop equipment, \$2.73 million for a press shop and \$2.38 million for the other shops and equipment. The second loan for \$3.0 million, signed in June 1962, will meet the foreign exchange costs of imported dies and equipment.

Premier Automobiles will meet local currency costs of \$5.2 million from its own resources (earnings and reserves) and through credit facilities from its usual banking associates.

### 3. Progress to Date

Progress on the overall project has not been as rapid as anticipated, and completion now is not expected before February 1965, approximately one year after the original target date.

The new stamping plant is complete and most of the major presses and equipment are being installed. Delayed arrival of ancillary equipment and dies and some shipping damage to some presses have prevented operation of most of the presses.

Practically all the balancing equipment, utilized mostly in the main plant, has been installed.

Premier Automobiles recently indicated they now desire to make additional sheet metal components for the Fiat 1100 car, requiring the purchase of 265 more dies from the U.S. at a cost of \$500,000. The company also indicated that they intend to submit a proposal to AID for a large new loan of about \$27 million for a truck expansion program. Neither proposal has yet received official sanction of the Government of India, and AID thus has taken no action.

PROJECT DATA SUMMARY — AID DOLLAR COSTS

E-1a

1. DATA CURRENT AS OF: 1 November, 1964		2. COOPERATING COUNTRY INDIA		3. PROJECT NO. 386-22-330-252		4. TITLE Railway Modernization I, II & III	
5. U.S. FUNDING: PHYSICAL WORK:		BEGIN FY 1958	END FY 1961	6. PRIOR REFERENCES			
		1959	1966				

7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)	a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT <sup>1/</sup>	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
					(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT
					AID	PASA									
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	DL L*	114,982	-	-	-	-	-	-	-	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)	DL L	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	DL L*	111,389	-	-	-	-	-	-	-	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)	DL L*	4,446	-	-	-	-	-	-	-	-	-	-	-	-
C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL L*	3,593	-	-	-	-	-	-	-	-	-	-	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS														
	B. EXPENDITURES	DL L*	2,500	-	-	-	-	-	-	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL L*	1,093	-	-	-	-	-	-	-	-	-	-	-	-
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS														
	B. EXPENDITURES	DL L*	1,093	-	-	-	-	-	-	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR														
IV. PLANNING YR. (EST.) FY	GROSS OBLIGATIONS <sup>2/</sup>														
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>														
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>	DL L*	114,982	-	-	-	-	-	-	-	-	-	-	-	114,982

REMARKS:

- 1/ This is a memorandum (non-odd) column.
- 2/ Show estimated expenditures in column i.

Refers to Annex 4 of L.A.S.

\* Loans DIF - 2, 12, 151.

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-330-252	Railway Modernization I, II & III
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### 1. The Activity Target.

The objective of this project is to provide to the Railway Board financial assistance to permit importation of the structural steel, locomotives, rolling stock components, centralized traffic control electric and signalling equipment, machinery and tools required to carry out a program of modernization and expansion in order to accommodate the increasing volume of passenger and freight railway traffic.

DLF Loan Nos. 2, 12, and 151 are covered by this description.

The Indian railways are over a century old. The present system of eight regional railways was formed by consolidating about 20 pre-independence railways of broad, meter, and narrow gauge track.

India's first Five Year Plan followed an extended period of inadequate investment in the railways, and about \$1 billion was expended between 1951-56 for rehabilitation of the existing system. The Second Five Year Plan expenditures on railways totalled about \$2.0 billion.

A study of the Indian Railways, made in 1957 by Sanderson and Porter for an AID predecessor agency, found that the operation and management of the Indian Railways were sound, but that certain measures were required if the Railways were to cope with increasing traffic demands. It particularly recommended the use of Centralized Traffic Control (CTC) and electric signalling, and concluded that:

- Under central traffic control line capacity could be increased by about 18 percent.
- The need for double tracking would be estimated.
- Since CTC can be installed for less than one-half the cost of double tracking and in less time, installation costs would be minimized and the improvement in service would be realized sooner.
- Speed of trains could be increased.
- Operating costs would be reduced.
- Safety would be increased.

Similar benefits are expected to result from the installation of CTC on the Siliguri-Alipurduae-Amingaon sections of the North East Frontier Railway under Loan No. 151.

Railroad cars, coaches and steam locomotives are manufactured in India more cheaply than they can be imported. Improvements and modernization of the railways are regarded as an essential element in India's economic development program, to build up increased capacity for passenger and goods traffic. They are the main arteries of transport and provide more than 90 percent of the surface transport for industries and domestic requirements.

Dieselization is required to meet growing traffic on rail sections in key mining and industrial centers where steam traction is presently being utilized to the point of saturation. The capacity on the saturated sections can be effectively improved by augmenting existing steam locomotives with either diesel or electric locomotives of higher power, capable of quick acceleration and sustained faster speed within the permissible axle loads. It is planned to use diesel units for movement of long distance through traffic in bulk-type commodities on lines serving coal and ore regions and industrial port centers. It is estimated that dieselization will increase the capacity of the affected section of rail by about 20 percent in terms of train trips. A more significant increase materializes by the running of heavier trains loads, and it is proposed to increase the loads of trains powered by diesels by about 60 percent.

### 2. The Course of Action.

Three loans were given to India to help the Railway Board carry out its program of modernization and expansion by providing the foreign exchange to enable them to acquire (a) steel, components for use in the local manufacture of railroad freight cars, coaches and locomotives, (b) structural steel components for use in constructing or strengthening railroad bridges, (c) diesel and electric locomotives.

The first Railway Loan (DLF Loan No. 2) for \$40 million was signed in June 1958. Against it about 249,100 tons of steel were imported at a cost of \$30 million, to enable India to produce 20,000 freight cars, 300 steam locomotives, 600 steel coaches and 2500 underframes. The loan amount was reduced by \$10 million since the Government of India was able to purchase the required quantity of steel for the \$30 million.

The Second Railway Loan (DLF No. 12) of \$35 million was signed in December 1958. It financed purchases as follows:

Rolling Stock	\$ 19.0 million
Track material	12.5 million
Other Railway Equipment	3.5 million
Total	\$ 35.0 million

AID 1020-1 (7-84)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-330-252	Railway Modernization I, II & III
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The Third Railway Loan (DLF Loan No. 151) for \$50 million was signed in December 1960. (This loan included the \$10 million amount saved in DLF Loan No. 2.). Purchases were scheduled as follows:

Electric Locomotives (117)	\$10.0 million
Diesel Locomotives (170)	36.0 million
Central Traffic Control	4.0 million
Total:	<u>\$ 50.0 million</u>

3. The Progress to Date.

DLF Loans No. 2 and No. 12 are completely disbursed, and only \$3,349 of DLF Loan No. 151 are unexpended.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY -- AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November, 1964		2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-22-330-253				4. TITLE Railways IV, V, & VI						
	5. U.S. FUNDING:		BEGIN FY		END FY	6. PRIOR REFERENCES										
	PHYSICAL WORK:		1963		1966											
7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		a.	b.	c.	d.	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
		APPROPRIATION TITLE	LOAN OR GRANT	TOTAL	CONTRACT 1/	(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	DL	I*	58,850	-	-	-	-	-	-	58,850	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)	DL	I**	15,850	-	-	-	-	-	-	15,850	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	DL	I*	41,525	-	-	-	-	-	-	41,525	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)	DL	I*	27,032	-	-	-	-	-	-	27,032	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	I*	17,325	-	-	-	-	-	-	17,325	-	-	-	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	DL	I***	7,200	-	-	-	-	-	-	7,200	-	-	-	-	-
	B. EXPENDITURES	DL	L	6,465	-	-	-	-	-	-	6,465	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L	18,060	-	-	-	-	-	-	18,060	-	-	-	-	-
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS															
	B. EXPENDITURES	DL	L	18,060	-	-	-	-	-	-	18,060	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
IV. PLANNING YR. (EST.) FY	GROSS OBLIGATIONS 2/															
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	DL	L	66,050	-	-	-	-	-	-	66,050	-	-	-	66,050	-

## REMARKS:

- 1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

Refers to Annex 4 of L.A.S.

\*Loan AID - 35 & 86  
\*\*Loan AID - 86  
\*\*\*Loan AID - 121

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-330-253	Railways IV, V, & VI
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1. The Activity Target:

The objective of this project is the expansion and improvement of the Indian Railway System, through dieselization of traffic-saturated sections of railroad line. This project involves: (a) purchase and delivery of diesel locomotives, (b) provision of a two-year supply of spare parts and maintenance equipment, and (c) training of maintenance technicians by the US supplier in the plant where the diesel locomotives are manufactured. The United States will assist in the attainment of this target by providing the following loans.

Loan No. 035	-	\$43.00 million
Loan No. 086	-	\$15.85 million
Loan No. 121	-	\$ 7.20 million
Total	-	<u>\$66.05 million</u>

Background: At the time of independence (1947), India inherited the largest railway system in Asia. However, it was not designed or in condition to support the already enormous and rapidly rising demands for transport in the developing economy.

During the First Five Year Plan India's main effort was directed at rehabilitation, especially of the railways which had deteriorated greatly during World War II and partition. Over the course of the Second Five Year Plan, the major task was to develop increased carrying capacity to meet the heavy transport needs of new and expanding basic industries like iron and steel, coal, and cement.

The Third Five Year Plan sets very high priority on the further rapid development of transportation as a basic necessity to widespread economic growth. The railways are the principal means of transporting raw materials to and finished products from India's industries. Projected increase in mining, manufacturing, and agriculture during the Third Plan period will impose significant additional demands on India's already-strained railway system. As shown in Table I, India's railway will be required to move some 241.3 million tons of originating freight traffic by the last year of the Third Plan period - reference Mid Term Appraisal of the Plan (1963). This amount represents an increase of 87.5 million tons (56.9%) over such tonnage carried at the end of the Second Plan period (1960-61).

Table I

Indian Railway Freight Tonnage  
(in million tons)

<u>Class of Freight</u>	<u>1960-61</u>	<u>1961-62</u>	<u>1962-63</u>	<u>Est. 1963-64</u>	<u>Revised III Plan Targets 1965-66</u>
Steel & Raw Materials	14.0	16.9	20.2	22.5	27.5
Coal	49.7	53.1	60.2	69.6	87.6
Cement	6.4	6.6	6.6	6.8	10.3
General:					
(a) Export Ore	2.5	2.5	3.2	4.1	7.9
(b) Rly. stores	16.7	14.6	15.9	17.2	22.5
(c) All other	64.5	64.3	68.6	71.3	85.5
Totals	<u>153.8</u>	<u>158.0</u>	<u>174.7</u>	<u>191.5</u>	<u>241.3</u>

The aggregate traffic demands on most sections of the Indian railway which are now served by steam locomotives are expected to exceed carrying capacity during the Third Plan period. Since the carrying capacity of steam locomotives on these lines is fully saturated under the given operating conditions, the principal alternatives for coping with this additional demand are either high-capital-cost track doubling or increasing carrying capacity and track efficiency by dieselization.

Replacement of steam engines with diesels effects a very substantial reduction, not only in the cost of maintenance but also in the cost of maintenance facilities, since it eliminates the need for round houses, watering facilities, coaling stations, and other appurtenances not necessary to diesel operation.

The operating advantage of diesel locomotives as compared to steam is equally formidable. More rapid acceleration reduces the overall time required for runs, an advantage which takes on added significance in congested track situations where frequent stops are necessary. Furthermore, in India, only two persons are required to operate a diesel locomotive as compared to three for a steam locomotive. The ratio of fuel weight carried is nine to one in favor of diesel. This means that to provide the same tractive effort available from one ton of fuel oil carried by the diesel, the steam engine must carry nine tons of coal and sacrifice eight tons of pay load which could be counted as revenue-producing capacity in the case of diesel operation.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-330-253	Railways IV, V, & VI
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2. The Course of Action :

To improve the efficiency and increase the capacity of the Indian Railway System by financing the purchase and delivery of 237 diesel locomotives, under the following loan agreements:

Loan No. 35, Fourth Railway Loan: The loan is to provide the Railway Board, Government of India, with \$43 million to purchase 158 diesel locomotives, including spare parts and maintenance equipment.

The sections on which the locomotives are to be used are -

<u>Sections</u>	<u>No. of Locomotives</u>
<u>Broad gauge:</u>	
Above Moghalsarai	17
Barkakana-Chunar	50
Rourkela-Bhilai & Jilimili-Bhilai	30
Hospet-Guntakal-Madras	36
	133
<u>Meter gauge:</u>	
Lumding-Badarpur	14
Rangiya-Rangapara North	11
Mukronghehelek	25
	25
Total diesels:	158

Loan No. 086, Fifth Railway Loan. The loan is to provide \$15.8 million to the Railway Board to purchase 54 broad gauge (B.G.) diesel electric locomotives, including necessary spare parts, equipment and training.

These locomotives are to be used on the following sections.

(1) Andal-Burdwan-Calcutta: The distance between Andal and Calcutta is 116 miles, and at least 30 diesel locomotives will be required to (a) transport the increased output of the steel plants; (b) meet additional coal requirements of industries in the Calcutta area; and (c) help feed certain other areas, such as Assam.

(2) East Coast (Kharagpur-Waltair-Vijayawada). The East Coast Section carries coal from the Bengal-Bihar and Talcher fields and the finished products of the steel plants at Tatanagar, Burnpur, and Durgapur, requiring about 200 wagons daily, to the south of the country. For this 24 diesel locomotives will be required for operation over a distance of 470 miles between Kharagpur and Waltair, with extended runs up to Vijayawada.

Loan No. 121, Sixth Railway Loan. The loan is to provide \$7.2 million to the Railway Board to purchase an additional 25 diesel locomotives, including spare parts and training.

3. The Progress to Date:

Loan No. 035, IV Railway loan

132 B.G. diesel & 21 electric locomotives and spares have been delivered and the loan is fully disbursed except for \$1.42 million as of September 30, 1964.

Loan No. 086, V Railway Loan and Loan No. 121, VI Railway Loan: The Loan Agreement for No. 086 was signed on October 21, 1963; Loan No. 121 was authorized on July 31, 1964. Procurement arrangements are now being finalized for both loans. No disbursements have been made yet.

PROJECT DATA SUMMARY -- AID DOLLAR COSTS

E-1a	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. PROJECT NO.		4. TITLE									
	1 November 1964		India		386-24-390-256		Hindustan Motors Vehicle Plant I & II									
	U.S. FUNDING:		BEGIN FY	END FY	6. PRIOR REFERENCES											
PHYSICAL WORK		1963	1965													
		1963	1967													
7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. 1/ LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT
						AID	PASA									
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	DL	L*	15,800	-	-	-	-	-	-	15,800	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)	DL	L	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	DL	L*	8,311	-	-	-	-	-	-	8,311	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)	DL	L*	8,311	-	-	-	-	-	-	8,311	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L*	7,489	-	-	-	-	-	-	7,489	-	-	-	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	DL	L**	23,000	-	-	-	-	-	-	23,000	-	-	-	-	-
	B. EXPENDITURES	DL	L	8,000	-	-	-	-	-	-	8,000	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L	22,489	-	-	-	-	-	-	22,489	-	-	-	-	-
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS															
	B. EXPENDITURES	DL	L	11,000	-	-	-	-	-	-	11,000	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L	11,489	-	-	-	-	-	-	11,489	-	-	-	-	-
IV. PLANNING YR (EST.) FY 1967	GROSS OBLIGATIONS 2/	DL	L	-	-	-	-	-	-	-	-	-	-	-	11,489	-
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	DL	L	38,800	-	-	-	-	-	-	38,800	-	-	-	38,800	-

REMARKS:

1/ This is a memorandum (non-odd) column.  
2/ Show estimated expenditures in column i.

\*AID Loan #46.  
\*\*AID Loan #118.

Refers to Annex 4 of IAS.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION Unclassified	386-24-390-256	Hindustan Motors Vehicle Plant I & II
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1. The Activity Target

Loan I

- a. To increase Hindustan Motors Limited truck manufacturing capacity from 9,000 to 10,500 vehicles a year.
  - b. To increase the indigenously-manufactured content of the vehicles from 74 to 90 percent.
  - c. To achieve full capacity production of existing facilities.
- To accomplish the above, the project is designed to:
- a. Expand and modernize the forge shop and forge die shop.
  - b. Modernize and expand the machine shop.
  - c. Build a completely new cast iron foundry.
  - d. Build a completely new press plant that will also include the assembly department.

Loan II

- a. To establish manufacturing facilities for annual production of 15,000 Bedford diesel and gasoline truck engines.
- b. To increase the capacity for production of truck chassis from 10,500 to 15,000 per year.
- c. To modernize and balance the machining capacity of the truck division.

To accomplish the above, the project is designed to:

- a. Install a modern engine machining and assembly line, using special purpose transfer type machines when feasible, and add new forge, foundry, and heat treating equipment.
- b. Install additional machine tools for truck parts and add forge, foundry, and heat treating capacity.
- c. Replace many old general purpose machines with new special purpose machines.

2. The Course of Action

Loan I

- a. Provide development loan financing of \$15.8 million, to

SECURITY CLASSIFICATION

Unclassified

cover all but \$1.1 million of the foreign exchange costs; the GOI is to provide \$1.1 million from its free foreign exchange for purchases from the United Kingdom.

- b. Local currency costs of \$5.6 million, including the rupee equivalent of \$1.1 million for purchases from the United Kingdom, will be covered from Hindustan Motors' internal resources, with no additional borrowing contemplated.

For further details concerning this loan see Development Loan Paper AID-DLC/P-72.

Loan II

- a. A development loan of \$23.00 million to cover the entire foreign exchange cost.
- b. Local currency costs of \$10.39 million will be covered by Hindustan Motors' internal resources without additional borrowing.

For further details on this loan see Capital Assistance Paper AID-DLC/P-252.

3. Progress to Date

Loan I

The equipment expansion and modernization parts of this project are only slightly behind schedule, and should be completed by January 1965. The construction of the cast iron foundry, the press plant, and the extension of the forge shop are farther behind schedule. The press plant and forge extension will be finished by about April 1965, and the foundry by about November 1965. The delays have been due to the exceptionally heavy monsoon, shortage of construction steel, and the last minute changes in design of supporting beams in the press shop.

Loan II

This loan was authorized on June 15, 1964, but the loan agreement has not yet been signed.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY India			3. PROJECT NO. 386-24-390-257				4. TITLE Telco Truck Plant I & II						
	5. U.S. FUNDING:		BEGIN FY 1963		END FY 1965		6. PRIOR REFERENCES									
	PHYSICAL WORK:		1963		1967											
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT <sup>1/</sup>	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		DL	L*	13,700	-	-	-	-	-	13,700	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)		DL	L	-	-	-	-	-	-	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		DL	L*	11,202	-	-	-	-	-	11,202	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)		DL	L*	10,812	-	-	-	-	-	10,812	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L*	2,498	-	-	-	-	-	2,498	-	-	-	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS		DL	L**	11,800	-	-	-	-	-	11,800	-	-	-	-	
	B. EXPENDITURES		DL	L	4,000	-	-	-	-	-	4,000	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L	10,298	-	-	-	-	-	10,298	-	-	-	-	
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS															
	B. EXPENDITURES		DL	L	7,000	-	-	-	-	-	7,000	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L	3,298	-	-	-	-	-	3,298	-	-	-	-	
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS <sup>2/</sup>		DL	L	-	-	-	-	-	-	-	-	-	3,298	-	
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>		DL	L	25,500	-	-	-	-	-	25,500	-	-	-	25,500	

## REMARKS:

- <sup>1/</sup> This is a memorandum (non-add) column.  
<sup>2/</sup> Show estimated expenditures in column i.

Refers to Annex 4 of L.A.S.

\*AID Loan #48.  
\*\*AID Loan # 120.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-24-390-257	Telco Truck Plant I & II
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1. The Activity Target

Loan I

To expand the production capacity of the Telco Tata-Mercedes-Benz truck plant from 12,000 vehicles a year to 18,000, and to increase their indigenously-manufactured content by 1964 from 74 to 86 percent.

To achieve the above targets the project is designed to:

- a. Expand the TELCO alloy iron foundry to meet all the castings requirements for a future production of 24,000 vehicles per year;
- b. augment the TELCO forge shop to make all forgings required for that production program; and
- c. provide sufficient additional machining, pressing, and assembling equipment for production of 18,000 vehicles per year.

Loan II

To expand the Tata-Mercedes-Benz truck plant capacity from 18,000 to 24,000 vehicles per year and to increase further their indigenously manufactured content.

To achieve the above objective the plant will:

- a. Purchase sufficient additional machining, stamping, tool room and inspection equipment for production of 24,000 vehicles per year;
- b. expand the forge shop and heat treating facilities.

2. The Course of Action

Loan I

A development loan of \$13.7 million was provided to cover all but \$2.1 million of the foreign exchange costs of the project; the GOI is to make free foreign exchange available for \$2.1 million of purchases from West Germany. Local currency costs of \$11.5 million, including the rupee equivalent of \$2.1 million for purchases from West Germany and additional working capital are being provided or raised by Telco. Details of the loan are contained in Development Loan Paper AID-DLC/P-77.

Loan II

A development loan of \$11.80 million was provided to cover all

but \$1.05 million of the foreign exchange costs of the project. Daimler-Benz will provide \$1.01 million through the purchase of equity shares and the GOI will provide \$40,000 in free foreign exchange. Local currency costs of \$7.25 million are the responsibility of Telco. Details of the loan are contained in Capital Assistance Paper AID-DLC/P-251.

3. Progress to Date

Loan I

This project is virtually complete. Building expansion is finished, all but a very few machines are in place, and most machines are in operation; production of 1500 vehicles per month, or 18,000 per year, should be attained by December 1964. Indigenous content of the TMB trucks is now at about 84 percent and is expected to rise to 90 percent by mid-1965.

Loan II

The agreement for this loan which was authorized on June 15, 1964, has not yet been signed.

AID 1020-2 (2-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-22-330-265				4. TITLE Railways VII - Diesel Shunter Locomotives							
	5. U.S. FUNDING:	BEGIN FY 1965		END FY 1965	6. PRIOR REFERENCES											
	PHYSICAL WORK:	1966		1966												
7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES		f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
						(1) U.S. AGENCIES		(2)	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT
I. THRU ACTUAL YEAR FY _____		A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR														
		GROSS OBLIGATIONS (ACTUAL YEAR)														
		B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR														
		EXPENDITURES (ACTUAL YEAR)														
		C. UNLIQUIDATED OBLIGATIONS END OF YEAR														
II. OPERATIONAL YEAR (EST.) FY 1965		A. GROSS OBLIGATIONS	DL L	3,800	-	-	-	-	-	-	3,800	-	-	-	-	-
		B. EXPENDITURES	DL L	-	-	-	-	-	-	-	-	-	-	-	-	-
		C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL L	3,800	-	-	-	-	-	-	3,800	-	-	-	-	-
III. BUDGET YEAR (EST.) FY 1966		A. GROSS OBLIGATIONS														
		B. EXPENDITURES	DL L	3,800	-	-	-	-	-	-	3,800	-	-	-	-	-
		C. UNLIQUIDATED OBLIGATIONS END OF YEAR														
IV. PLANNING YR. (EST.) FY _____		GROSS OBLIGATIONS 2/														
V. ALL SUBSEQUENT YEARS (EST.)		GROSS OBLIGATIONS 2/														
VI. CUMULATIVE TOTAL ALL YEARS (EST.)		GROSS OBLIGATIONS 2/	DL L	3,800	-	-	-	-	-	-	3,800	-	-	-	3,800	-

REMARKS:

- 1/ This is a memorandum (non-odd) column.
- 2/ Show estimated expenditures in column i.

Refers to Annex 4 of L.A.S.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-330-265	Railways VII - Diesel Shunter Locomotives
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1. The Activity Target:

To provide by the end of 1965, 21 broad gauge diesel electric shunting locomotives (switching engines), with a two-year supply of spare parts, for use in major marshalling yards. This first group of diesel electric shunters will replace costlier and less efficient steam shunters in three critically congested yards, Mughalsarai, Andal, and Bondamunda.

Traffic on the India railroads has been increasing steadily, and A.I.D. financing has provided diesel equipment and signalling devices to permit a higher traffic volume without costly double tracking of main lines. This in turn has resulted in heavier traffic in the classification yards, made more pronounced by the increased minerals traffic attendant upon the development of steel plants and thermal power stations. (See E-1s on Indian Railways Loans I through VI).

As dieselization of the main line system progresses, there are advantages of balancing operations between main line service and the marshalling yards become more apparent. Particularly after improvements in yard layouts and mechanization of the humping operation (primarily installation of retarders), the use of diesel electric shunters, with more rapid acceleration-deceleration characteristics and a higher availability coefficient, will maximize benefits. Such improvements have been completed or are under way in the three yards to which this initial lot of 21 diesel electric shunters are to be assigned.

The need for progressive acquisition of diesel shunting and switching locomotives is supported by the recent report of Coverdale and Colpits, based on a coal transport study undertaken through the LEAD for the Government of India.

2. The Course of Action:

To provide financing for procurement of 21 broad gauge diesel shunting locomotives and a two year supply of spare parts for use in the marshalling yards at Mughalsarai, Andal and Bondamunda, the order for which the Railway Board wishes to place for delivery in 1965. AID is being asked to finance the full costs through a loan of \$3.8 million.

3. The Progress to Date:

In July 1964 the Government of India applied to AID for a loan of \$3.4 million (now to be raised to \$3.8 million) to finance acquisition of the shunters and spare parts. This application is under review.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA				3. PROJECT NO.				4. TITLE Goal - Agricultural Production					
	B.		BEGIN FY		END FY		6. PRIOR REFERENCES									
	U.S. FUNDING:															
7.		PHYSICAL WORK:														
AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		a.	b.	c.	d.	e.		f.		g.		h.		i. 1/		
						PERSONNEL SERVICES		PARTICIPANTS		COMMODITIES		OTHER COSTS		LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
						(1) U.S. AGENCIES		(2)	(1) U.S. AGENCIES	(2)	(1) DIRECT AND U.S. AGENCIES	(2)	(1) DIRECT AND U.S. AGENCIES	(2)	(1) DIRECT AND U.S. AGENCIES	(2)
		APPROPRIATION TITLE	LOAN OR GRANT	TOTAL	CONTRACT 1/	AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT		
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	\$125,907	15,359	9,034	-	7,116	2,090	2,632	99,215	3,759	209	1,852		
		DL	L	30,000	-	-	-	-	-	-	-	30,000	-	-	-	
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	1,436	790	327	-	346	228	111	80	213	11	120		
		DL	L	-	-	-	-	-	-	-	-	-	-	-		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	122,307	12,689	9,020	-	6,043	1,852	2,274	98,535	2,831	211	1,541	2,740*	467
		DL	L	24,896	-	-	-	-	-	-	24,896	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)	TC	G	1,656	1,086	324	-	520	170	139	60	261	16	166	-	
		DL	L	3,714 <sup>a/</sup>	-	-	-	-	-	-	3,714	-	-	-	-	
C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	3,600	2,670	14	-	1,073	238	358	680	928	(2)	311			
	DL	L	5,104	-	-	-	-	-	-	5,104	-	-	-			
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	2,002	1,138	363	148	564	344	406	9	-	-	168		
		DL	L	60,950	-	-	-	-	-	-	60,950	-	-	-		
	B. EXPENDITURES	TC	G	1,961	1,121	364	144	535	236	214	98	209	(2)	163		
		DL	L	12,000	-	-	-	-	-	-	12,000	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	3,641	2,687	13	4	1,102	346	550	591	719	-	316		
		DL	L	54,054	-	-	-	-	-	-	54,054	-	-	-		
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TC	G	2,281	1,389	338	284	995	270	294	-	-	-	100		
		DL	L	-	-	-	-	-	-	-	-	-	-	-		
	B. EXPENDITURES	TC	G	2,326	1,367	338	282	761	274	236	65	169	-	201		
		DL	L	28,054	-	-	-	-	-	-	28,054	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	3,596	2,709	13	6	1,336	342	608	526	550	-	215		
		DL	L	26,000	-	-	-	-	-	-	26,000	-	-	-		
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/	TC	G	2,289	1,395	322	347	1,031	225	264	-	-	-	100	951	
		DL	L	-	-	-	-	-	-	-	-	-	-	-	20,000	1,232
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	5,537	3,042	1,044	953	2,288	498	454	-	-	-	300	3,325	
		DL	L	-	-	-	-	-	-	-	-	-	-	-	6,000	5,914
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	\$138,016 <sup>a/</sup>	22,323	11,101	1,732	11,994	3,427	4,050	99,224	3,759	209	2,520	115,693	
		DL	L	90,950	-	-	-	-	-	-	90,950	-	-	-	90,950	-

## REMARKS:

- 1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

\*Includes closed projects: TC = \$102,590

L/C charged to \$ Account 1,036

a/  
Excludes Unliqd. balance of \$2,927 from projects 028 and 147, included in project 281.

AID 1020-3 (7-64)		PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES										SECURITY CLASSIFICATION UNCLASSIFIED			
E-1b		1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA		3. BEG. FY 1951 1953		END FY 1971 1972		4. PROJECT NO.		5. TITLE Goal: Agricultural Production		6. PRIOR REFERENCES:	
7. OBLIGATED AND DISBURSED		a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
		(1) TYPE	(2) SOURCE	(3) LOAN GRANT	DOLLAR EQUIVALENTS (000) 1/		LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
					(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED	
I CUMULATIVE THRU ACTUAL YEAR	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/				3,097a/		14,827			6,949	-		7,878	
		(ii) TRUST FUND	Govt. Rev.	-	621a/	619	2,974	2,963	-	-	-	-	2,974	2,963	
		(iii) OTHER LC	Sec. 402	G	87,256a/	85,648	417,739	410,043	198,300	198,300	6,369	541	208,591	204,833	
	B. P.L. 480 LC		Sec. 104			1,91,155a/	91,155	436,412	436,412	436,412	436,412	-	-	-	-
	TOTAL ACTUAL FY 1964	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/											338	317
			(ii) TRUST FUND	Govt. Rev.	G	70	68	338	317	-	-	-	-	1,804	1,662
(iii) OTHER LC			Sec. 402	G	703	721	3,359	3,450	-	-	1,637	151	-	-	
B. P.L. 480 LC		Sec 104(e)	G	5,525	32,973b/	26,450	157,863	26,450	157,863	-	-	-	-	-	
II OPERATIONAL YEAR (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/											528	528	
		(ii) TRUST FUND	Govt. Rev.	-	110	110	528	528	-	-	-	-	5,998	3,241	
		(iii) OTHER LC	Sec. 402	G	2,093	1,343	10,018	6,430	-	-	3,031	158	-	-	
B. P.L. 480 LC		Sec. 104			2,53,869	53,869	257,902	257,902	257,902	257,902	-	-	-	-	
III BUDGET YEAR (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/											637	639	
		(ii) TRUST FUND	Govt. Rev.	-	133	133	637	639	-	-	-	-	5,198	4,135	
		(iii) OTHER LC	Sec. 402	G	2,163	1,741	10,355	8,346	-	-	4,047	164	-	-	
B. P.L. 480 LC		Sec. 104(e)	G	8,000	8,000	38,301	38,301	38,301	38,301	38,301	38,301	-	-	-	
IV PLANNING YEAR (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/											586	586	
		(ii) TRUST FUND	Govt. Rev.	-	122	122	586	586	-	-	-	-	4,174	4,083	
		(iii) OTHER LC	Sec. 402	G	2,255	1,902	10,796	9,106	-	-	4,876	147	-	-	
B. P.L. 480 LC		Sec. 104(e)	G	6,000	6,000	28,726	28,726	28,726	28,726	28,726	28,726	-	-	-	
V ALL SUBSEQUENT FYs (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/											1,751	1,760	
		(ii) TRUST FUND	Govt. Rev.	-	365	367	1,751	1,760	-	-	-	-	10,842	18,471	
		(iii) OTHER LC	Sec. 402	G	5,387	8,320	24,834	39,817	-	-	20,468	878	-	-	
B. P.L. 480 LC		Sec. 104(e)	G	10,000	10,000	47,876	47,876	47,876	47,876	47,876	47,876	-	-	-	
VI TOTAL ALL YEARS (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/				3,097a/		14,827			6,949	-		7,878	
		(ii) TRUST FUND	Govt. Rev.	-	1,351a/	1,351	6,476	6,476	-	-	-	-	6,476	6,476	
		(iii) OTHER LC	Sec. 402	G	98,954a/	98,954	473,742	473,742	198,300	198,300	38,791	1,888	234,763	234,763	
B. P.L. 480 LC		Sec. 104			169,024a/	167,024	809,217	809,217	809,217	809,217	-	-	-	-	

REMARKS:  
 1/ Exchange Rate: \$1 = RS. 4.7876  
 2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a  
 a/ Includes closed projects: 1. L/C changed to \$ Account - \$ equiv 1,036  
 2. Govt. Revenue - \$ equiv 274  
 3. Section 402 - \$ equiv 4,715  
 4. P.L. 480 - \$ equiv 33,571  
 b/ Includes closed projects \$12,959

E-1c		PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS										1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING CTRY. INDIA		3. PERSONNEL SERVICES PARTICIPANT TRAINING		BEG. FY 1951 1972		4. PROJECT NO. Goal: Agricultural Production		
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		a. CUM. THRU ACTUAL FY			b. ACTUAL FY 1964			c. OPERATIONAL FY 1965			d. BUDGET FY 66			e. PLANNING FY 67			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
PROJECT YEARS	A. MAN U.S.	U.S.	Non U.S.	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
																						I
B. ON I BOARD	U.S.	-	135	17.0	-	70.0	24.0	9	55.0	25.0	19.0	68.0	25	28	64							
	Non U.S.	-	-	-	-	70.0	-	-	70.0	-	-	70.0	-	-	70							
II. PARTICIPANTS PROGRAMMED	A. U.S.	549	-	745	73	-	63.0	118.0	-	63.0	92.0	-	49.0	77	-	44	175	-	79	401.0	-	980
B. THIRD CTRY.	242	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	-	-	-	46.0	-	-

REMARKS:  
 1/ End of Fiscal Year  
 1/ Includes 11,759 for loans  
 2/ Includes 8,501 for loans  
 3/ Includes 77.4 for closed projects addressed to this goal  
 4/ Includes 169 for closed projects addressed to this goal  
 5/ Includes 5 for closed projects addressed to this goal  
 6/ Includes 48 for closed projects addressed to this goal

Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year FY 1964	Operational Year FY 1965	Budget FY 1966	Budget +1 FY 1967	Budget +2 FY 1968	Budget +3 FY 1969	Budget +4 FY 1970	All Subsequent Years	Total All Years	
386-11-110-007	Agricultural Extension	DL	-	-	-	-	-	-	-	-	-	-	
		DG	2,649	277	259	388	432	494	371	282	141	5,016	
		SA	-	-	-	-	-	-	-	-	-	-	-
		480	-	-	-	-	-	-	-	-	-	-	-
		L/C	332	102	250	380	420	450	350	300	150	2,632	
		Coop. C.	-	-	-	-	-	-	-	-	-	-	-
386-11-250-019	Construction Equipment Operators	DL	-	-	-	-	-	-	-	-	-	-	
		DG	491	-	-	-	-	-	-	-	-	491	
		SA	-	-	-	-	-	-	-	-	-	-	
		480	-	-	-	-	-	-	-	-	-	-	
		L/C	-	-	-	-	-	-	-	-	-	-	
		Coop. C.	-	-	-	-	-	-	-	-	-	-	
386-42-250-020	Rihand Valley Development	DL	-	-	-	-	-	-	-	-	-	-	
		DG	-	-	-	-	-	-	-	-	-	-	
		SA	-	-	-	-	-	-	-	-	-	-	
		480	11,759	-	8,501	-	-	-	-	-	-	20,260	
		L/C	41,420	-	-	-	-	-	-	-	-	41,420	
		Coop. C.	-	-	-	-	-	-	-	-	-	-	
386-11-110-028 386-31-110-028	Agricultural Education & Research (old) Agricultural Universities Development (new)	DL	-	-	-	-	-	-	-	-	-	-	
		DG	11,919	-	-	-	-	-	-	-	-	11,919	
		SA	-	-	-	-	-	-	-	-	-	-	
		480	-	-	-	-	-	-	-	-	-	-	
		L/C	2,384	-	-	-	-	-	-	-	-	2,384	
		Coop. C.	-	-	-	-	-	-	-	-	-	-	
386-12-150-031 386-32-150-031	Modern Storage of Foodgrains	DL	-	-	-	-	-	-	-	-	-	-	
		DG	1,667	-	-	-	-	-	-	-	-	1,667	
		SA	-	-	-	-	-	-	-	-	-	-	
		480	25,433	-	7,795	-	-	-	-	-	-	33,138	
		L/C	21	-	-	-	-	-	-	-	-	21	
		Coop. C.	-	-	-	-	-	-	-	-	-	-	

SECURITY CLASSIFICATION

UNCLASSIFIED

AID FORM 10-112 (7-62)	DATE PREPARED 1 November 1964	COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	MULTI-YEAR LISTING	Goal: Agricultural Production	E-4
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Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year	Operational Year	Budget	Budget +1	Budget +2	Budget +3	Budget +4	All Subsequent Years	Total All Years
				FY 1964	FY 1965	FY 1966	FY 1967	FY 1968	FY 1969	FY 1970		
386-11-130-041	Animal Husbandry	DL	-	-	-	-	-	-	-	-	-	-
		DG	851	83	72	54	31	-	-	-	-	1,008
		SA	-	-	-	-	-	-	-	-	-	-
		480	-	-	-	-	-	-	-	-	-	-
		L/C	229	77	140	101	42	-	-	-	-	512
		Coop. C.	-	-	-	-	-	0	-	-	-	-
		Other	-	-	-	-	-	-	-	-	-	-
386-11-130-061	Crop Production	DL	-	-	-	-	-	-	-	-	-	-
		DG	1,333	108	219	153	149	90	78	59	49	2,130
		SA	-	-	-	-	-	-	-	-	-	-
		480	-	-	-	-	-	-	-	-	-	-
		L/C	192	53	317	256	284	126	85	35	33	1,328
		Coop. C.	-	-	-	-	-	-	-	-	-	-
		Other	-	-	-	-	-	-	-	-	-	-
386-11-130-069	Dairy Development	DL	-	-	-	-	-	-	-	-	-	-
		DG	994	-	-	-	-	-	-	-	-	994
		SA	-	-	-	-	-	-	-	-	-	-
		480	-	-	-	-	-	-	-	-	-	-
		L/C	-	-	-	-	-	-	-	-	-	-
		Coop. C.	-	-	-	-	-	-	-	-	-	-
		Other	-	-	-	-	-	-	-	-	-	-
386-11-130-100	Calcutta Milk Scheme	DL	-	-	-	-	-	-	-	-	-	-
		DG	518	-	-	-	-	-	-	-	-	518
		SA	-	-	-	-	-	-	-	-	-	-
		480	-	-	-	-	-	-	-	-	-	-
		L/C	-	-	-	-	-	-	-	-	-	-
		Coop. C.	-	-	-	-	-	-	-	-	-	-
		Other	-	-	-	-	-	-	-	-	-	-
386-11-110-147 386-31-110-147	U.P. Agricultural University	DL	-	-	-	-	-	-	-	-	-	-
		DG	1,110	-	-	-	-	-	-	-	-	1,110
		SA	-	-	-	-	-	-	-	-	-	-
		480	4,512	-	-	-	-	-	-	-	-	4,512
		L/C	224	-	-	-	-	-	-	-	-	224
		Coop. C.	-	-	-	-	-	-	-	-	-	-
		Other	-	-	-	-	-	-	-	-	-	-

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE AC-4

Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year FY 1964	Operational Year FY 1965	Budget FY 1966	Budget +1 FY 1967	Budget +2 FY 1968	Budget +3 FY 1969	Budget +4 FY 1970	All Subsequent Years	Total All Years	
386-11-120-156 386-31-120-156	Soil and Water Conservation	DL	-	-	-	-	-	-	-	-	-	-	
		DG	718	160	214	212	223	215	200	200	103	2,085	
		SA	-	-	-	-	-	-	-	-	-	-	-
		480	13,880	5,525	8,219	-	-	-	-	-	-	-	22,099
		L/C	205	14	338	245	314	250	200	200	88	1,840	
		Coop. C.	-	-	-	-	-	-	-	-	-	-	-
386-22-230-199	Trambay Fertilizer Plant	DL	30,000	-	-	-	-	-	-	-	-	30,000	
		DG	-	-	-	-	-	-	-	-	-	-	
		SA	-	-	-	-	-	-	-	-	-	-	
		480	-	-	-	-	-	-	-	-	-	-	
		L/C	-	-	-	-	-	-	-	-	-	-	
		Coop. C.	-	-	-	-	-	-	-	-	-	-	
386-11-250-223	Construction Equipment Training & Utilization	DL	-	-	-	-	-	-	-	-	-	-	
		DG	389	130	201	-	-	-	-	-	-	590	
		SA	-	-	-	-	-	-	-	-	-	-	
		480	-	-	-	-	-	-	-	-	-	-	
		L/C	35	8	131	-	-	-	-	-	-	-	216
		Coop. C.	-	-	-	-	-	-	-	-	-	-	
386-31-140-231	Agricultural Refinance Corporation	DL	-	-	-	-	-	-	-	-	-	-	
		DG	-	-	-	-	-	-	-	-	-	-	
		SA	-	-	-	-	-	-	-	-	-	-	
		480	-	-	10,444	-	-	-	-	-	-	-	10,444
		L/C	-	-	-	-	-	-	-	-	-	-	
		Coop. C.	-	-	-	-	-	-	-	-	-	-	
386-22-120-233	Beas Dam Project	DL	-	-	33,000	-	-	-	-	-	-	33,000	
		DG	-	-	-	-	-	-	-	-	-	-	
		SA	-	-	-	-	-	-	-	-	-	-	
		480	-	-	-	-	-	-	-	-	-	-	
		L/C	-	-	-	-	-	-	-	-	-	-	
		Coop. C.	-	-	-	-	-	-	-	-	-	-	

SECURITY CLASSIFICATION

UNCLASSIFIED

AID FORM 10-112 (7-62)	DATE PREPARED	COOPERATING COUNTRY	SECURITY CLASSIFICATION	MULTI-YEAR LISTING	Goal: Agricultural Production	E-4
	1 November 1964	INDIA	UNCLASSIFIED			

Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year FY 1964	Operational Year FY 1965	Budget FY 1966	Budget +1 FY 1967	Budget +2 FY 1968	Budget +3 FY 1969	Budget +4 FY 1970	All Subsequent Years	Total All Years
386-24-230-272	Hindustan Shovels	DL	--	--	2,950	--	--	--	--	--	--	2,950
		DG	--	--	--	--	--	--	--	--	--	--
		SA	--	--	--	--	--	--	--	--	--	--
		480	--	--	--	--	--	--	--	--	--	--
		L/C	--	--	--	--	--	--	--	--	--	--
		Coop. C.	--	--	--	--	--	--	--	--	--	--
		Other	--	--	--	--	--	--	--	--	--	--
386-24-230-276	Cochin Fertilizer Plant (F.A.C.T.)	DL	--	--	25,000	--	--	--	--	--	--	25,000
		DG	--	--	--	--	--	--	--	--	--	--
		SA	--	--	--	--	--	--	--	--	--	--
		480	--	--	--	--	--	--	--	--	--	--
		L/C	--	--	--	--	--	--	--	--	--	--
		Coop. C.	--	--	--	--	--	--	--	--	--	--
		Other	--	--	--	--	--	--	--	--	--	--
386-11-110-281 386-31-110-281	Agricultural Universities Development	DL	--	--	--	--	--	--	--	--	--	--
		DG	678*	678	993	1,302	1,326	1,214	996	518	--	7,027
		SA	--	--	--	--	--	--	--	--	--	--
		480	4,333	--	19,000	8,000	6,000	4,000	4,000	2,000	--	43,000
		L/C	449**	449	876	998	1,036	1,100	900	271	--	5,628
		Coop. C.	--	--	--	--	--	--	--	--	--	--
		Other	--	--	--	--	--	--	--	--	--	--
386-11-140-282	Agriculture Production Incentives	DL	--	--	--	--	--	--	--	--	--	--
		DG	--	--	44	172	128	134	128	134	131	871
		SA	--	--	--	--	--	--	--	--	--	--
		480	--	--	--	--	--	--	--	--	--	--
		L/C	--	--	43	183	159	184	159	184	122	1,034
		Coop. C.	--	--	--	--	--	--	--	--	--	--
		Other	--	--	--	--	--	--	--	--	--	--
	Total: AID Activities Agricultural Production	DL	30,000	--	60,950	--	--	--	--	--	--	90,950
		DG	23,317	1,436	2,002	2,281	2,289	2,147	1,773	1,193	424	35,426
		SA	--	--	--	--	--	--	--	--	--	--
		480	55,584	5,525	53,869	8,000	6,000	4,000	4,000	2,000	--	133,453
		L/C	45,541	703	2,092	2,162	2,255	2,110	1,694	990	393	57,239
		Coop. C.	--	--	--	--	--	--	--	--	--	--
		Other	--	--	--	--	--	--	--	--	--	--

\*Excludes Unliqd. balance of \$2,927 from projects 147 and 028 taken as obligations in project 281.

\*\*Excludes unliqd. balance of the equiv. of \$1,433 from projects 147 and 028.

\*\*\*Excluded unliqd balance of the equiv. of \$1,065 from project 147.

UNCLASSIFIED

AID 1020-3 (7-64)		PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES							SECURITY CLASSIFICATION UNCLASSIFIED					
E-1b		1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY India		3. BEG. FY 1951 END FY 1971 1952 1972		4. PROJECT NO. 386-11-110-007		5. TITLE Agricultural Extension				
7. OBLIGATED AND DISBURSED		a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
		(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
					(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G	671	3,211					1,342	-		1,869
	FA	(ii) TRUST FUND Govt. Revenue		-	17	224							224	223
	ACT	(iii) OTHER LC Sec. 402		G	332	1,588					416	-	1160	931
	B. P.L. 480 LC													
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/			-	-					-	-		-
	FA	(ii) TRUST FUND Govt. Revenue		-	14	67							67	67
	ACT	(iii) OTHER LC Sec. 402		G	102	487					101	-	383	323
	B. P.L. 480 LC													
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/			-	-								
	FA	(ii) TRUST FUND Govt. Revenue		-	16	77							77	77
	ACT	(iii) OTHER LC Sec. 402		G	250	1,211					899	-	301	312
	B. P.L. 480 LC													
III BUDGET YEAR (EST.) FY 1966	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/			-	-								
	FA	(ii) TRUST FUND Govt. Revenue		-	20	96							96	96
	ACT	(iii) OTHER LC Sec. 402		G	380	1,670					1,372	-	287	298
	B. P.L. 480 LC													
IV PLANNING YEAR (EST.) FY 1967	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/			-	-								
	FA	(ii) TRUST FUND Govt. Revenue		-	20	96							96	96
	ACT	(iii) OTHER LC Sec. 402		G	420	1,999					1,750	-	215	249
	B. P.L. 480 LC													
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/			-	-								
	FA	(ii) TRUST FUND Govt. Revenue		-	80	384							384	385
	ACT	(iii) OTHER LC Sec. 402		G	1,250	6,374					5,593	-	608	781
	B. P.L. 480 LC													
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G	671	3,211					1,342	-		1,869
	FA	(ii) TRUST FUND Govt. Revenue		-	183	877							877	877
	ACT	(iii) OTHER LC Sec. 402		G	2,632	12,601					10,030	-	2,571	2,571
	B. P.L. 480 LC													

## REMARKS:

1/ Exchange Rate: \$1 =

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c		PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF: 1 November 1964			2. COOPERATING CTRY. India			3. PERSONNEL SERVICES PARTICIPANT TRAINING		BEG. FY 1951 END FY 1971 1951 1972		4. PROJECT NO. 386-11-110-007								
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		a. CUM. THRU ACTUAL FY			b. ACTUAL FY 1964			c. OPERATIONAL FY 1965			d. BUDGET FY 1966			e. PLANNING FY 1967			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	147	-	-	9	-	-	8.5	-	-	12	4	-	12	8	-	27	29	-	206.5	41	-
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. ON BOARD	U.S.	-	-	-	6	-	-	9	-	-	12	10	-	12	20	-	-	-	-	-	-	-
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II. PARTICIPANTS PROGRAMMED	A. U.S.		170	-	-	31	-	-	42	-	-	40	-	-	30	-	-	85	-	-	367	-	-
	B. THIRD CTRY.		19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	-	-	36	-	-

## REMARKS:

1/ End of Fiscal Year

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF:	2. COOPERATING COUNTRY			3. PROJECT NO.				4. TITLE							
	1 November 1964	India			386-11-110-007				Agricultural Extension							
	5. U.S. FUNDING:	BEGIN FY		END FY	6. PRIOR REFERENCES											
		1951		1971												
7. PHYSICAL WORK:		1952		1972		e. PERSONNEL SERVICES		f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	(1) U.S. AGENCIES		(2)	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	1/ (2) CONTRACT
A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		TC	G	2,649	--	1,246	--	--	437	--	936	--	30	--		
GROSS OBLIGATIONS (ACTUAL YEAR)		TC	G	277	--	150	--	--	95	--	28	--	4	--		
B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		TC	G	2,517	--	1,243	--	--	336	--	908	--	30	--	671	--
EXPENDITURES (ACTUAL YEAR)		TC	G	243	--	146	--	--	89	--	3	--	5	--		
C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC	G	132	--	3	--	--	101	--	28	--	--	--		
II. OPERATIONAL YEAR (EST.)		TC	G	259	--	117	9	--	130	--	3	--	--	--		
A. GROSS OBLIGATIONS		TC	G	239	--	118	9	--	109	--	3	--	--	--		
B. EXPENDITURES		TC	G	152	--	2	--	0	122	--	28	--	--	--		
C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC	G	388	--	122	141	--	125	--	--	--	--	--		
A. GROSS OBLIGATIONS		TC	G	382	--	122	141	--	116	--	3	--	--	--		
B. EXPENDITURES		TC	G	158	--	2	--	--	131	--	25	--	--	--		
C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC	G	432	--	120	222	--	90	--	--	--	--	--	449	--
IV. PLANNING YR. (EST.) FY 1967		TC	G	1,288	--	486	542	--	260	--	--	--	--	--	1429	--
GROSS OBLIGATIONS 2/		TC	G	5,016	--	2,091	914	--	1,042	--	939	--	30	--	5016	--
V. ALL SUBSEQUENT YEARS (EST.)		TC	G		--			--		--		--		--		
GROSS OBLIGATIONS 2/		TC	G		--			--		--		--		--		
VI. CUMULATIVE TOTAL ALL YEARS (EST.)		TC	G		--			--		--		--		--		
GROSS OBLIGATIONS 2/		TC	G		--			--		--		--		--		

REMARKS:

- 1/ This is a memorandum (non-odd) column.
- 2/ Show estimated expenditures in column i.

Refers to Annex 6 of LAS.

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-110-007	Agricultural Extension
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## I. The Activity Targets

The present project is designed to help India build an agricultural extension system by 1971 as an effective force in increasing agricultural production, especially of foodgrains. This involves strengthening the organizational and technical capabilities needed for the implementation of problem-oriented programs designed to reach and serve the farmer and increase his output. The specific objectives of this project are to assist GOI:

- A. To organize and administer India's Center and state agricultural services so as to provide necessary responsibility and authority within the Ministry of Food and Agriculture and the state agricultural departments.
- B. To strengthen in-service agricultural production training programs for 18,000 selected full-time agricultural workers (VLWs), 5,500 agricultural extension officers (AEOs) and animal husbandry extension officers (AHEOs), 100 principals and staff members of Gram Sewak Training Centers (GTCs), and the staffs of 15 state directors of extension.

### Background

India lacks almost totally the type of national extension service needed to modernize its agriculture and feed its burgeoning population. A vast Community Development program launched after independence now involves some 53,000 multi-purpose village level workers (VLWs) who represent the vital link between agricultural technology and its application by Indian cultivators. The link is woefully weak for many reasons, but chiefly because of poor organization and administration of agricultural extension activities proper, lack of technical competence and proliferation of duties of VLWs, and failure to adopt a practicable, problem-oriented approach to increasing the productivity of individual farmers.

Under tremendous pressure to resolve the national food crisis, GOI now is grappling with its agricultural extension problem more realistically and energetically than at any time since independence. A pattern is emerging which reflects determination to subordinate all other aspects of overall

community development in rural India in favor of greater agricultural output. Thus the Ministry of Community Development and Cooperation (MCDG), by Presidential Order of July 18, 1964, has been placed under the general supervision of the Minister of Food and Agriculture (MFA), "so as to concentrate its activities on increased agricultural production." The GOI strategy for immediate expansion of foodgrain production, which has been static at about 80 million metric tons for the last four years, leans heavily on a new program titled Intensive Agriculture Areas (IAA), directed by a newly appointed, dynamic and able special secretary of MFA. A total of 128 of India's 325 districts, selected on the basis of yield potential, have been designated for concentrated foodgrain production effort beginning with the present fall crop season.

To maximize the impact of available extension resources within the IAA framework, GOI is embarking upon an agricultural extension training program of staggering proportions. Yet it too is selective, involving the development of the most promising third of the current body of VLWs, along with other agricultural extension officers at block and district levels, at a relatively small number of the better training centers. Basically the retraining of an intensive and highly practical nature, will be aimed at the effective application of the most essential improved practices for foodgrain production. Greatly strengthened on-the-job training at all organizational levels and field follow-up procedures will accompany the institutional training program. Concurrently, GOI will undertake a massive farmer training program in the IAA districts. The entire IAA effort is apart from the Intensive Agricultural District Program (IADP), but represents a partial application of "Package Program" principles to those areas of India potentially capable of satisfying the nation's foodgrain requirements.

In the setting outlined above, this project will be oriented during FY 1965 toward constitution in FY 1966 of a project for Agricultural Extension Organization and Methodology Training. As an FY 1966 companion project, activities under the present Crop Production and Poultry Husbandry projects will become a Subject-Matter Extension Support project. These interdependent and mutually supporting projects further will draw subject-matter, organizational and administrative technical assistance from the other three FY 1966 agricultural projects of the Mission, i.e. Farm Irrigation and Drainage, Soil and Land Use Survey, and Agricultural Universities Development. Except for some aspects of the last-named, the ultimate objective of these continuing activities in their new alignment is to spark an upturn in India's foodgrain output. To further support attainment of this master goal, a new project, Agricultural Production Incentives, is proposed for

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-110-007	Agricultural Extension
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establishment in FY 1965. This paragraph is intended to clarify the interrelations of activities of the Mission's Agriculture Division and the manner in which these activities address IAS proposals for agriculture. In short, our agricultural activities are separately and jointly directed toward attaining technical competence through training, supplies of necessary inputs, and creation of production incentives, all at the levels demanded by Indian self-sufficiency in foodgrains.

## II. The Course of Action

Principal lines of technical assistance will be:

A. To strengthen agricultural extension training and its impact at the cultivator level through:

1. Special short courses for directors of agriculture and deputy directors of agricultural extension covering agricultural extension principles, objectives, staffing, administration, supervision, program planning, implementation and evaluation, with the introduction of technical knowledge as required.
2. Comprehensive training (one month) in the problem-approach extension training technique, including appropriate agricultural subject-matter and teaching methods ("train the trainer" short courses of one month each for the staff of 20 selected GTCs serving the IAA program).
3. Special refresher courses for AEOs, AHEDOs, and VLWs, emphasizing production of major foodgrain crops of the areas they serve (training concentrated on the staff in the 128 IAA districts).
4. Development of the concept of supervision and on-the-job training, with special emphasis on the IAA districts.

B. To develop model teaching plans and teaching aids as guides for principals and instructors of GTCs.

C. To assemble required data and produce agricultural production training materials for foodgrains for use by instructors and field extension workers.

D. To develop extension reference handbooks for use of field staff in promoting increased production of specific foodgrain crops through improved, locally adaptable practices.

The major courses of action hereunder are as follows:

A. Build the institutional concepts and framework required for the operation of an agricultural extension service specifically designed to increase India's foodgrain production and to help the Indian farmer and his family solve problems that they recognize as important. Agricultural extension is education in action, bringing about the application of useful research results in actual farming. It is a means of putting technical knowledge and successful farming experience to work in solving problems that affect the farmer and the nation. Experience has shown that farm people must be involved in the programming process if agriculture is to receive full benefit from extension. Agricultural extension organization must provide for the functions of administration, supervision, training, program development, implementation, and evaluation. There must be coordinated team work between extension, research and other related service and supply agencies.

Since the agricultural extension organization must be designed to meet a continuing and changing need, a sound basic charter is necessary to provide stability and support in attaining clearly defined objectives. With the current bright prospects for attaining agricultural policy and organizational changes long overdue in India relating to extension and research, increased U.S. advisory assistance will be required through the Fourth Plan period. Full term advisors as well as short term consultants will be needed.

Activities of AID technicians will be as follows: (1) Following the guidelines contained in the Mission's October 1964 paper titled "Notes on the Reorganization of Agricultural Extension Resources in India" (copy attached), a continuing effort will be made to encourage the formulation and implementation of sound policies and programs for building an agricultural extension system fitting the described pattern; (2) Encourage the development of written agreements outlining the specific organizational and technical responsibilities of Center and state governments in agricultural extension programs; (3) Utilizing the services of a consultant; study and evaluate organized extension training programs and conduct seminars at India's three Extension Education Institutes and at selected Gram Sevak Training Centers and College Extension Wings, and also analyze job responsibilities of

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-110-007	Agricultural Extension
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agricultural extension workers; (4) Four regional extension training advisors, acting in a liaison capacity between Center and states, will conduct training programs with state extension staff and coordinate the work of short-term U.S. consultants having specific training assignments.

B. Assist in building closer working relationships between agricultural research and extension at all organizational levels. The time lag in taking the results of production research to the farmer and obtaining adoption must be reduced. Likewise new problems must be brought to the researcher without delay. Extension provides a two-way channel of communication between the researcher and the farmer. Research and extension are mutually dependent upon each other in the effective utilization of their respective services. Research results provide content for extension programs. Extension assists research in maintaining a proper focus on priority problems.

The researcher must provide new information to the extension worker in a form that he can utilize. The extension worker in turn takes the information to the farmer in a form that the farmer can understand and utilize. Through actual demonstrations and other extension methods which support recommended practices, farmer adoption is encouraged and the fruits of research are put to work on the farm. U.S. project advisors will lend their support to the close coordination of the two services through a team approach to solving agricultural problems.

Activities of AID technicians will include: (1) Identification and utilization of opportunities for joint participation of GOI extension and research staff in carrying out extension planning, programming and training activities; (2) Study of applied research needs of extension personnel assigned to the Intensive Agricultural Areas program and assistance in channeling AID resources to meet such needs.

C. Assist with the development and training of the extension staff personnel required for leadership at the various governmental levels. Training will include technical subject-matter and effective methodology for attacking specific problems. It will include training in administration and supervision as extension operating functions in support of programs to increase the production of major foodgrain crops.

Assistance will be given to provide and utilize refresher training opportunities for extension staff on the job and at training centers (a total of three extension education institutes, 100 extension training centers, and 40 college extension wings). The need for increasing the technical and teaching competence of VLWs is recognized. GOI is now providing opportunities for qualified VLWs to obtain B.Sc. degrees in agriculture. Selected agricultural VLWs will also be given a one-year diploma course in agriculture.

Assistance will be provided in developing the understanding and skills of extension workers so as to use result demonstrations as a primary teaching method, supplemented and supported by other extension methods. The result demonstration becomes most effective when it provides the basis for a well planned extension education program. The attitude of extension workers is most important. Farmers recognize the value of dedicated and competent extension workers. An extension service should provide for recognition and reward for good work well done. This is essential to maintaining high morale.

U.S. advisors will assist Indian counterparts to utilize local resources fully in staff development through training courses, seminars, conferences and educational materials. Activities of AID technicians will include: (1) Assistance in developing and using a training manual designed to make result demonstrations the basic element in extension education activities with farmers; (2) Assistance in planning and conducting seminars for state joint directors of extension training concerning their role and job responsibilities, and for Center and state extension staff members concerning selected extension training subjects; (3) Through assignment of two-man teams (short-term consultants), assist states and regions in strengthening institutional pre-service and in-service, as well as on-the-job, training of extension workers.

D. Use a problem-oriented approach in building extension programs; involve people concerned with specific problems. Effective extension programs are based on problems that cultivators consider important. Before people will become concerned about a solution, they must recognize the existence of a problem.

Farm leaders must be involved in all stages of the program development process, i.e.: 1. Situation analysis; 2. Organization for planning; 3. Program planning process; 4. A planned program; 5. Plan of work; 6. Execution of plan of work; and 7. Appraisal of accomplishments. This process should be applied according to the needs of the situation.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-110-007	Agricultural Extension
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In preliminary Fourth Plan documents, it is emphasized that agriculture must provide the hard core and be the balancing factor in economic development. To this end five points are stressed concerning the utilization of agricultural inputs:

1. Requisite inputs must be physically available.
2. They must be available to the cultivator in the right quantity and at the right time.
3. The cultivator must be made to realize the value of using inputs and be taught how to use them properly.
4. The cultivator must have the proper incentives for increasing output through the use of inputs.
5. The cultivator must have credit and other requirements to obtain and use the inputs.

The greatest mass training program in agriculture ever faced by a nation now confronts India. It has been decreed that the erstwhile multipurpose Village Level Worker must devote full time to agricultural production. To be truly effective, VLWs must be retrained as agricultural production workers. In order to accomplish this training job rapidly and effectively, the following types of training are to be given to selected VLWs:

<u>Type of Training</u>	<u>Number to be Trained Annually</u>
Short-term, intensive	750
Diploma course (one year)	1,600
B.Sc. degree course	500
On-the-job	16,000

After an initial year at the above level, the rate of VLW training will be stepped up as additional staff and facilities permit.

The government is increasing the role of the extension training centers in refresher training and continuing education activities. This includes former training programs. Agricultural colleges are to be relied on for providing future VLWs and replacements in increased numbers. Steps are being taken to provide a professional career for capable, well trained VLWs. Agricultural extension officers are being given supervisory responsibilities for agriculture in Community Development blocks.

During 1964 five AID advisors were assigned in "package districts" under the Intensive Agricultural District Program (IADP), a joint GOI-Ford Foundation-AID undertaking covering 16 selected districts. Results of their work, in which well conducted crop demonstrations are used as a basis for teaching cultivators to use a package of improved practices, are reflected in better training programs by extension staff, more effective teaching techniques, and higher quality field demonstrations.

Recent expansion of the intensified approach to increased agricultural output to cover 128 selected districts in addition to the 16 IADP package districts offers a major opportunity for developing an effective extension organization. Through this effort all functions of agricultural extension and service agencies are brought into sharp focus and given an orientation to specific recognized problems in foodgrain production. This is providing a basis for overall organizational changes designed to increase agricultural output.

B. Progress has been made by research and extension agencies in realizing that they must work as a team if either is to perform most effectively. AID's support of seven integrated agricultural universities has provided opportunity for about 50 Indian staff members to study and observe the coordination of research and extension in the U.S. This has been followed by opportunity to put such concepts into practice. Experience with the IADP has shown that without research inputs, extension can soon run dry. An example is the urgent need for a strong-stemmed and high yielding rice variety that will respond well to relatively heavy applications of fertilizer. IADP has led to a sharper focus on specific problems which are impeding greater agricultural production. At the same time, increasing GOI acceptance of the problem-oriented approach in extension training activities is pointing up the need for close integration of research and extension.

C. The levels of extension training already attained and planned are indicated in the following table:

Extension Staff Category	Number Already Trained at:				Planned Number To Be Trained Annually
	GFCs	Ext. Wings	EETs	Total	
VLW (Pre-service)	64,476	-	-	64,476	5,000
VLW (Refresher)	7,155	-	470	7,625	750
AEO (Refresher)	-	5,338	580	5,918	1,200
GFC (Extension Methods)	-	-	432	432	180
All Categories	71,631	5,338	1,482	78,451	7,130

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Teamwork is essential to problem solving. Most agricultural problems involve more than a single subject-matter area. In view of the critical economic and food supply situation in India today, a sense of urgency is required in meeting and tackling the problems of foodgrain production. The Intensive Agricultural District Program is based on the problem approach and offers guidelines for strengthening the extension and research institutions involved in the new Intensive Agricultural Area scheme.

Activities of AID technicians will include: (1) Assistance in planning and conducting an all-India conference on problem-oriented and production-centered extension training programs; (2) Help in developing training outlines and teaching aids for such major foodgrain crops as rice, pulses, wheat and maize.

E. Support the work of Rural Youth Clubs as an integral part of the agricultural extension program. Rural Youth Club members represent a source of India's future leadership. Too often village youth are not fully utilized in agricultural production programs. Young people have shown that they are ready to try new ideas and practices useful in agricultural development. Organized rural youth work is a means of developing appreciation for research and the scientific approach in solving farm and home problems. Club members learn new and improved agricultural methods and teach these to others (including adults). Club and individual projects can be a source of income, whereby members learn to earn and manage money. A well-planned young farmers program helps to build strong, self-reliant citizens.

The U.S. rural youth advisor will encourage a coordinated approach to rural youth work through providing training material; developing leadership and effective programs; and establishing organizational structures to accomplish club objectives. His activities will include: (1) Reviewing India's experience with rural youth work, so as to draw upon past successes and failures in planning future programs; (2) Encouraging the development of an institutional framework as a leadership base for strengthened rural youth programs; and (3) Assisting in the preparation of training aids and manuals for use by extension personnel and local youth leaders.

### III. Progress to Date

Since the initiation of the Community Development project in 1952 and adoption of the concept of a multi-purpose Village Level Worker as the local contact for a national extension service, the

Ministry of Food and Agriculture has had the responsibility for training VLWs. At present 5,223 blocks are in operation, staffed with about 53,000 VLWs and 10,000 block-level agricultural extension and animal husbandry extension officers. A basic weakness in the training of these agricultural workers has been the failure to develop ability to apply specific knowledge and skills required to achieve maximum agricultural production. This deficiency is evident throughout India's extension service.

The Community Development administrative channels have extended from the Ministry of Community Development and Cooperation through the state development commissioners to the district collectors and the block development officers. Agriculture has had a technical responsibility, discharged through the state director of agriculture to the district agricultural officer and the block level extension officer. With eight block level extension officers (agriculture, animal husbandry, health, social organizations, cooperatives, village industries, education, and panchayat) and a BDO all looking to the VLW for local implementation of their respective activities, there has been negligible attention given to agricultural production.

The U.S. assistance role in extension has heretofore centered around the work of India's extension training institutions and in much smaller degree on support of the IADP operations. The major objective of the training has been to provide staff to the community development blocks. There is great need for closer integration of and coordination between the extension training institutions and the extension field organization. Coordination of research, extension and education is making better headway. USAID is giving full support to the effective coordination of research, extension, teaching and services so that they reach and benefit the farmer.

Major accomplishments to date are as follows:

A. The need for a national agricultural extension institution fully supported by research and by adequate services for fertilizer, good seed, pesticides, credit, storage, marketing, etc., is now generally recognized by GOI and the state governments. This need is pointed up by the growing national pressure for greater food supplies and export earnings. In October 1964, the Mission prepared and presented to the Minister of Food and Agriculture a paper titled "Notes on the Reorganization of Agricultural Extension Resources in India". This document emphasizes the need for changed delegations of authority and assignments of responsibility in support of efforts to effectively reach and influence cultivators. Early reactions are favorable, but our proposals are still under GOI review.

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As previously indicated, much of the training given to date has been of poor quality due to lack of emphasis on specific knowledge and skills and application thereof in the form of improved practices.

AID advisors have helped to improve extension training through the preparation of syllabi and course outlines for extension workers and in presentation of material. This has involved the two-year syllabus for VLWs, course outlines for subject-matter refresher training of agricultural and animal husbandry extension officers, and training in extension methods for instructors at extension training centers. Much remains to be done, however.

The Fourth Plan calls for greatly expanded training efforts; 25 new extension training centers for VLWs; two-month refresher courses at the present 100 extension training centers; 500 six-week subject-matter courses for 15,000 agricultural and animal husbandry extension officers; and continuation of 40 college extension wings with 45 new wings to be organized. The need for training in administration and supervision has also been recognized. To date little opportunity has been provided for state and district level officers to obtain refresher training in administrative functions and subject matter appropriate to their assignment.

D. With assistance of AID advisors the problem approach to agricultural extension training has been brought into sharp focus. For example, following the presentation of the problem-oriented approach with AID assistance in the refresher training of extension officers at Bichpuri College in early 1962, 6,000 copies of the report of this work were printed. The report includes in detail the procedures and materials used and it is being distributed to all training institutions plus selected state, district and block level extension officers.

In February 1964 a national seminar on building and implementing problem-oriented extension programs was held, with AID participation, for professors of extension at agricultural colleges. The printed report of this seminar is to be used as a reference manual for future training activities. Subsequent visits with course participants have revealed that they are making use of this approach in their under-graduate and post-graduate courses as well as in refresher courses.

Package program experience is providing actual demonstration results which are being used to convince other farmers to adopt recommended practices. AID-assisted demonstration results with maize, ragi, paddy, chillies, and tomatoes are providing additional

convincing evidence of the value of recommended practices in solving specific problems. Utilization of the problem approach has demonstrated that the extension program-building process can be simplified and applied to fit the needs of the situation. When this is done, the influence of extension education is multiplied.

E. Work with rural youth has been accepted by GOI as an integral part of extension. Nearly all of the 100 extension training centers were recently assigned a goal of 10 clubs each for training purposes and 822 clubs have been organized. The goal has now been raised to 20 clubs per center and some centers have already exceeded this number. The Directorate of Extension has strengthened its rural youth staff through the addition of personnel. The Extension Division of the Indian Agricultural Research Institute has included a course in rural youth leadership at the graduate level.

India is participating in the International Farm Youth Exchange program. In 1964, ten young Indian farmers participated in a program in the U.S. while ten American youths came to India. The program for the Americans in India takes full advantage of their U.S. 4-H Club experience. AID has assisted with the preparation of training materials for use in organizing and developing club programs. GOI recently requested the assignment of a U.S. rural youth advisor to assist in the further development of work with rural youth, and he reported for duty in early October 1964.

Through FY 1964, 172 participants received training in the United States and 17 trained in third countries in various aspects of agricultural extension. Training emphasis, particularly in recent years, has been on the practical field application of modern extension techniques.

#### IV. Funding Requirements

##### a. Total Requirements

During the life span of the project FY 1951-1971, U.S. contribution is estimated as follows (in thousands of dollars):

FY	Non-Contract Participants	Technicians	Commo- duties	Other costs	Total \$ Cost	Section 402 Rs. (\$ Eqv.)
Thru FY1964	437	1,246	936	30	2,649	332
FY1965	130	126	3	-	259	250
FY1966	125	263	-	-	388	380
FY1967	90	342	-	-	432	420
FY1968 thru FY1971	260	1,028	-	-	1,288	1,250
Total	1,042	3,005	939	30	5,016	2,632

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Cost estimates for the total AID contribution through the remainder of the project's duration reflect a slightly higher technician cost element during FY1966 and FY1967, which tapers off sharply thereafter, and participant training costs somewhat above the present level until FY1968, which taper off during the subsequent years. Under the existing situation, these estimates are reasonable. Total requirement of Section 402 rupees during the life span of the project is estimated at \$2,632,000 equivalent.

GOI financing, in view of the planned massive training program, is expected to reach a record allocation during the Fourth Five-Year Plan. Other external financing, primarily by UNICEF (training aspects of the All-India Applied Nutrition Program), Freedom from Hunger Campaign (extension-type activities), the Ford and Rockefeller Foundations (mainly Intensive Agricultural District Program and extension education, respectively), and Peace Corps extension activities, is substantial and is increasing. A peak support level from these sources of about \$4.7 million is estimated in FY1969, followed by a decline to \$1.8 million in FY1971.

b. Operational Year Requirements (FY1965)

As shown on the E-1a and E-1b tables, the total funding requirement in FY1965 is \$259,000 consisting of 8.5 man-years of technician services (\$126,000), training of 42 participants (\$130,000) and AID-titled commodities worth about \$3,000 for Mission procurement of demonstrational equipment in support of the technicians' work.

In addition to the dollar funding above, U.S.-owned Section 402 rupees equivalent to \$250,000 are required, that is to cover international travel and authorized allowances payable to AID technicians (\$45,000); international travel of participants (\$63,000); and rupee costs of project support materials and services available locally in India (\$142,000).

c. Budget Year Requirements (FY1966)

DG dollar funding in this fiscal year exceeds operational year requirements by about 50%. The breakdowns by elements are - technicians \$263,000; and participants \$125,000.

In addition to the dollar funding above, U.S.-owned Section 402 rupees equivalent to \$380,000 are required, that is to cover international travel and authorized allowances payable to AID technicians (\$121,000), international travel of participants (\$60,000), and rupee costs of project support materials and services available locally in India (\$199,000).

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Technicians

<u>Title and Identification of Position</u>	<u>D.H. or PASA</u>	<u>Name of Incumbent</u>	<u>Pos. Grade</u>	<u>Pos. No.</u>	<u>Start of Funding for FY</u>	<u>Date of Home Leave/Return or Transfer</u>	<u>Location</u>	<u>Funding</u>	
								<u>\$</u>	<u>Sec. 402 Rs. (\$ Eqv.)</u>
					<u>FY1965</u>				
Ext. Adv. Trng.	D	G.G. Gibson	1	417	7/1/64	6/28/66 (HL)	New Delhi	26,600	4,800
Ext. Adv. Trng.	D	G.C. Knierim	4	461	7/1/64	7/28/65 (TR)	New Delhi	14,200	4,500
Ext. Adv. Trng.	D	J.H. Webb	4	438	7/1/64	2/26/66 (TR)	Bangalore	14,200	4,500
Soil Adv. Fert.	D	E.M. Stickney	6	380	7/1/64	6/17/66 (HL)	Raipur	9,800	4,400
Agr. Econ. Farm Mgt.	D	R.M. Isler	4	381	7/1/64	11/7/64 (TR)	Raipur	14,600	6,400
Agr. Econ. Farm Mgt.	D	J.F. Boyd	5	375	7/1/64	5/24/66 (HL)	Vijayawada	11,700	4,500
Rural Youth Adv.	D	R.E. Fort	3	509	9/2/64	10/7/66 (HL)	New Delhi	18,200	6,500
Ext. Adv. Trng.	P	Recruiting	4	-	1/1/65	1/1/67 (HL)	New Delhi	9,400	4,800
Ext. Adv.	D	J.E. Crosby	2	65	7/1/64	10/1/64 -	New Delhi	<u>7,800</u>	<u>4,300</u>
FY1965 Total Estimated Cost								126,500	44,700

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Technicians

<u>Title and Identification of Position</u>	<u>D.H. or PASA</u>	<u>Name of Incumbent</u>	<u>Pos. Grade</u>	<u>Pos. No.</u>	<u>Start of Funding for FY</u>	<u>Date of Home Leave/Return or Transfer</u>	<u>Location</u>	<u>Funding</u>	
								<u>\$</u>	<u>Rs. (\$ Eqv.)</u>
					<u>FY1966</u>				
Ext. Adv. Trng.	D	G.G. Gibson	1	417	7/1/65	6/28/66 (TR)	New Delhi	26,600	5,300
(Replacement)	D	-	2	-	6/1/66	6/1/68 (HL)	New Delhi	4,200	3,000
Ext. Adv. Trng.	D	G.C. Knierim	4	461	7/1/65	7/28/65 (TR)	New Delhi	1,700	2,900
(Replacement)	D	-	4	-	8/1/65	8/1/67 (HL)	New Delhi	15,400	6,500
Ext. Adv. Trng.	D	J.H. Webb	4	438	7/1/65	2/26/66 (TR)	Bangalore	10,000	5,500
(Replacement)	D	-	4	-	3/1/66	3/1/68 (HL)	*	7,100	4,100
Soils Adv. Fert.	D	E.M. Stickney	5	380	7/1/65	6/17/66 (HL)	Raipur	12,800	9,400
Agr. Econ. Farm Mgt.	D	(Recruiting)	4	-	7/1/65	1/1/67 (HL)	*	14,200	4,500
Agr. Econ. Farm Mgt.	D	J.F. Boyd	5	375	7/1/65	5/24/66 (HL)	Vijayawada	12,800	9,400
Rural Youth Adv.	D	R.E. Fort	3	509	7/1/65	10/7/66 (HL)	New Delhi	17,500	4,800
Ext. Adv. Trng.	P	(Recruiting)	4	-	7/1/65	1/1/67 (HL)	New Delhi	14,200	4,500
4 new Ext. Adv. Trng.	P	(Recruiting)	4	-	10/1/65	10/1/67 (HL)	*	52,000	24,000
10 consultants, aver. 115 days each at \$65/day, total equiv. 4 man/yr.	P	(Recruiting)	-	-	-	-	*	74,700	37,000
								FY1966 Total Estimated Cost	263,200 120,900

\*Locations not yet decided.

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Participants (Non-Contract)

<u>Brief Description of Training</u>	<u>No. of Partici- pants</u>	<u>Duration of Training</u>	<u>Target Starting Date</u>	<u>Estimated Cost</u>	
				<u>\$</u>	<u>Sec. 402 Rs. (\$ Eqv.)</u>
<u>FY1965</u>					
Formal extension education for staff of Indian extension training institutions.	20	9 months	7/1/65	69,800	30,000
Practical extension training and observation in field for Indian field workers in extension.	22	6 months	7/1/65	62,080	33,000
FY1965 Total Estimated Funding				130,080	63,000
<u>FY1966</u>					
Formal extension education for staff of India extension training institutions.	20	9 months	7/1/66	69,800	30,000
Practical extension training and observation in field for Indian field workers in extension.	20	6 months	7/1/66	54,800	30,000
FY1966 Total Estimated Funding				124,600	60,000

Note: All training described above to be given in U.S.A. FY1965 provides a total of 42 participants, which includes 8 under a supplementary budget and therefore subject to availability of funds.

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New Delhi  
6 October 1964

Notes on the Reorganization of  
Agricultural Extension Resources in India

INTRODUCTION

This paper is directed to a consideration of certain key issues in the re-organization of agricultural extension resources of India with a primary objective of maximizing effectiveness of its contacts with farmers.

The recommendations it contains do not constitute a comprehensive treatment for all organizational and technical problems that arise in the implementation of any plan of re-organization, for re-organization requires many difficult and far reaching decisions. This paper discusses certain major factors involved, suggesting decisions that India must make soon if it is to begin to formulate the new organization required to meet new goals for agricultural production.

Happily, many of the recommendations are in line with suggested lines of reform for which great support is already being mobilized within the Government of India and the states. In these cases, the effect of these recommendations is not to suggest a new point of reform in the uses of India's extension resources but simply to indicate the degree to which an AID team supports the judgement of energetic groups in Indian governmental circles.

In large outline, recommendations are the following:

1. Establish a line of undivided authority from the Union Ministry of Food and Agriculture through and with State Departments of Agriculture in order to fix definite responsibilities at each level in support of effective contact with farmers.
2. Establish at all levels, including the lowest, an intimate tie between research and extension.
3. Create a key role for local farm leadership.
4. Recruit agricultural production workers from the VLM corps and mount a massive training program.

5. Simplify the task of achieving early returns from reorganization by, for the time being:
  - a. Retraining only about 30% of the present VLWs—those with special aptitudes for agricultural work,
  - b. Limiting agricultural extension work as restructured to high food potential geographic areas—specifically those areas selected by the GOI for the intensive agricultural areas approach,
  - c. Focusing on a limited number of practices for selected essential crops, in order to make the most of the limited training and experience of the local field worker.

Each of these recommendations will be discussed in turn.

I. A Line of Undivided Authority

A. Effective contact with the farmers is the heart of a strong agricultural extension service. The sole justification for all other agricultural workers is to support the local field worker in his work with farmers. Hence the entire organizational structure of extension must focus upon the local field worker and must systematically provide unambiguous direction and unstinting support to him.

B. At present the Ministry of Food and Agriculture has no direct administrative control and meaningful administrative influence upon the operation of employees working at farm levels. Furthermore, most subject-matter groups within the Ministry, whether service or research, and whether at Center or within the states, attempt to maintain separate and individual extension activities. Administrative control throughout is limited essentially to use of coordinating committees and through use of personal contacts with strong individuals. This means of administrative control has proved to be ineffective.

C. It therefore appears that the position of the Central Government should be strengthened if immediate production goals are to be met. The Central government, representing as it does the nation in the national food emergency, should have for a period of time more influence upon the implementation of programs for

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marshalling farmer resources than it has had in the past.

D. There are two possible approaches to this extension of Center authority:

1. provide the necessary increases in budget at state and local levels from national funds in order to establish and operate a reformed agricultural extension organization. With the national funding provided, states should be assigned definite responsibility and goals. They should then make firm commitments. The employee of the state portion of the extension service might well be paid, partially at least, from Center funds in an identifiable manner. In initial stages of organization and operation, firm monetary controls should be maintained by the Center.
2. create a national agricultural extension service under national emergency powers. If such is done, definite agreement should be entered into between Center and state that at the termination of the national emergency the jointly financed, yet state administered type of arrangement indicated above would be organized, financed, and implemented.

E. The Agricultural Extension Service should be entirely separated organizationally and physically from the Community Development Organization. It should be placed within the Ministry of Food and Agriculture at the Center and within the departments of agriculture in the states, where it will be closely associated with the agricultural research and with agencies responsible for essential production supplies such as fertilizer, seeds, pesticides, water management resources, equipment, credit, and scientific technical information and guidance.

F. In order to fix manageable and definite responsibilities for each worker in the extension services, the agricultural extension organization should be completely disassociated from those activities that may adversely affect the requisite respect and confidence of the farmers. Activities involving inspections, controls, taxing, fund collecting, small savings program, direct sales, water distribution control, etc., are examples.

G. While certain special powers may be granted to the Center for the duration of the food emergency, an undivided straight line of authority within the Departments of Agriculture should become a permanent feature of extension services organization.

H. A diagram of a plan for establishing an undivided line of authority in order to fix responsibility for effective contact with the cultivators is presented on page 15 as the appendix. The appendix contains a description of the required responsibilities at each level in the chain of command from the national level to the Agricultural Production Worker (APW).

## II. The Tie Between Research and Extension.

A. An effective national program for agricultural production depends on a two-way flow of information between sources of new knowledge and the farm operator. Application of new knowledge from research plus the good experiences of successful farmers increase both the quantity and quality of farm production. Conversely, successful research operations result from the researcher's having a broad knowledge of current farm problems.

B. Agricultural extension organizations serve as the connecting link in communication between researchers at state and Center and the farmer on his land. It keeps Center and state agencies as well as private industry informed as to the up-coming farm requirements in service and supply that develop from accelerated use of new knowledge by the farmer. It should be a useful line of communication between the government and the farmer for adequate formulation and implementation of government agricultural policy.

C. The shortest and most direct line of communication to the farmer is essential. It is, therefore, essential that the farmer, through the extension service, be directly linked with the research organizations. To serve the nation effectively, agricultural extension must be placed administratively under the direct and immediate supervision of the same cabinet post as is agricultural research.

D. The closest of coordination between agricultural extension and agricultural research is mandatory at all levels. This can be achieved through appropriate departmental integration of extension subject matter, specialists and research scientists. Administrative policy and procedure should clearly indicate the placement of responsibility and the type of coordination required at the various organizational levels.

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Such devices for intimate interrelationship should be considered as placing the offices of extension subject matter specialists and research workers in the same building.

E. The development of agricultural universities for planning and directing teaching, research and extension at the state level provides a sound basis for achieving the required coordination of field programs, including extension and research. In seven states, by law, such responsibilities have been placed with the new agricultural universities. In the remaining states having no such legislation, responsibility for agricultural research rests with the department of agriculture; for agricultural extension, responsibility rests partly with the agricultural departments and partly with the community development departments. As states establish integrated agricultural universities, it is believed desirable to follow the pattern of placing state leadership responsibility for organizing and implementing research and extension with the agricultural university whenever they develop to a point where they are capable of carrying such responsibility.

F. Whatever the method of organization, the extension organization should be equal in stature, both of organization and of staff, to the agricultural research organization. Anything short of this will be inadequate to meet India's goals for national agricultural production.

G. Fortunately, the reservoir of applicable research results from both Indian sources and from international sources is already sufficient for the initiation of an effective extension program. Supplemental to present research results are, of course, the successful experience of the better farmers of India and other countries. New research can fill in the gaps in available usable technical information.

H. Research program must recognize the importance of increased material benefits to the cultivators. Research must, therefore, be given a practical orientation; it must cope with the production problems confronting cultivators participating in the extension program.

### III. Local Participation

A. A committee of farmer leaders in each locality will be essential to get at the problems of farmers in that locality. Such a committee is the best means of reaching agreement on alternative solutions, actions to be taken and on assignment of responsibility. Moreover, such a committee is invaluable in spreading information about improved practices.

B. Experience has shown that when farmers are involved in planning the agricultural demonstration program or other extension activity with extension workers, they take more interest in seeing that it is carried through according to plan.

C. The Panchayati Raj system, as provided by law in several states should assume appropriate local leadership responsibility. The coordinating potential of Panchayati Raj should be fully utilized; plans for local participation of farmer leaders should include the possible contributions of Panchayati Raj, as well as other forms of local farmer organization.

### IV. Recruitment and Training

A. The present ranks of community development village level worker should provide the initial selection of agricultural production workers. VLWs who have demonstrated aptitude and interest should be selected for the corps of agricultural production workers required for meeting the national food emergency.

B. Additional agricultural production workers should be trained by a combined effort of the extension training staff and the agricultural colleges and universities. The new recruits required to meet extension needs could come from new university graduates or from further VLW transfers if qualified candidates are available.

C. For recruits from the colleges and universities, too much attention to degrees without adequate field experience sufficient to gain the skills associated with demonstrations and other extension activities will materially inhibit the rate of production increase. Particularly in early stages of development, the capability of the agricultural production worker to work with and for farmers will be just as essential as his overall competence in agricultural sciences.

D. Pay scales must be sufficient to attract basically qualified candidates, who can most rapidly assimilate and use the training they must receive prior to field assignment.

E. In order to recruit the right kind of extension worker, opportunity for advancement should be firmly established for every position from agricultural extension worker through to top administration. It should be linked to effectiveness with implementation of farmer efforts. Initially it should not be tied in any way to academic degrees. Eventually the requirement for academic degrees may be established as prerequisite to employment. Capacity to work with the farmer has to be emphasized because of the very high percentage of non-farm experienced university graduates who are ill-equipped to gain or hold farmer confidence and respect.

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F. New employees should be appointed for a probationary period of sufficient length to assure uncomplicated severance of the unfit or of the ill-placed employee.

G. A massive training program must be launched. India is confronted with the largest training effort which any country of the world has ever faced. It involves training of trainees, training supervisors, training of agricultural production workers, and training of selected farmer leaders. On the basis of information given in the table below, intensive districts alone would require two thousand agricultural extension officers and 20,000 agricultural production workers. The districts would contain 23 million farmers.

India's Present Technical Service for Agriculture.

	India	State	Region	District	Block	Circle	Ministry
Director	15	1	-	-	-	-	Agr.
Dy. Dir.	60	4	1	-	-	-	Agr.
DAO	325	22	6	1	-	-	Agr.
AEO	5,000	350	90	16	1	-	Agr.-CD
VLW	50,000	3,500	900	160	10	1	CD
Farmers	60 M	4 M	1 M	182,000	11,400	1,140	

The above figures are approximations based on average for 15 states.

H. The problem of training is posed primarily by the fact that present village level workers are multi-purpose with numerous duties. Their education is only at the high school level. They have limited special training for a broad sphere of activities covering the responsibilities of the many ministries of government, primarily health, education and agriculture. They have very limited practical farming experience.

The training program is to be designed on the supposition that many VLWs under careful guidance and when properly supported and supervised can be retrained to become useful agricultural production workers. To be sure, retraining requires due consideration to the capacity of VLWs to absorb new knowledge quickly and to acquire the needed skills sufficiently to gain and hold farmer confidence.

V. How to Keep the Program Simple and Manageable.

It has been suggested that the reorganization of extension services can be simplified to become manageable by restricting the number of agricultural extension workers to be incorporated into the new system, by restricting the geographical areas and crops in which they will work, and by limiting the skills they are asked to acquire.

A. Limited Number of Extension Workers

It is estimated that not more than 30% of the total number of VLWs could be adequately trained and properly supervised during the first year to effect the reorganization required. Whatever the long-run prospects may be for conversion of the VLW corps into an effective Agricultural Extension corps, not more than one-third can be scheduled for retraining to begin with; even this amount of retraining is ambitious.

B. Limited Crops and Geographic Areas

1. Program efforts at the start should be limited to selected geographical crop areas where the greatest impact can be made with limited human and other resources now available. Other areas would be encouraged to operate by their own efforts in the beginning of the program. As soon as resources are available, program efforts could be extended to other geographic areas and crops.

2. The geographic areas to be served initially should be limited to areas of greatest production potential--specifically those areas selected for Intensive Agricultural Area programs. Subsequent expansion of area should occur only as rapidly as there is sufficient APW staff that can both advise and demonstrate, first hand, the required essential practices.

3. The size of the job, the limited time and the limited qualifications of trainees make it essential that training be crop focuses on the limited number of essential food crops. The program should be restricted perhaps to rice, wheat, pulses, hybrid grain sorghums, millets, and hybrid maize.

C. Limited Skill Demands on Extension Workers

1. To simplify the retraining process and make the most of competence of the Agricultural Production Worker, he should be retrained

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION Unclassified	386-11-110-007	Agricultural Extension
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in a limited number of skills like fertilizer use, pest control and some practices in water and soil management.

2. The entire training program from beginning to end should be oriented the first year toward training each Agricultural Production Worker to accomplish competently some specific assignment such as to establish, supervise, and measure the yield from a specific number of farm field demonstrations and to hold farmer meetings at these demonstrations. The supervisor and each APW should be held responsible for completion of every specified step of such a demonstration program or other specified and simplified extension activity.

3. Incentive awards to successful APWs and farmers should be used to motivate good performance on a limited number of essential operations.

4. Demonstration goals and other targets of extension work can be raised only as the growth of competence permits. Demonstration goals, for example, might be doubled the second year, subject to firm and good supervision coupled with adequate support. At some point, farmer-conducted demonstrations should take over to bring about the widespread adoption of recommended crop practices. APWs and supervisors would then face a full time job of advising, assisting and supporting farmers in actual field application of practices.

VI. Some Concluding Cautions

If such recommendations as these are to be the first steps in the reorganization of agricultural extension services in India, it is important that they be given a fair chance at thorough going implementation. It has been made clear that agricultural extension exists for one purpose:— service to the farmer. Hence the extension employee has to be stripped of responsibilities which he now bears for inspection and quarantine, sales and financial collections, enforcement of rules and regulations, tax assessments and collections, land ownership disputes and settlement, agricultural pricing and production, requisitioning or other similar activities. These responsibilities, which indeed need discharging by some officials, should be placed elsewhere in government.

In addition:

A. The Union and state Ministries of Finance should cooperate through timely and adequate fund releases within approved budgets.

B. Farmer demand for fertilizer, seeds, pesticides can be expected to tax supplies seriously within two years from the initiation of a combined agricultural extension training demonstration effort. As the extension worker succeeds in teaching the cultivator how to use new inputs, it is of course essential that the new inputs be available.

APPENDIX

A PLAN FOR ESTABLISHING A LINE OF AUTHORITY TO FIX RESPONSIBILITY

The entire organizational structure must focus upon the local field workers. Effective contact with the farmer is the heart of a strong Agricultural Extension Service. The sole justification for all other agricultural extension workers is to support him in his work with farmers. The chart on page 16 shows how this line of responsibility should be established. The chart on page 17 shows how ultimately the organization can be expanded to all States of India and make its services available to the 60,000,000 farmers as resources permit.

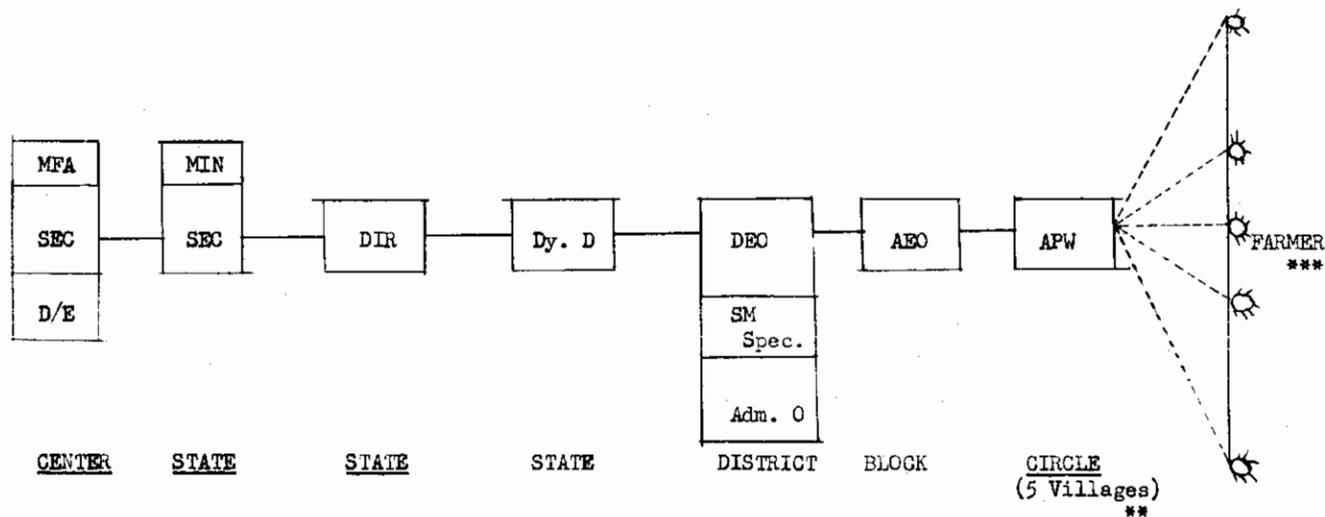
Initially the expansion should focus on selected intensive production areas and upon a very limited number of primary food crops such as rice, wheat, pulses, millets and sorghums, and maize. Limitation of training resources and of the trainees to absorb training make this essential.

A. Responsibilities at the National Level

1. Functional responsibilities include:

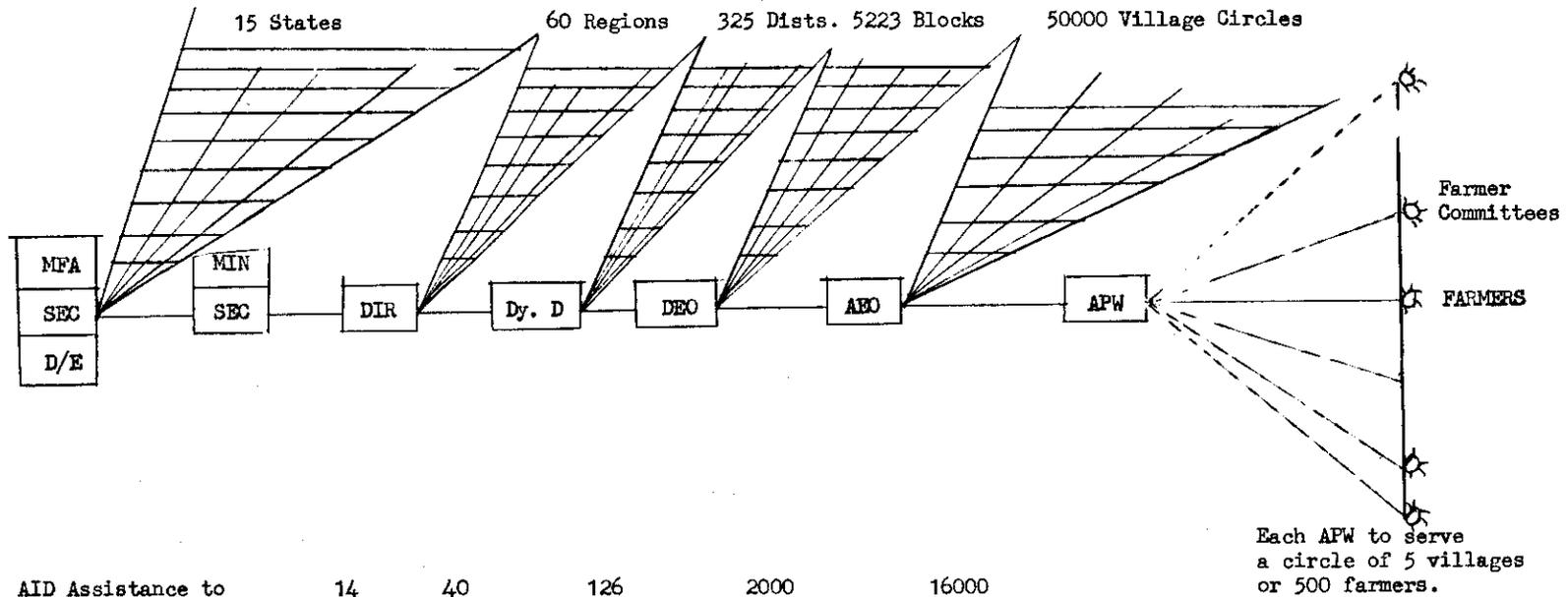
- a. Providing coordination with agricultural research and other agencies.
- b. Developing policies and programs for achieving national targets.
- c. Assistance and guidance to States in organization and operation of agricultural extension services.
- d. Providing leadership in the areas of assigned program responsibilities as set forth in the organizational plan.
- e. Maintenance of adequate fiscal and budgetary controls including submission of funding requests.

BASIS FOR ORGANIZATIONAL PLAN OF AN AGRICULTURAL  
EXTENSION SERVICE IN INDIA



- \* Coordination with research takes place at all levels.
- \*\* Each circle represents approximately 500 farmers.
- \*\*\* Farmer participation in all phases of demonstration work planning through implementation is essential to obtaining widespread adoption of recommended practices. Farmer committees of village, blocks and district levels will be used.

AN AGRICULTURAL EXTENSION SERVICE TO SERVE  
ALL INDIA - Ultimately



AID Assistance to	14	40	126	2000	16000
IAA will involve	States	Regions	Districts	Blocks	Circles

AID 1020-1 (7-64)	1. DATA CURRENT AS OF 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION Unclassified	386-11-110-007	Agricultural Extension
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## 2. Staffing at the Center Level

A National Administrator of Extension is required to fix responsibility for policy development and implementation. He assesses the operation of various schemes and makes needed adjustment to obtain desired results.

The national administration of extension should include the following units:

### a. Administration

This unit provides the services and facilities for maintaining fiscal and budgetary controls.

### b. Program and Supervision

This unit assists with programs and supervision required to support state extension operations. Training activities in program building and supervision are included.

### c. Subject matter

This unit is responsible for developing subject matter support for extension programs, making full use of all available technical resources.

### d. Information

This unit provides training in communication techniques. It assists in the development of printed materials and teaching aids with a focus upon farmer use of same.

### e. Special Project

This unit is responsible for special projects such as IADP. The services of other units will be utilized fully in the implementation of all special projects.

### f. Training, Evaluation and Staff Development

This unit is responsible for organizing and implementing training activities designed to build technical, teaching and leadership competence of extension personnel; it evaluates program activities. It assists in the professional development of staff through the identification of specific

needs and opportunities for obtaining the required training.

3. The National Administration will guide and assist states with extension operations such as administration, supervision, programming, training and evaluation.

## B. Responsibilities at the State Level

### 1. State Director

This officer provides overall leadership and program direction. He develops State extension programs in line with national agricultural policy; he develops and maintains liaison with agricultural research, regulatory and service organizations. He maintains contact with the farmer and his problems through supervisors, subject matter specialists and the information, training, and evaluation personnel. He obtains funds needed for extension operation and insures their proper use in line with the nation's food production program.

The office of the State Director of Extension should include the following units:

(a) Program Development and Supervision: This unit is responsible for the development of extension programs based on priority problems; supervision is provided to guide and assist extension staff in program implementation.

(b) Subject Matter: This unit provides subject matter based on research results required to answer specific questions and problems of the farmers.

(c) Information: This unit develops printed materials, posters, pictures, charts and other teaching aids required in effective communications with farmers.

(d) Training and Evaluation: This unit organizes and implements training to build the technical competence of extension personnel and farmers. Evaluation of program activities and personnel job performance is a continuing part of strengthening extension work.

### 2. Regional Supervision - (Deputy Director)

He provides supervision of personnel and programs at the regional level. This includes subject-matter supervision where the needs of the area can be served best by regional specialists. The supervisory responsibility should be clearly indicated.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION Unclassified	386-11-110-007	Agricultural Extension
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3. District Supervision - (District Extension Officer)

Effective supervision at the district level is essential. It is at this point that the standards for quality and use of field demonstrations for extension education in the district are established and maintained. Supervision of extension personnel and programs of a district should be assigned as a whole time job. The district level team headed by a district extension supervisor should include a small number of subject matter specialists assigned according to major agricultural problems. One full-time administrative officer should be included to handle non-technical administrative matters.

It is at the level of the AFW and his contact with the farmer that national agricultural policy is translated into food production. Honest and sustained implementation efforts at the AFW level will result in the desired production acceleration.

4. Block Supervision - (Agricultural Extension Officer)

The agricultural extension officer is responsible for seeing that the agricultural production worker can and does do his job. He is the primary person at the field level in assuring a two-way flow of information as well as seeing that appropriate arrangements are made for needed supplies. He assists with the development of procurement and supply channels which do not require the involvement of agricultural extension personnel in their operations. His main duties include assistance and support for APWs in laying field demonstrations and using the demonstrations in obtaining wide-spread farmer adoption of recommended practices.

The supervisor represents the director in dealing with local people; he advises with field workers on programming, plans of work, and implementation; he evaluates the work done by field staff and identifies strengths and weaknesses in operation; he arranges for specialist help on subject matter and extension teaching methods, and for general administrative support.

5. Local Field Staff - (Agricultural Production Worker)

These workers are the heart of an Agricultural Extension Service. They provide the principal contact with the farmer and his problems. The response of the farmer in adopting improved practices is determined largely by the AFW's skill, competence, conviction, and devotion to duty in helping the farmer.

He must be capable of and he must carry out, in a professional manner, every step in the production-cycle of assigned demonstration crops. He must devote his efforts to obtaining wide-spread adoption of a few carefully selected crops and practices known to have potential for impact on key agricultural production problems. This means continual on-the-job and other in-service training to keep him up to date in technical advances and ahead in skills and knowledge of the farmers they serve.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-10	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-11-250-019				4. TITLE Construction Equipment Operators							
	5.	BEGIN FY 1954		END FY 1962		6. PRIOR REFERENCES 386-42-019										
	U.S. FUNDING:	1954		1962												
	PHYSICAL WORK:	1957		1963												
7.		g.	b.	c.	d.	e.		f.		g.		h.		i. 1/		
AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		APPROPRIATION TITLE	LOAN OR GRANT	TOTAL	CONTRACT 1/	PERSONNEL SERVICES		PARTICIPANTS		COMMODITIES		OTHER COSTS		LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
						(1) U.S. AGENCIES		(2)	(1) U.S. AGENCIES	(2)	(1) DIRECT AND U.S. AGENCIES	(2)	(1) DIRECT AND U.S. AGENCIES	(2)	(1) DIRECT AND U.S. AGENCIES	(2)
						AID	PASA	CONTRACT	CONTRACT	CONTRACT	CONTRACT	CONTRACT	CONTRACT	CONTRACT	CONTRACT	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	491	491	-	-	271	-	-	-	24	-	196		
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	-	-	-	-	-	-	-	-	-	-	-		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	489	489	-	-	271	-	-	-	22	-	196	51	9
	EXPENDITURES (ACTUAL YEAR)	TC	G	12	12	-	-	7	-	-	-	1	-	4	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	2	2	-	-	-	-	-	-	-	-	-		
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	-	-	-	-	-	-	-	-	-	-	-		
	B. EXPENDITURES	TC	G	2	2	-	-	-	-	-	2	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	-	-	-	-	-	-	-	-	-	-	-		
III. BUDGET YEAR (EST.) FY _____	A. GROSS OBLIGATIONS															
	B. EXPENDITURES															
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
IV. PLANNING YR. (EST.) FY _____	GROSS OBLIGATIONS 2/															
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	491	491	-	-	271	-	-	-	24	-	196		491

REMARKS: Refers to Annex 6 & 3 of L.A.S. Unexpended balance is due to a pending financial adjustment.

1/ This is a memorandum (non-add) column. Project terminated in FY 1962. The two Technical Training Centers at Kotah (Rajasthan), and Nagarjunasagar (Andhra Pradesh)

2/ Show estimated expenditures in column i. were opened in December 1955 and July 1956 respectively. Two U.S. instructors were assigned at each center - one each in equipment operation and one each in maintenance and repair - for a total of about 16 man-years. These instructors were furnished these centers by two contractors - the Vinnell Co. Inc. and the Ralph M. Parsons Co. U.S.-financed heavy construction equipment worth \$425,160 was furnished these centers in FY 1954 under Project #386-42-019, for training and demonstration. During the life of the project, 525 trainees were graduated from these centers as of July 1963 when American technicians were withdrawn. These centers are now entirely under the control of C.W.P.C., GOI sponsoring agency, and run by Indian instructor personnel. The GOI plans to operate these centers for an indefinite further period. Since inception the Kotah Center has trained 308 graduates as of December 1, 1963, and the Nagarjunasagar Center trained 327 as of July 1, 1964. Additional classes are currently being conducted at these centers. The American technicians were transferred to the new centers opened at Nangal (Punjab) and Kakrapar (Gujerat) under Project ---- SECURITY CLASSIFICATION UNCLASSIFIED ---No. 386-11-250-223.

AID 1020-3 (7-64)		PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES							SECURITY CLASSIFICATION UNCLASSIFIED						
E-1b		1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		END FY		4. PROJECT NO.		5. TITLE			
		1 November 1964		India		Funding 1955		1965		386-42-250-020		Rihand Valley Development			
7. OBLIGATED AND DISBURSED		e. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
		(1)	(2)	(3)	(1)		(2)		(1)	(2)	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
		TYPE	SOURCE	LOAN OR GRANT	DOLLAR EQUIVALENTS (000) 1/		LOCAL CURRENCY UNITS (000)		OBLIGATED	DISBURSED	(a)	(b)	(a)	(b)	
					(a)	(b)	(a)	(b)			U.S. PERS.	NON-U.S. PERS.	OBLIGATED	DISBURSED	
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC			Sec.402	a/	41,420	41,420	198,300	198,300	198,300	198,300	-	-	-
	B. P.L. 480 LC				Sec.104(g)	L*	11,759	11,759	56,300	56,300	56,300	56,300	-	-	-
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC			Sec.402	-	-	-	-	-	-	-	-	-	-
	B. P.L. 480 LC				Sec.104(g)	L*	-	1,759	-	8,420	-	8,420	-	-	-
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC			Sec.402	-	-	-	-	-	-	-	-	-	-
	B. P.L. 480 LC				Sec.104(g)	L	8,501	8,501	40,700	40,700	40,700	40,700	-	-	-
III BUDGET YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC														
IV PLANNING YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC														
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC														
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC			Sec.402	a/	41,420	41,420	198,300	198,300	198,300	198,300	-	-	-
	B. P.L. 480 LC				Sec.104(g)	L	20,260	20,260	97,000	97,000	97,000	97,000	-	-	-

REMARKS:  
 1/ Exchange Rate: \$1 = Rs.4.7876  
 2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c		PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES PARTICIPANT TRAINING			4. PROJECT NO.											
		5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract			
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																							
		Non U.S.																							
B. ON BOARD	U.S.																								
	Non U.S.																								
II. PARTICIPANTS PROGRAMMED	A. U.S.																								
	B. THIRD CTRY.																								

REMARKS:  
 1/ End of Fiscal Year  
 \* Part of Loan # AID-86-11  
 Refers to Annex 6 & 3 of LAS  
 a/ Out of total financing of Rs.198.3 million Rs.0.967 was grant and Rs.197.333 was loan. The loan amount applied to the MSP Loans is as follows:  
 FOAx-86-2 Rs.68,156,056  
 ICAX-86-3 Rs.55,006,666  
 ICAX-86-5 Rs.74,170,387  
 SECURITY CLASSIFICATION UNCLASSIFIED  
 PAGE NO. AC-30



AID 10204 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-42-250-020	Rihand Valley Development
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1. The Activity Target

Stage I

To increase the electric generating capability of the State of Uttar Pradesh by 250 MW, to assist in supplying irrigation water for approximately 500,000 acres of land, and to furnish a measure of flood control in the area downstream of the Rihand Dam by providing U.S. dollar financing for U.S. technicians and construction equipment and local currency financing for the general construction of the Rihand Dam.

Stage II

To increase further the generating capability within the State of Uttar Pradesh by making available additional local currency financial assistance for the installation of a sixth 50-MW unit in the Rihand powerhouse.

Background: The project is located in the southeast corner of Uttar Pradesh on the Rihand River approximately 27 miles above the junction of the Sone River and the Rihand River or approximately 100 miles south of Banaras. The project consists of the following:

1. Concrete gravity dam - 306 feet high and 3,065 feet long with an overflow spillway with a design capacity of 471,000 cu.feet per second, controlled by 18 radial gates of 40 feet x 31.5 feet in dimension.
2. Reservoir with a gross storage of 8,600,000 acre feet and a live storage of 7,200,000 acre feet. A power plant at the base of the dam with an initial or Stage I capacity of 5 units of 50 MW each for a total of 250 MW with a provision being made for future installation (Stage II) of a sixth 50 MW unit.
3. Transmission and distribution system including
  - a. 385 miles of double circuit 132 KV lines
  - b. 122 miles of double circuit 66 KV lines
  - c. 960 miles of 33 KV lines
  - d. 1,300 miles of 11 KV lines
  - e. switchyard and substation equipment necessary to step up the generator sending voltage and to step down the voltage at the receiving substations.

The project authorities did not contract for consulting engineering services for overall engineering advice or services, but did avail themselves of technical assistance of the U.S. Bureau of Reclamation, and the U.S. AID; on occasions the authorities used the short-term services of American dam construction specialists under private contracts. A preliminary planning and design report, prepared for the project authorities by International Engineering, was issued in 1949. The detailed design and supervision of the dam and power plant were undertaken by the Uttar Pradesh Irrigation Department with assistance from the Central Water & Power Commission.

2. Progress to Date

Stage I

A construction contract was awarded in March 1955 to the Hindustan Construction Company. The dam and the 5-unit powerhouse were completed and put into service in 1962.

Stage II

The Uttar Pradesh State Electricity Board undertook in 1964 the installation of a sixth 50-MW unit which is scheduled to go into operation during December 1965.

3. Funding Requirements

Stage I

The total estimated cost of Stage I is the rupee equivalent of \$96.6 million. Of this amount, \$107,000 represents a grant from USAID for U.S. technician services. \$5,902,000 represents a grant from the same source to finance construction equipment procurement. Four rupee loans have been made as follows:

March 22, 1955 (MSF)	Rs. 68,156,056
July 10, 1956 (MSF)	Rs. 55,006,666
July 28, 1957 (MSF)	Rs. 74,170,387
March 26, 1962 (PL 480)	Rs. 56,300,000
	Rs. 253,633,109 (Equiv. \$52.98 million)

Stage II

It is understood that a local currency loan for Rs.40,700,000 (equiv. of \$8.5 million) will be requested and authorized in Fiscal Year 1965.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-42-250-020	Rihand Valley Development
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To date no engineering information has been furnished to the Mission and we are, therefore, not in a position to say what the money will be used for nor to provide any background or completion dates for the work to be accomplished. Discussions in early March 1964 with the Chairman of the State Electricity Board confirmed that construction work was under way for the sixth 50-MW unit and that it was scheduled to go into operation in December 1965. With this information it is presumed that the local currency loan requested will be to support the local currency costs of the installation of the sixth unit.

E-1a	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	3. PROJECT NO. 386-11-110-028 386-31-110-028		4. TITLE Agricultural Education and Research (old) Agricultural Universities Development (new)	
	5. BEGIN FY 1954		END FY 1963		6. PRIOR REFERENCES	
	U.S. FUNDING: PHYSICAL WORK:		1955 1963**			

7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)	APPROPRIATION TITLE	LOAN OR GRANT	TOTAL	CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
					(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
					AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	
I. THRU ACTUAL YEAR FY 1966*	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	11,919	11,469	129	-	5,292	18	2,312	303	2,725	-	1,140		
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	-	-	-	-	-	-	-	-	-	-	-		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	9,469	9,244	123	-	4,302	18	1,944	84	2,092	-	906	538	454
	EXPENDITURES (ACTUAL YEAR)	TC	G	-	-	-	-	-	-	-	-	-	-	-	-	-
C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	2,450	2,225	6	-	990	-	368	219	633	-	234			
II. OPERATIONAL YEAR (EST.) FY _____	A. GROSS OBLIGATIONS															
	B. EXPENDITURES															
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
III. BUDGET YEAR (EST.) FY _____	A. GROSS OBLIGATIONS															
	B. EXPENDITURES															
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
IV. PLANNING YR. (EST.) FY _____	GROSS OBLIGATIONS 2/															
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	11,919	11,469	129	-	5,292	18	2,312	303	2,725	-	1,140	225	9,244

REMARKS:  
 1/ This is a memorandum (non-add) column.  
 2/ Show estimated expenditures in column i.

\*Through FY1963 only.  
 \*\*Activity terminated in FY1963; unexpended balances transferred to Project # 281.  
 Refers to Annex 6 of LAS

AID 1020-3 (7-64)		PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES						SECURITY CLASSIFICATION UNCLASSIFIED									
E-1b		1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		4. PROJECT NO.		5. TITLE		6. PRIOR REFERENCES:					
		1 November 1964		India		1954 1955		1963 1963		386-11-110-028 386-31-110-028		Agricultural Education and Research (old) Agricultural Universities Development (new)					
7. OBLIGATED AND DISBURSED	a. FUNDS				b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)						
	(1)		(2)		(1)		(2)		(1)		(2)		(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
	TYPE		SOURCE		DOLLAR EQUIVALENTS (000) 1/		LOCAL CURRENCY UNITS (000)		OBLIGATED		DISBURSED		(a) U.S. PERS.		(b) NON-U.S. PERS.		
					(a) OBLIGATED		(b) DISBURSED						(a) OBLIGATED		(b) DISBURSED		
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G		992		4,751		-		1,429		-		3,322	
	FA ACT	(ii) TRUST FUND		Govt. Revenue		194		926		-		-		926		926	
	ACT	(iii) OTHER LC		Sec.402		2,384		5,144		-		2,494		343		5,037	
	B. P.L. 480 LC																
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G		-		-		-		-		-		-	
	FA ACT	(ii) TRUST FUND		Govt. Revenue		-		-		-		-		-		-	
	ACT	(iii) OTHER LC		Sec.402		-		-		-		-		-		-	
	B. P.L. 480 LC																
II OPERATIONAL YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/															
	FA ACT	(ii) TRUST FUND															
	ACT	(iii) OTHER LC															
	B. P.L. 480 LC																
III BUDGET YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/															
	FA ACT	(ii) TRUST FUND															
	ACT	(iii) OTHER LC															
	B. P.L. 480 LC																
IV PLANNING YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/															
	FA ACT	(ii) TRUST FUND															
	ACT	(iii) OTHER LC															
	B. P.L. 480 LC																
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G		992		4,751		-		1,429		-		3,322	
	FA ACT	(ii) TRUST FUND		Govt. Revenue		194		926		-		-		926		926	
	ACT	(iii) OTHER LC		Sec.402		2,384		5,144		-		2,494		343		5,037	
	B. P.L. 480 LC																
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G		992		4,751		-		1,429		-		3,322	
	FA ACT	(ii) TRUST FUND		Govt. Revenue		194		926		-		-		926		926	
	ACT	(iii) OTHER LC		Sec.402		2,384		5,144		-		2,494		343		5,037	
	B. P.L. 480 LC																

REMARKS:  
 1/ Exchange Rate: \$1 = Rs. 4.7876  
 2/ The total dollar equivalent amounts are the same as in Col. i of Table E-1a

E-1c		PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES		4. PROJECT NO.		5. ALL SUBSEQUENT FYs			6. TOTAL ALL YEARS				
		1 November 1964			India			1955 1955		1964 1965		386-11-110-028 386-31-110-028										
I PROJECT PERSONNEL	A. MAN YEARS	a. CUM. THRU ACTUAL			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
	U.S.	2.6	-	170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.6	-	170
	Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II. PARTICIPANTS PROGRAMMED	A. U.S.	10	-	470	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	470
	B. THIRD CTRY.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

REMARKS:  
 1/ End of Fiscal Year  
 2/ Through FY1963 only.  
 Note: The unliquidated balance of the Sec.402 rupee fund equivalent of \$1,310,000 has been transferred to project #281.

SECURITY CLASSIFICATION UNCLASSIFIED

PAGE NO. AC-34 (Revised)

PROJECT DATA SUMMARY — AID DOLLAR COSTS

E-1a

1. DATA CURRENT AS OF: 1 November, 1964		2. COOPERATING COUNTRY INDIA		3. PROJECT NO. 386-12-150-031 36-32-150-031		4. TITLE Food Grain Storage				
5. U.S. FUNDING:		BEGIN FY 1954	END FY 1963	6. PRIOR REFERENCES						
PHYSICAL WORK:		1955	1965							

7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES		f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
						(1) U.S. AGENCIES		(2)	(1) U.S. AGENCIES	(2)	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	CONTRACT	CONTRACT	CONTRACT	CONTRACT		
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	1,667	-	132	-	-	19	-	1,516	-	-	-	-	
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	-	-	-	-	-	-	-	-	-	-	-	-	
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	1,057	-	132	-	-	19	-	1,506	-	-	-	28	
	EXPENDITURES (ACTUAL YEAR)	TC	G	5	-	-	-	-	-	-	5	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	10	-	-	-	-	-	-	10	-	-	-	-	
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	-	-	-	-	-	-	-	-	-	-	-	-	
	B. EXPENDITURES	TC	G	10	-	-	-	-	-	-	10	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	-	-	-	-	-	-	-	-	-	-	-	-	
III. BUDGET YEAR (EST.) FY _____	A. GROSS OBLIGATIONS															
	B. EXPENDITURES															
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
IV. PLANNING YR. (EST.) FY _____	GROSS OBLIGATIONS 2/															
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	1,667	-	132	-	-	19	-	1,516	-	-	-	1,057	

REMARKS:

1/ This is a memorandum (non-odd) column.

Refers to Annex 6 of LAS.

2/ Show estimated expenditures in column i.

**PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES**

SECURITY CLASSIFICATION  
UNCLASSIFIED

E-1b

1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	3. Funding 1954 1965	BEG. FY 1954	END FY 1965	4. PROJECT NO. 386-12-150-031 386-32-150-031	5. TITLE Food Grain Storage	6. PRIOR REFERENCES:
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7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	Govt. Rev.	G	28	135	-	-	59	-	-	-	76	
	(ii) TRUST FUND	Govt. Rev.	-	5	5	24	24	-	-	-	24	24	
	(iii) OTHER LC	Sec. 402	G	21	21	99	97	-	-	53	-	45	
	B. P.L. 480 LC	Sec. 104(e)	G	25,433	25,433	121,762	121,762	121,762	121,762	-	-	-	
TOTAL ACTUAL FY 1964	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	Govt. Rev.	G	-	-	-	-	-	-	-	-	-	
	(ii) TRUST FUND	Govt. Rev.	-	-	-	-	-	-	-	-	-	-	
	(iii) OTHER LC	Sec. 402	G	-	-	-	-	-	-	-	-	-	
	B. P.L. 480 LC	Sec. 104(e)	G	-	6,070	-	29,060	-	29,060	-	-	-	
II OPERATIONAL YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	Govt. Rev.	G	-	-	-	-	-	-	-	-	-	
	(ii) TRUST FUND	Govt. Rev.	-	-	-	-	-	-	-	-	-	-	
	(iii) OTHER LC	Sec. 402	G	-	-	2	-	-	-	1	-	1	
	B. P.L. 480 LC	Sec. 104(e)	G	7,705	7,705	36,888	36,888	36,888	36,888	-	-	-	
III BUDGET YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	(ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
IV PLANNING YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	(ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	(ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	Govt. Rev.	G	28	135	-	-	59	-	-	-	76	
	(ii) TRUST FUND	Govt. Rev.	-	5	5	24	24	-	-	-	24	24	
	(iii) OTHER LC	Sec. 402	G	21	21	99	99	54	-	45	-	45	
	B. P.L. 480 LC	Sec. 104(e)	G	33,138	33,138	158,650	158,650	158,650	158,650	-	-	-	

REMARKS:  
1/ Exchange Rate: \$1 = S. 4.7070  
2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF: 1 November, 1964			2. COOPERATING CTRY. INDIA			3. PERSONNEL SERVICES		BEG. FY	END FY	4. PROJECT NO.								
										1956	1962	386-12-150-031 386-32-150-031										
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		a. CUM. THRU ACTUAL FY			b. ACTUAL FY 1964			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	7.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.3	-	-
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B. ON BOARD	U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II PARTICIPANTS PROGRAMMED	A. U.S.	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	-
	B. THIRD CTRY.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

REMARKS:  
1/ End of Fiscal Year

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-12-150-031 386-32-150-031	Food Grain Storage
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1. The Activity Target:

(a) To demonstrate modern methods of grain storage to the GOI by providing two 10,000 ton grain elevators, one at Calcutta in west Bengal, and one at Hapur, Uttar Pradesh, and 50 prefabricated 1000-ton warehouses, 32 at Cochin in Kerala and 18 at Avadi, Madras.

(b) To assist the GOI by providing PL 480 Section 104 (e) grants for increasing GOI-owned grain storage facilities throughout India from a capacity of 1,476,000 metric tons to 3,280,000 metric tons before the end of the Third Five Year Plan, March 31, 1966.

2. The Course of Action:

Since this is mainly a project for construction of warehouses, AID action primarily has been funding the GOI program for modernization and expansion of food grain storage facilities. However, equipment locally unavailable was provided, and entomologists and food grain storage and handling experts have been made available to advise the Indian technicians in these fields.

3. The Progress to Date:

The elevators at Hapur and Calcutta are completed and in use. The prefabricated warehouses at Cochin and Avadi are in use, although, due to the current shortages, only small amounts of grain are stored there now. Moisture testers, bag drivers, laboratory grain testing equipment are in India and installation is over 90 percent complete. The marine leg of Calcutta is still under construction.

4. Funding Requirements:

A.I.D. has provided the services of two U.S. technicians; training of 8 Indian officials in the U.S. Also two participants have been trained in this field in FY 63 and two more are under training in U.S. in FY 64 under project 386-11-130-001, Crop Production.

\$1.5 million have been provided for commodities and the equivalent of \$21,000 has been expended from the U.S. owned Section 402 rupees. Also one grant of PL-480 rupees equivalent of \$25.4 million has been made. An additional grant of \$7.7 million in PL-480 rupees has been proposed in FY 1965 to further expand the grain storage facilities.

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO.

AC-37

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED					
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY India			3. PROJECT NO. 386-11-130-041				4. TITLE Animal Husbandry							
	5.		BEGIN FY		END FY		6. PRIOR REFERENCES										
	U.S. FUNDING:		1951		1967												
	PHYSICAL WORK:		1951		1968												
7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT <sup>1/</sup>	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS <sup>1/</sup>		
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		TG	G	851	-	277	-	-	141	-	409	-	24	-		
	GROSS OBLIGATIONS (ACTUAL YEAR)		TG	G	83	-	33	-	-	26	-	22	-	2	-		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		TG	G	801	-	276	-	-	115	-	386	-	24	-	118	-
	EXPENDITURES (ACTUAL YEAR)		TG	G	83	-	33	-	-	16	-	30	-	4	-	-	-
C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TG	G	50	-	1	-	-	26	-	23	-	-	-	-	-	
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS		TG	G	72	-	44	-	-	27	-	1*	-	-	-		
	B. EXPENDITURES		TG	G	78	-	44	-	-	20	-	14	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TG	G	44	-	1	-	-	33	-	10	-	-	-	-	-
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS		TG	G	54	-	37	-	-	17	-	-	-	-	-		
	B. EXPENDITURES		TG	G	62	-	37	-	-	19	-	6	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TG	G	36	-	1	-	-	31	-	4	-	-	-	-	-
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS <sup>2/</sup>		TG	G	31	-	15	-	-	16	-	-	-	-	-	36	-
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>		-	-	-	-	-	-	-	-	-	-	-	-	-	31	-
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>		TG	G	1,008	-	373	-	-	201	-	410	-	24	-	1,008	-

## REMARKS:

- <sup>1/</sup> This is a memorandum (non-odd) column.  
<sup>2/</sup> Show estimated expenditures in column i.

\* AID-titled commodities

Refers to Annex 6 of LAS

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

SECURITY CLASSIFICATION  
UNCLASSIFIED

E-1b

1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	3. FUNDING 1951 1967 1951 1968	4. PROJECT NO. 386-11-130-041	5. TITLE Animal Husbandry	6. PRIOR REFERENCES:
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7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1)		(2)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				DOLLAR EQUIVALENTS (000) 1/		LOCAL CURRENCY UNITS (000)				(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED						
I CUMULATIVE THRU ACTUAL YEAR	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	Govt. Revenue	G	118	567	-	-	174	-	-	393		
	FA ACT (ii) TRUST FUND	Sec. 402	G	10	50	-	-	-	-	50	50		
	(iii) OTHER LC	Sec. 402	G	229	176	1095	842	295	-	764	547		
	B. P.L. 480 LC												
TOTAL ACTUAL FY 1964	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	Govt. Revenue	G	-	-	-	-	-	-	-	-		
	FA ACT (ii) TRUST FUND	Sec. 402	G	3	15	-	-	-	-	15	15		
	(iii) OTHER LC	Sec. 402	G	77	31	363	150	31	-	334	119		
	B. P.L. 480 LC												
II OPERATIONAL YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	Govt. Revenue	G	-	-	-	-	-	-	-	-		
	FA ACT (ii) TRUST FUND	Sec. 402	G	5	23	-	-	-	-	23	23		
	(iii) OTHER LC	Sec. 402	G	140	87	670	416	59	-	577	357		
	B. P.L. 480 LC												
III BUDGET YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	Govt. Revenue	G	-	-	-	-	-	-	-	-		
	FA ACT (ii) TRUST FUND	Sec. 402	G	4	18	-	-	-	-	18	18		
	(iii) OTHER LC	Sec. 402	G	101	93	483	447	70	-	401	377		
	B. P.L. 480 LC												
IV PLANNING YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	Govt. Revenue	G	-	-	-	-	-	-	-	-		
	FA ACT (ii) TRUST FUND	Sec. 402	G	4	18	-	-	-	-	18	18		
	(iii) OTHER LC	Sec. 402	G	42	70	201	336	56	-	162	280		
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	Govt. Revenue	G	-	-	-	-	-	-	-	-		
	FA ACT (ii) TRUST FUND	Sec. 402	G	-	-	-	-	-	-	-	-		
	(iii) OTHER LC	Sec. 402	G	-	86	-	408	65	-	-	343		
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	Govt. Revenue	G	118	567	-	-	174	-	-	393		
	FA ACT (ii) TRUST FUND	Sec. 402	G	23	109	-	-	-	-	109	109		
	(iii) OTHER LC	Sec. 402	G	512	512	2,449	2,449	545	-	1,904	1,904		
	B. P.L. 480 LC												

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS		1. DATA CURRENT AS OF:	2. COOPERATING CTRY.	3. PERSONNEL SERVICES	BEG. FY	END FY	4. PROJECT NO.													
			1 November 1964	India	PARTICIPANT TRAINING	1951	1967	386-11-130-041													
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY			b. ACTUAL FY 1964			c. OPERATIONAL FY 1965			d. BUDGET FY 1966			e. PLANNING FY 1967			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	19	-	-	2	-	-	3	-	-	1.9	-	-	1	-	-	-	24.9	-	-
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B. ON BOARD	U.S.					2			3			1			1						
	Non U.S.																				
II. PARTICIPANTS PROGRAMMED	A. U.S.		53			9			10			6			6				75		
	B. THIRD CTRY.																				

REMARKS:

1/ End of Fiscal Year

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-130-041	Animal Husbandry
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## I. The Activity Targets

Assistance under this project is now confined exclusively to poultry development, processing and marketing. Earlier objectives of the project have been achieved (See Section III). The remaining targets are:

1. To impart training in all aspects of poultry production, processing and marketing to extension and other GOI officials and to private poultrymen.
2. To demonstrate modern processing of poultry meat.
3. To demonstrate modern transportation of poultry products from producer to consumer.
4. To demonstrate modern handling and storage of eggs.

U.S.A.I.D. undertook this project because poultry products could contribute substantial amounts of badly needed protein to the Indian diet. For example in 1955, when the project was started, the average per capita consumption of eggs was about five per year and poultry meat was used in very limited quantities. At that time, with the very limited production, marketing was not a major problem, and our efforts and those of the GOI focussed on increased production. To-day, with production tending to outrun the ability of processing and marketing facilities to get meat and eggs to the consumer, emphasis has shifted to the targets above.

Currently there is no modern processing, transport or marketing of poultry products in India. For meat purposes birds are delivered alive to the market, usually in poor condition; they are brought to market by bullock cart, bicycle, truck, tonga or on foot, as the case may be. Eggs are delivered in baskets, packed in rice hulls or other material, in a dirty, generally unsanitary and often spoiled condition; breakage is often 10 percent or more.

The tremendous increase in production during the last three years in several parts of the country, notably in Punjab has created acute marketing problems. Poultry and its by-products are highly perishable, thus creating adequate marketing facilities is now the priority task. The proposed plant at Chandigarh (see below) will operate at full capacity, because of the increased poultry production in the surrounding areas.

Qualitatively the broad objectives are to change the entire Indian approach to poultry production (already accomplished), to develop institutions capable of carrying forward the new program, and to upgrade generally the whole Indian approach to processing, transport and marketing of poultry products. Experience gained in the last phase will benefit Indian handling of perishable agricultural produce in general.

Quantitatively we intend to assist in establishing a complete, integrated poultry unit at Chandigarh, Punjab, which will include one feed mill of 32 tons daily capacity; one modern hatchery of approximately 100,000-egg capacity; brooder houses which can handle 9,000 birds; nine laying houses for 1,000 birds each; and a modern broiler processing plant with cold storage facilities. The plant will have egg grading and refrigerated holding rooms. In addition five egg-collecting centers with refrigeration and total capacity of 345,000 eggs are to be constructed in rural areas tributary to Chandigarh. Four complete refrigerated truck-trailers are to be put into operation, each with a load capacity of 108,000 eggs or 11,000 pounds of dressed, frozen birds, to move such products from Chandigarh to Delhi, where a large cold storage and wholesale outlet warehouse is to be constructed.

It is impossible to predict exact dates for completion of various phases of the project, but it is expected that the entire project will be completed by the end of FY1967 to a point where U.S. assistance will no longer be needed. It is not planned to extend the marketing demonstration to other parts of India; the Chandigarh-Delhi demonstration will serve as a training ground for poultrymen from other parts of the country. The project will phase out in FY1967.

## II. The Course of Action

Since the developmental and production aspects of the project are completed (See Section III), A.I.D., the Government of India and Punjab State propose to attain project objectives in the following manner:

1. Complete the various parts of the Chandigarh poultry unit for which A.I.D. has supplied or is supplying dollar-financed equipment to a value of \$45,044 and locally procured equipment worth Rs. 140,000. The Punjab Government and Center are providing 12 acres of land, buildings, labor and equipment worth Rs. 2,000,000.
2. Stimulate and support the establishment of a Punjab Poultry Corporation in the public sector to handle the physical, fiscal and managerial aspects of the demonstration and conduct all related activities.

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-130-041	Animal Husbandry
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3. Build and place into operation two refrigerated transport trucks. The AID-supplied imported mobile refrigeration units are in India, the Corporation will provide the truck-tractors and the trailer bodies are to be constructed within six months.
4. When the project is operating, the Government of India, Punjab State and A.I.D. will develop a practical training program to cover all aspects of the poultry industry, with trainees to come from all parts of India. During the early part of this stage A.I.D. technicians will participate in and guide the direction of the training.

Three A.I.D. technicians are involved with different aspects of this program, as follows (see Table I, attached):

1. An Agricultural Marketing and Processing Advisor is assigned to work with the Government of India on broad aspects of the overall poultry program, not only on operations in Punjab, but in applying that experience to the problems of the other Indian states. He guides the thinking and influences development of policy in the Center; of utmost importance in India, because the direction taken by the States is largely determined at the Center.
2. A Livestock Advisor (Poultry) is assigned to the Northern Region of India, and is posted at Chandigarh, where he works specifically with the Punjab Poultry Officer in completing the Chandigarh processing and marketing center and will also guide the training which will follow at this Center. In addition he advises Uttar Pradesh, Rajasthan, and Himachal Pradesh on all aspects of poultry development and marketing.
3. Another Agricultural Marketing and Processing Advisor assigned at Delhi is the engineer who is vital to the success of the whole program. He designs the processing and cold storage plants and collecting centers involved and determines requirements for processing equipment and refrigeration units. He also prepares plans and blueprints for these units, as well as for transport units, as needed. Guidance in the erection of structures and in the installation, operation and maintenance of processing and refrigeration equipment is also his responsibility. This type of engineering expertise is too limited in India to be available to the project in a timely way.

It is expected that 22 participants will be trained from FY 1965 through FY 1967 in various fields of poultry and egg processing and marketing technology and management. The FY 1965 original budget provides for eight participants. The supplemental budget provides two more participants subject to availability of funds. A total of 12 participants is provided for in FY 1966 and FY 1967.

### III. Progress to Date

Early Development - In 1955, following recommendations made by an A.I.D. consultant, project agreement No. 38 was signed between GOI and the U.S. under which a Poultry Advisor was brought to India and baby chicks and equipment in considerable quantities were imported. The Advisor served from 1956 to 1958. As a result of his efforts the Poultry Development Section in the Ministry of Food and Agriculture was created in 1957.

In 1960 a second Poultry Advisor came to India for service in Punjab. He was instrumental in directing the formation of the highly successful Gurdaspur poultry cooperative project. Modern methods of poultry production, modified to fit Indian village conditions, were introduced. Much has been written elsewhere about this project. In essence, awareness of its success and the money-making possibilities of improved poultry production, following A.I.D.-recommended methods, spread like wildfire. Very quickly many other cooperatives patterned after Gurdaspur were formed and hundreds of individuals went into the business, not only in Punjab but in Delhi State, Uttar Pradesh and elsewhere. Now one sees A.I.D.-type thatch roof poultry houses increasingly frequently in northern India, and local adaptations of them are springing up in other parts of the country.

Recent Development - Activities recently have shifted from production, which no longer requires our assistance, to the development of a modern system of marketing, storage and transportation of poultry products. The old methods are inadequate for proper handling of the large volume of both eggs and meat now being produced, much less for the production anticipated in the future. The Government of India now realizes that the poultry industry can contribute in a major way to farm earnings and to the general diet; apathy has completely disappeared and the GOI now wants to spread the poultry production program, on the Gurdaspur pattern, to all of India. The Center is also aware of the inadequacy of the marketing system and has agreed to help Punjab set up a model system for the country. These major changes in attitude, thinking and action on the part of GOI and Punjab State are directly attributable to A.I.D. activities in this project.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-130-041	Animal Husbandry
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Specific items of recent progress are the following:

1. Articles of incorporation for a Punjab Poultry Corporation were reviewed by the Punjab Chief Minister and others and have been approved.
2. Punjab, with Center help, has allocated Rs. 2,000,000 to support the activities of the Corporation until it becomes self supporting.
3. Plans and blueprints have been prepared for all elements of the Chandigarh processing plant, collecting centers and Delhi cold storage - wholesale unit.
4. Plans and blueprints have been completed and bids let for the construction of two refrigerated trailers.
5. Plans and blueprints have been made for all refrigeration units and for all machinery to be built or placed in the processing plant.
6. Most project commodities and machines, except those to be built in place, have been received but not installed. Some of these were supplied by A.I.D. and some by Punjab.
7. Land has been provided by Punjab State in Chandigarh for the main center there.
8. The feed mixing mill, hatchery, brooder and laying houses have been or are being constructed.
9. Electricity for the center has been sanctioned.
10. Training in poultry production has been given to about 200 poultry officers, Agricultural Extension Officers and other extension and private personnel in courses conducted in Punjab, West Bengal and Kerala.

#### IV. Funding Requirements

##### 1. Total Requirements

During the life span of this project, total funding requirements are estimated at \$1,008,000 from dollar funds and equivalent to \$512,000 from U.S.-owned Section 402 rupees. Dollar funding consists of \$373,000 for the services of technicians, \$201,000 for participant training, \$410,000 for commodities; and \$24,000 for other costs.

##### 2. Operational Year Requirements (FY1965)

FY1965 funding requirements are \$72,000, which include \$44,000 for the services of 3 technicians, \$27,000 for training of 10 participants, and \$1,000 for the purchase of AID-titled demonstrational equipment in support of the technicians' work.

In addition to dollar funding above, U.S.-owned Section 402 rupees equivalent to \$140,000 are provided, i.e. \$19,000 to cover international travel and authorized allowances payable to U.S. technicians; \$15,000 for international travel of participants; and \$106,000 for rupee costs of project support materials and services available locally in India.

##### 3. Budget Year Requirements (FY1966)

DG dollar funding in the budget year is estimated at \$54,000 consisting of \$37,000 for technician services and \$17,000 for training of six participants.

In addition to dollar funding above, U.S.-owned Section 402 rupees equivalent to \$101,000 are required to cover international travel and authorized allowances payable to U.S. technicians (\$17,000); international travel for participants (\$9,000); and rupee costs of project support materials and services available locally in India (\$75,000).

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-130-041	Animal Husbandry
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Technicians - Direct-Hire

<u>Title and Identification of Position</u>	<u>D. H. or PASA</u>	<u>Name of Incumbent</u>	<u>Position Grade</u>	<u>Position No.</u>	<u>Start of Funding for FY</u>	<u>Date of Home Leave/Return or Transfer</u>	<u>Location</u>	<u>Funding \$</u>	<u>Section 402 Rs. (\$ Equiv.)</u>
					<u>FY1965</u>				
Agricultural Marketing Processing Advisor	D	I. G. Brady	5	89	7/1/64	2/1/65 (HL)	New Delhi	13,000	10,200
Livestock Advisor Poultry	D.	E. M. Nelson	3	453	7/1/64	2/12/66 (TR)	Chandigarh	17,500	4,800
Agricultural Processing Advisor (Engineering)	D	E. R. Flegel	4	478	7/1/64	10/18/65 (TR)	New Delhi	<u>14,200</u>	<u>4,500</u>
FY1965 Total Estimated Cost								44,700	19,500
					<u>FY1966</u>				
Agricultural Marketing Processing Advisor	D	I. G. Brady	5	89	7/1/65	2/1/65 (HL)	New Delhi	11,700	4,500
Livestock Advisor Poultry	D	E. M. Nelson	3	453	7/1/65	2/12/66 (TR)	Chandigarh	16,100	5,200
Agricultural Processing Advisor (Engineering)	D	E. R. Flegel	4	478	7/1/65	10/18/65 (TR)	New Delhi	<u>9,480</u>	<u>7,500</u>
FY1966 Total Estimated Cost								37,250	17,200

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-130-041	Animal Husbandry
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Participants (Non-Contract)

<u>Brief Description of Training</u>	<u>No. of Partici- pants</u>	<u>Duration of Training</u>	<u>Target Starting Date</u>	<u>Estimated Cost</u>	
				<u>\$</u>	<u>Section 402 Rs. (\$ Equiv.)</u>
<u>FY1965</u>					
Poultry Processing and Marketing	5	6 months	4/1/65	13,700	7,500
Hatchery Management	5	6 months	4/1/65	<u>13,700</u>	<u>7,500</u>
FY1965 Estimated Total Funding				27,400	15,000
<u>FY1966</u>					
Poultry Processing and Marketing	3	6 months	4/1/66	8,220	4,500
Hatchery Management	3	6 months	4/1/66	<u>8,220</u>	<u>4,500</u>
FY1966 Estimated Total Cost				16,440	9,000

FY1965 funding includes \$5,480 for two participants provided in the supplementary budget, subject to approval by AID/W.

## PROJECT DATA SUMMARY -- AID DOLLAR COSTS

SECURITY CLASSIFICATION  
UNCLASSIFIED

E-1a	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. PROJECT NO.				4. TITLE							
	1 November 1964		India		386-11-130-061				Crop Production							
	5. U.S. FUNDING:		BEGIN FY		END FY		6. PRIOR REFERENCES									
	PHYSICAL WORK:		1955		1971											
7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		a.	b.	c.	d.	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
		APPROPRIATION TITLE	LOAN OR GRANT	TOTAL	CONTRACT 1/	(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT
						AID	PASA									
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	1,333	-	469	-	-	180	-	659	-	25	-		
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	108	-	64	-	-	28	-	15	-	1	-		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	918	-	463	-	-	152	-	278	-	25	-	155	
	EXPENDITURES (ACTUAL YEAR)	TC	G	84	-	60	-	-	12	-	11	-	1	-	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	219	4	65	67	4	81	-	2	-	-	-		
	B. EXPENDITURES	TC	G	180	4	65	67	4	33	-	11	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	454	-	6	-	-	76	-	372	-	-	-		
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TC	G	153	-	60	43	-	50	-	-	-	-	-		
	B. EXPENDITURES	TC	G	152	-	60	43	-	38	-	11	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	455	-	6	-	-	88	-	361	-	-	-		
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/	TC	G	149	-	61	38	-	50	-	-	-	-	-	151	-
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	276	-	72	144	-	60	-	-	-	-	-	729	-
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	2,130	4	727	292	4	421	-	661	-	25	-	2,126	4

## REMARKS:

- 1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

Commodities in FY1965, \$2,000, AID-financed.

Refers to Annexe 6 of LAS.

AID 1020-3 (7-64)		PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES										SECURITY CLASSIFICATION UNCLASSIFIED			
E-1b		1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY 1955 1955		END FY 1971 1971		4. PROJECT NO. 386-11-130-061		5. TITLE Crop Production			
		1 November 1964		India								5. PRIOR REFERENCES:			
7. OBLIGATED AND DISBURSED		e. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
		(1)	(2)	(3)	(1)		(2)		(1)	(2)	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
		TYPE	SOURCE	LOAN OR GRANT	DOLLAR EQUIVALENTS (000) 1/		LOCAL CURRENCY UNITS (000)		OBLIGATED	DISBURSED	(a)	(b)	(a)	(b)	
					(a)	(b)	(a)	(b)			U.S. PERS.	NON-U.S. PERS.	OBLIGATED	DISBURSED	
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G		155		744			200	-		544	
	FA ACT	(ii) TRUST FUND	Govt. Revenue		18	17	84	83	-	-	-	-	84	83	
		(iii) OTHER LC	Sec. 402	G	192	182	921	869	-	-	505	-	500	364	
		B. P.L. 480 LC													
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G		-		-			-	-		-	
	FA ACT	(ii) TRUST FUND	Govt. Revenue		6	5	27	27	-	-	-	-	27	27	
		(iii) OTHER LC	Sec. 402	G	53	45	254	218	-	-	155	-	90	63	
		B. P.L. 480 LC													
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND	Govt. Revenue		10	10	48	48	-	-	-	-	48	48	
		(iii) OTHER LC	Sec. 402	G	317	117	1,517	560	-	-	203	-	981	357	
		B. P.L. 480 LC													
III BUDGET YEAR (EST.) FY 1966	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND	Govt. Revenue		10	10	48	48	-	-	-	-	48	48	
		(iii) OTHER LC	Sec. 402	G	256	160	1,225	767	-	-	181	-	1,072	586	
		B. P.L. 480 LC													
IV PLANNING YEAR (EST.) FY 1967	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND	Govt. Revenue		7	7	34	34	-	-	-	-	34	34	
		(iii) OTHER LC	Sec. 402	G	264	229	1,360	1,096	-	-	660	-	115	436	
		B. P.L. 480 LC													
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND	Govt. Revenue		30	31	144	145	-	-	-	-	144	145	
		(iii) OTHER LC	Sec. 402	G	279	640	1,336	3,067	-	-	1,984	-	158	1,083	
		B. P.L. 480 LC													
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND	Govt. Revenue		75	71	385	385	-	-	-	-	385	385	
		(iii) OTHER LC	Sec. 402	G	1,328	1,328	6,359	6,359	-	-	3,533	-	2,826	2,826	
		B. P.L. 480 LC													

REMARKS:  
 1/ Exchange Rate: \$1 = Rs. 4.7876  
 2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c		PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS										1. DATA CURRENT AS OF:		2. COOPERATING CTRY.		3. PERSONNEL SERVICES PARTICIPANT TRAINING		BEG. FY 1955 1956		END FY 1971 1971		4. PROJECT NO. 386-11-130-061			
		a. CUM. THRU ACTUAL FY			b. ACTUAL FY 1964			c. OPERATIONAL FY 1965			d. BUDGET FY 1966			e. PLANNING FY 1967			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS					
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract			
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	22	-	-	4.4	-	-	6.0	3.3	0.3	4	3	-	4	3	-	8	4	-	48.4	13.3	0.3		
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	B. ON BOARD	U.S.	-	-	-	3	-	-	4	3	-	4	3	-	4	3	-	-	-	-	-	-	-		
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
II. PARTICIPANTS PROGRAMMED	A. U.S.		48	-	-	8	-	-	25	-	-	16	-	-	16	-	-	25	-	-	130	-	-		
	B. THIRD CTRY.		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

REMARKS:  
 1/ End of Fiscal Year  
 FY1965 funding includes 15 PASA consultants and 1 contract consultant. These are not reflected in the number of technicians on board at the end of operational year.

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

SECURITY CLASSIFICATION  
UNCLASSIFIED

E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3.	BEG. FY	END FY	4. PROJECT NO.		5. TITLE			
	1 November 1964		India		Funding	1955	1971	386-11-130-061		Crop Production			
					Phys. Work	1955	1971			6. PRIOR REFERENCES:			
7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) JOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G		155	744			200	-		544	
	FA ACT	(ii) TRUST FUND		Govt. Revenue	18	17	84	83	-	-	84	83	
		(iii) OTHER LC	G	Sec. 402	192	182	921	869	-	-	500	364	
		B. P.L. 480 LC											
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G		-	-			-	-		-	
	FA ACT	(ii) TRUST FUND		Govt. Revenue	6	5	27	27	-	-	27	27	
		(iii) OTHER LC	G	Sec. 402	53	45	254	218	-	155	-	90	63
		B. P.L. 480 LC											
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND		Govt. Revenue	10	10	48	48	-	-	48	48	
		(iii) OTHER LC	G	Sec. 402	317	117	1,517	560	-	203	-	981	357
		B. P.L. 480 LC											
III BUDGET YEAR (EST.) FY 1966	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND		Govt. Revenue	10	10	48	48	-	-	48	48	
		(iii) OTHER LC	G	Sec. 402	256	160	1,225	767	-	181	-	1,072	586
		B. P.L. 480 LC											
IV PLANNING YEAR (EST.) FY 1967	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND		Govt. Revenue	7	7	34	34	-	-	34	34	
		(iii) OTHER LC	G	Sec. 402	284	229	1,960	1,096	-	660	-	115	436
		B. P.L. 480 LC											
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND		Govt. Revenue	30	31	144	145	-	-	144	145	
		(iii) OTHER LC	G	Sec. 402	279	640	1,336	3,067	-	1,984	-	158	1,083
		B. P.L. 480 LC											
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND		Govt. Revenue	75	75	358	358	-	-	358	358	
		(iii) OTHER LC	G	Sec. 402	1,328	1,328	6,359	6,359	-	3,533	-	2,826	2,826
		B. P.L. 480 LC											

REMARKS:

1/ Exchange Rate: \$1 =

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:		2. COOPERATING CTRY.		3.		BEG. FY	END FY	4. PROJECT NO.										
	PERSONNEL AND PARTICIPANTS			1 November 1964		India		PERSONNEL SERVICES PARTICIPANT TRAINING		1955	1971	386-11-130-061										
I PROJECT PERSONNEL	A. MAN YEARS	g. CUM. THRU ACTUAL FY			b. ACTUAL FY 1964			c. OPERATIONAL FY 1965			d. BUDGET FY 1966			e. PLANNING FY 1967			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
	U.S.	22	-	-	4.4	-	-	6.0	3.3	0.3	4	3	-	4	3	-	8	4	-	44.0	13.3	0.3
	Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. ON BOARD				3	-	-	4	3	-	4	3	-									
	U.S.																					
	Non U.S.																					
II. PARTICIPANTS PROGRAMMED	A. U.S.	48	-	-	8	-	-	25	-	-	16	-	-	16	-	-	25	-	-	130	-	-
	B. THIRD CTRY.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

REMARKS:

1/ End of Fiscal Year

FY1965 funding includes 15 PASA consultants and 1 contract consultant. These are not reflected in the number of technicians on board at the end of operational year.

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Introduction

In the introductory paragraphs under The Activity Targets of the accompanying E-1 narrative for Agricultural Extension, to which reference is hereby made, the FY 1965 reorientation and FY 1966 restructuring of the present project are outlined. To facilitate inclusion of certain activities being conducted under Crop Production in a FY 1966 project to be titled Subject-Matter Extension Support, the present E-1 narrative is in the form of a dual presentation, covering Foodgrain Production and Promotion and Fertilizer respectively. A single set of Crop Production E-1 face sheets has been utilized, however, to cover past and continuing Crop Production technical assistance through FY 1965 and assistance contemplated from FY 1966 onward under Subject-Matter Extension Support. In FY 1966 new E-1 face sheets will be prepared for the latter project only and the former project will be terminated.

FOODGRAIN PRODUCTION AND PROMOTION

I. The Activity Targets

The primary qualitative target of this activity is to help masses of Indian cultivators, through the use of extension personnel supported by understanding and capable government officials, to recognize the opportunities for maximum agricultural production through combining fertilizers with proper seed-bed and land preparation, good seed of improved varieties and hybrids, adequate insecticides, proper cultivation practices and necessary water management. All are requisite to any Indian program for accelerated agricultural production.

It is anticipated that this project can achieve its objectives by FY 1971.

The specific objectives of this project are as follows:

- A. To assist in training GOI extension personnel, seed specialists and plant protection officers in the specific quality seed and plant protection knowledge and skills that they need to effectively support and execute the result-demonstration technique.
- B. To introduce and demonstrate to Indian cultivators the advantages of using good seed, of growing new high yielding varieties and hybrids of foodgrain crops, of supplying adequate quantities of fertilizers and of giving adequate plant protection measures to these crops.

- C. To assist in initiating a quality seed production program for wheat, rice and other foodgrain crops so that the cultivator will have available to him the "good seed" which was demonstrated.

- D. To assist in determining the plant protection needs for specific foodgrain crops and in making needed material available to cultivators.

The project's quantitative targets are:

- A. To assist in training and changing the attitude of extension workers, seed specialists and plant protection officers in their approach to the cultivator so that agricultural extension might become a meaningful advisory service.
- B. To draw the cultivators away from some of the traditions and customs that are stifling agriculture progress through providing them with the means of seeing the results of combining the various needed agricultural inputs - largely through demonstrations with attendant farmer meetings and supporting educational techniques.
- C. To help assure cultivators of adequate quantities of good quality seed of improved varieties and hybrids by providing needed quality control inspection services and laboratories to support production efforts of seed growers, producers and dealers.
- D. To assure that adequate quantities of the proper plant protection materials are flowing to cultivators.

Background

India is faced with a continuing and ever increasing shortage of foodgrains and other food crops. At present the gap between requirements and indigenous foodgrain production is 11 million tons or 14 percent of the country's total production. Imports can fill this gap temporarily. The foodgrain production and promotion project is designed to help India close this gap by 1970/71.

As AID/India gives special attention to increasing fertilizer production, distribution and use, it becomes mandatory that quality seed and plant protectants be in adequate supply if the expected returns from fertilizer are to be realized. Not only must these supplies be available but also the 60-odd million cultivators need to see the results of their use applied to the

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fields in their communities. It is only then that the cultivators will have sufficient confidence to adopt the improved practices that are needed to increase food production and close the foodgrain production gap.

The needed demonstration technique can only be successful when the demonstrators have the technical competence to execute a successful demonstration. Therefore top priority is to be given to the subject-matter training that the agriculture extension workers need to become effective in demonstrating the use of good quality seed and plant protectants to cultivators.

Demonstrating the use of good seed is of no value unless adequate supplies are available. These supplies will not be forthcoming without the efforts of hundreds of informed seed growers, producers and seed dealers in multiplying improved varieties and hybrids according to specific quality specifications. Appropriate agencies and laboratories are needed to provide the necessary seed specialists who can support, technically guide and control the quality of a massive quality seed production effort.

The need for these services and controls is perhaps more obvious with crops of hybrid origin, but is equally important for all crops if the cultivator is to get the necessary good quality seed to achieve maximum production. The Mission has recognized the importance of such a program to Indian agriculture and in recent years has provided the required assistance to move toward this goal.

As long as fertilizer production was low and good quality seed was not available plant protection measures were of relatively small importance. However, as advances are made in improving the quantity and quality of fertilizers and seeds available, plant protection measures become increasingly important. They become an essential part of the demonstration of a package of improved practices and must be applied effectively by the cultivators.

The present system of Indian farming though now bound by tradition and custom has tremendous opportunity for increased yields. In order to attain the quantitative targets of increased foodgrain production, the cultivators must be shown the economic advantage to themselves of using good seed of new high yielding varieties and hybrids of important foodgrains, applying insecticides and making the proper use of other inputs. The advantages of following good farming practices must be convincingly presented to them. This is an extension job, so the first essential, as soon as good seed, fertilizers and insecticides are available,

is to teach the extension workers how to conduct extension programs and demonstrations which will create the incentives that activate the farmer's use of the new techniques and inputs.

## II. The Course of Action

Since some of the activities hereunder are of recent origin and certain elements involve the former Crop Production Project - 061 reference to Section III below will help explain the following course of action proposed (U.S. technicians and headquarters staff will support all these lines of development as appropriate):

- A. Subject-matter training will be provided to the best qualified extension personnel regarding the meaning of good quality seed, the proper varieties and hybrids to use and the necessary plant protection measures to follow. Through the demonstration and "learn by doing" approach, they will be taught the proper techniques for conducting and using demonstrations with cultivators.
- B. Seed specialists and plant protection officers who will support the extension program will be trained in the inspection, laboratory and production skills needed by them.
- C. Assist in conducting approximately 400 foodgrain crop demonstrations per year in enough districts, so that by 1971 all major foodgrain-producing districts will have been covered.
- D. Approximately the best 25 percent of each season's demonstrations will be converted into crop rotation or land use demonstrations to prove the feasibility and desirability of raising two or three crops per year, so that the land never lies idle. For example such a rotation might be: maize - July to October; wheat - November to March; fodder, vegetable or green manure crop - April to June; and then back to maize again. The production potential from this kind of farming is very great, provided all of the inputs, i.e. seed, fertilizer, pesticides, water, implements, etc., are available and all recommended practices are followed.
- E. To establish, equip and put into operation four more seed testing laboratories in FY 1965 and four in FY 1966. This will complete 14, one in each major State, in addition to one at the Center which was equipped by the Indian Agricultural Research Institute.

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- F. To make the seed control and certification programs operative as soon as enabling legislation is passed by Parliament. The seed act is expected to come up for the Parliament's consideration late in 1964 and will require explanation and support.
- G. Assistance also to be given to the Indian Agricultural Research Institute in planning modern storage for seed stocks of the various breeding and research programs of that institution.
- H. Center and State government plant protection specialists to determine their specific needs for materials and support industrial sources in their efforts to supply the needs.

Four A.I.D. technicians will guide this program in FY 1965.

1. One Agronomy Advisor (Seed Improvement) is assisting the Center and the States in developing this program. He and his counterparts plan the various training courses and he actively participates in the training activities. He assists the States in planning their seed testing laboratories, placing A.I.D.-provided equipment in operation, and guiding local personnel in carrying out laboratory operations. He will also assist State Departments of Agriculture in planning their seed certification and control agencies for helping seed growers, producers and dealers supply the best quality of seed possible to cultivators.
2. One Agriculture Advisor presently works on the hybrid maize demonstration program through the district agriculture officers and other extension personnel in the states on a restricted scale, since he has numerous other duties to perform, chiefly administrative. He has the cooperation and help of some of the A.I.D. agricultural field staff, who can give a certain amount of supervision to local demonstrations. This technician handles all of the administrative aspects of the hybrid demonstration program and prepares all reports.
3. An additional Agronomy Advisor (Crops) is to be assigned in FY 1965 and will devote his full time to this activity. His duties will be to guide the demonstration work with such foodgrain crops as wheat, rice, and sorghum and expand the training aspects with the extension service. He will also expand the crop rotation - land use aspects of the program.

4. An Agronomy Advisor (Plant Protection) will be assigned in FY 1965. He will devote his time to assuring that adequate plant protection measures are used in the demonstration program, and to training extension workers and plant protection officers. He will also consult with industrial sources to help assure that adequate quantities of pesticides are available.

All project technicians will assist in giving training to extension personnel in the art of conducting and using demonstrations and in the practices that must be followed in good farming. In addition to the training they will provide in the field during the demonstrations, these technicians will also be used at selected training centers where intensive training can be provided. They will also assist in preparing audio-visual material for use in the program.

The contribution of the Government of India and the states consists of providing laboratory buildings or space, along with furniture, other required local facilities, and staff to operate the seed laboratories. In addition they will make available the services of extension personnel, seed specialists, plant protection officers, promotion and visual aid officials of the National Seed Corporation, and other facilities of this Corporation for despatching the needed seed to demonstration areas. Seed, fertilizers and insecticides for conducting demonstrations will be procured with U.S.A.I.D. funds from local sources.

In addition to the major lines of activity outlined above, additional short-term operations become necessary in this field to meet emerging policy or operational problems confronting the GOI. The current such operations are:

#### Foodgrain Price Policy

Three consultant teams are involved, as follows:

1. A Program Team, with five members, will review: (a) programs for foodgrain procurement with a view to suggesting improvements in procedures for purchasing, storing, accounting for and disposing of foodgrains, and laying the groundwork for visits of Indian teams to the U.S. to observe and study U.S. procedures, (b) consider problems of executing more flexible programs for dealing with seasonal and localized surpluses or weak prices; and (c) develop a model economic justification for a support program for one of the foodgrains, indicating criteria of prices, quantities, disposal outlets and program costs relevant to price level and scope and method of support, and recommending needed improvements in information for decisions on support programs.

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2. A Market Structure Team, which will consist of two members, will help determine the prevalence and strength of competitive actions in Indian markets, and the source and strength of imperfections, or undue market power, in local marketing systems. The team will also conduct a series of studies of selected foodgrain and cash crop markets to determine the structure of firms comprising these markets; the extent and effect of their inter-dependence when deciding whether to compete or not; what, if any, restraints may be applied to firms which decide and act independently as to pricing or other competitive practices in procurement or sales; and what effect deficiencies in competition may have on local prices and supplies.

3. A Price Analysis Team, which will have two members, will help determine the relationship of prices to supply and demand factors; effects of regulatory programs; and seasonal and regional variations as a basis of decisions as to levels of prices, seasonal and geographic differentials for, and probable quantity implications of, alternative price stabilization programs.

The cost estimate for the above price support program consultants totals US\$34,300 and 59,100 Sec.402 rupees.

#### Other Consultant Requests of GOI

These are now estimated to include the following numbers of consultants and total man months of assignment:

One on aerial application of pesticides for two months; one on cattle sterilization and breeding for one month; three on soil and land use survey for six months; two on fertilizers for four months; and two on extension training for five months. Total consultants nine, for a total of 18 man months at \$1,600 per man month. The cost estimate (supplementary budget) is US\$28,800 and 122,000 Sec. 402 rupees.

### III. Progress To Date

#### Early Development

This activity started in 1955 when the Punjab Government requested assistance from A.I.D. in introducing and starting production of hybrid maize. A technician was assigned to Punjab State in 1955 and considerable quantities of seed of American hybrid and breeding stocks and some equipment were imported. Seed was distributed and production work started in 1956.

Although the U.S. hybrids clearly showed their potential for increasing yields, the U.S. material was not adapted to

Indian conditions. The people did not like dent maize. The inbred lines used to produce these hybrids were so poorly adapted to the climate and other factors that production of seed was virtually impossible.

In 1957 the Rockefeller Foundation initiated a massive breeding program which by 1961 had produced very good and acceptable indigenous hybrids, which were placed in production, completely replacing the U.S. hybrids. The Rockefeller Foundation not only directed the research program but also the production of seed on an all-India basis. From that point on the great need was a promotion program to teach the cultivators the advantages of the hybrids. A.I.D. accordingly shifted its assistance from production to demonstrations.

The Rockefeller Foundation in 1958 also started an extensive breeding and research program on sorghum, which has now reached the stage where varieties are ready for release and can be demonstrated to the cultivators. They are now helping develop new varieties of wheat and rice, the two major foodgrain crops.

In 1959 the Government of India requested A.I.D. to provide the services of a consultant to study India's needs for seed control and certification. This was done and recommendations were submitted, as well as a proposed draft seed law. In 1961 the Government of India asked that the same consultant return to help prepare a program of seed improvement work and assist in getting it started. This request was met and the consultant also trained a class of 15 men in seed testing.

#### Recent Developments

Following the recommendation of the seed improvement consultant, the Government of India next requested the assignment of a technician to help develop the program. An expert in the field of seed control and certification arrived in 1962 and continues to serve in this position. Since 1962 the following progress has been made:

1. A committee guided by the technician finalized seed legislation, based on that suggested by the consultant, which has been accepted by the Law Ministry and will be recommended for enactment at the next session of Parliament.
2. Three seed testing laboratories were placed in operation in FY 1964 and four more are being established during FY 1965, utilizing equipment supplied by A.I.D.
3. Seed certification standards have been formulated for hybrid maize, wheat, rice, barley, hybrid jowar and a number of vegetable crops.

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4. A limited seed certification program for hybrid maize and wheat has been initiated under the auspices of the National Seeds Corporation and the Indian Agricultural Research Institute.
5. Fifty-five Indians have been given intensive and effective within-India training in seed testing and field inspection. These are the people who are moving into the seed testing laboratories as they are set up and who will staff the control and certification agencies as they develop.
6. Within-India training has been given to approximately 45 seed development officials who are working within the Intensive Agriculture District Program.

The emphasis in the demonstration program is on quality rather than quantity, because poorly supervised demonstrations are rarely successful. The program, along with the publicity material that has been developed in connection with it, has been instrumental in building up an increasing demand for hybrid maize seed. An outstanding example of this involves the Mudhol Taluka (approximately a township) in Northern Mysore, where in 1962 three hybrid maize demonstrations were conducted. All were well supervised and successful and stimulated the farmers, who had never seen hybrid maize before, to buy seed for 500 acres, increased to 1,000 in the 1964 summer season. As further indication of cultivator interest, the Mudhol farmers requested the technician in charge to give them detailed information on how to grow hybrid maize. This was done in nine three-hour meetings attended by some 1,400 farmers along with local extension personnel. Many of the instructions given these farmers incorporated radical departures from their traditional ways and in some instances led to lively discussions. A second visit to the area just before harvest showed that many had changed from the old ways to the new and had made fine crops.

Another development growing out of the hybrid maize program has been the establishment of the National Seeds Corporation. A committee, made up of four Government of India officials, one Rockefeller Foundation technician and the A.I.D. Agriculture Advisor, planned the National Seeds Corporation and drew up the blueprint upon which it was founded. It was registered and became functional in March 1963. Its primary purposes are: (1) to raise and distribute foundation seeds of certain foodgrain and vegetable crops; (2) to foster the development of a seed industry primarily in the private sector; and (3) to encourage the development of a sound national seed control and certification program. In spite of the relatively short life of the National Seeds Corporation, it has already set up three 500-acre

farms and is producing significant amounts of foundation seed. Private growers, including one organization collaborating with the DeKalb Seed Co. of Illinois, are producing some 2,000 acres of hybrid maize seed at the present time. This entire development marks a radical and promising departure from the old ineffective methods of seed production in India.

The Government of India and the U.S. Government will soon sign a formal agreement under which USDA's Agricultural Research Service will supply four senior technicians (a plant breeder, an agronomist, a plant pathologist and an entomologist) to assist the Government of India in conducting an extensive research program on grain legumes. This project will make an important contribution to the Indian food supply, since more than half of all dietetic protein comes from grain legumes.

Since the plant protection position is new, no work has been conducted in this area except to utilize the services of one USDA consultant during October.

The experience gained in conducting the hybrid maize demonstrations, developing quality seed program and the opportunity of including the necessary plant protection measures will provide necessary support for an expanding fertilizer program.

#### Participant Training

Through FY 1964, 48 GOI officials received participant training in various aspects of crop production in the United States. In recent years the emphasis in such training has been on seed production, testing, certification and improvement, along with modern foodgrain storage. From FY 1965 through FY 1971, 44 more participants are expected to receive U.S. training in support of the courses of project action outlined herein. See the attached participant table for details of the training planned in FY 1965 and 1966.

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## FERTILIZER

### I. The Activity Targets

In order to meet foodgrain and cash crop requirements India must very rapidly increase consumption of fertilizer. This increase amounts to seven times the present consumption by 1970/71 and 16 times by 1975/76 or from less than 0.5 million tons to 7.6 million tons in eleven years. Assuming that the fertilizer will be made available, the following are the objectives of this project, to be achieved by 1971:

1. To develop a program of fertilizer promotion adequate to convince the cultivators that they must use fertilizer in recommended amounts.
2. To assist the fertilizer industry, both public and private, in developing sales organizations and sales techniques adequate to sell to the cultivators an ever increasing volume of fertilizer.
3. To assure cultivators fertilizer which is properly labelled and which conforms to specifications, by strengthening the Fertilizer Control Order and by developing the state organizations responsible for its enforcement.
4. To assist in the development of a distribution system, including storage, that will expedite the movement of fertilizer from the producing centers to the consumers.

### Background

India uses an average of two pounds of fertilizer nutrients per arable acre; this compares with 40 in the U.S.A. and 270 in Japan. In order to meet minimum acceptable foodgrain targets of 115 million tons in 1970/71 and 138 million tons in 1975/76, India's per acre consumption of nutrients must increase to 30 and 49 pounds respectively by these years. The reason for the absolute necessity for these rapid increases in production of food and consumption of fertilizer is that the present population of 470 million will increase to about 547 million in 1971 and to 610 million in 1976. The seriousness of the job ahead may be understood when it is realized that the gap of 11 million tons of foodgrains which exists today will increase to more than 50 million tons by 1975 if the present level of production continues. The present gap is causing serious trouble; India cannot live with a larger one.

Indian soils have been exhausted by centuries of continuous cropping without returning the basic fertilizer elements to farmlands. Fertilizer can restore the chemical deficiency and make it possible to produce good crops, but fertilizer alone will not meet the needs of the nation. Good seed of high yielding varieties and good crop and soil management are the necessary companions of the fertilizer program. Each of these inputs will contribute to productivity, but the gains from the combination will be far greater than the sum of the gains from each applied separately.

To get this production job done radical changes are required in methods of fertilizer promotion and cultivator education (extension), and in the whole approach to selling and in methods of distribution. The customs and beliefs of the cultivators about fertilizer and its use must be brought up to date, and the attitudes of government toward business, profits, prices, credit etc., must change to meet the rapidly changing situation.

This project will continue through the Fourth Plan period until 1971.

### II. The Course of Action

The course of action proposed to carry out this project is as follows:

- A. To encourage the Government of India to delegate to each producer part of the responsibility for promoting the use of fertilizer in general and of his own products in particular. Such an overall promotional effort might well be handled by a strictly non-governmental body, supported and directed by fertilizer producers. As long as the price fixing role of government is retained a small increase in the return to the producers should be allowed for this purpose. This approach should allow for an increasingly aggressive program without unduly increasing administrative overhead, and would place responsibility for the program with the most vitally concerned individuals. Two phases of the proposed promotion program deserve special mention:
  - 1) A mass-media approach, using mobile audio-visual vans which would go to the villages with movies, slides and literature. The vans would be operated by well-trained agronomists thoroughly conversant with the agronomic problems of the area in which they would work. The procedure would be to go to the village during the day, leaving literature and arranging for the evening meeting. In the evening both entertainment and work films would be shown, with a 45-minute question

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and answer period between each. The agronomists would be carefully selected agricultural graduates who will have received four months intensive training in agronomic practices with emphasis on fertilizer use, at one of the agricultural universities and complete instruction in the maintenance and operation of audio-visual equipment.

- 2) A hard-hitting, well executed demonstration program conducted by the agricultural extension service to be held on cultivators' fields to give them an opportunity to see the effects of fertilizer in action. This will be handled by the state extension services, but only after the carefully selected demonstrators were given four months of intensive training in conducting and using demonstrations. Four months of training is required because the principal feature of the training would be the actual carrying out of a set of demonstrations, from beginning to end, under supervision of the U.S. project leader and his counterpart.

Promotional materials will be developed and made available in large quantities.

- B. Sales training courses will be organized and directed to teach the fertilizer industry, and especially the cooperative and other retail outlets, what real selling is. This training will include such aspects of selling as display of merchandise, good advertising and the willingness and ability to give the farmer help in selecting the correct fertilizer for his needs, how much and how to apply it, etc. These aspects of selling are presently ignored, particularly by cooperatives.
- C. The Fertilizer Control Order will be strengthened to allow the standards set forth to be enforced and thus assuring the quality of the fertilizer offered for sale. The organizations charged with enforcement in the states must be given clearly defined responsibilities, the individuals within them must be given specific duties and in some cases trained so that they may adequately perform these duties. They must also be given a sense of urgency in the fulfillment of their assigned tasks. Only when there is active enforcement of the order, with inspection at the production points and at the retail outlets, will the cultivator be protected against error and deliberate fraud.

- D. The Government of India will determine and endeavor to eliminate unnecessary administrative and physical delays in the fertilizer distribution system. Particular emphasis will be placed on direct participation of the producers in the sale of their products, allowing them to select their own distributors and agents. Unrestricted movement of fertilizer of all kinds must be allowed as soon as possible. Preparation of mixtures will be encouraged where adequate control can be maintained, and discontinuance of mixing sought where such control is not possible. Advice will be given also on the development of an improved system of cooperative storage, especially at the rural depots.

Three technicians will advise on this program in FY 1965. One soils advisor (fertilizer) will work with the state agricultural extension services and with the producers in their phase of the fertilizer promotion program, helping to develop materials and to train their agronomists in the techniques of presentation to farmers. He will assist in training demonstrators in both the techniques of laying out and executing demonstrations and in how to show the practices which are being demonstrated, so that farmers may understand them and be motivated to adopt them. A second soils advisor (fertilizer) will work with the Fertilizer Association of India to develop materials for training both management and sales personnel. He will be available to assist with the training of extension personnel and to improve the coordination between the industry's efforts and the extension service's efforts to promote fertilizer use. A third soils advisor (fertilizer) will work with the Government of India on strengthening the Fertilizer Control Order and with the state governments to develop efficient enforcement organizations. He also will advise and assist in the reorganization of the fertilizer distribution and storage system to make it equal to the increased load which it will have to carry in the very near future.

A.I.D. plans to provide the first four audio-visual vans, with equipment, to initiate the promotion and sales program. This could be done largely with rupee funds. The cost would be approximately Rs. 240,000. The Government of India, the Fertilizer Association of India or the individual fertilizer manufacturers would provide all other requirements.

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### III. Progress To Date

#### Early Development

This is a continuing project. The activity started in 1952 when the Government of India requested assistance on soil fertility. Under this project more than one million fertilizer demonstrations were sponsored, 24 soil testing laboratories were established, and a radio tracer laboratory was equipped at the Indian Agricultural Research Institute. Fertilizer was imported to support the demonstration program. Assistance was also given in developing the original Fertilizer Control Order. These activities have led to an increase in fertilizer nutrient use from approximately 25,000 tons in 1952 to approximately 400,000 tons in 1964. This increase is proof that cultivators will utilize fertilizer when made aware of its value through promotion and demonstration.

#### Recent Developments

Present work is with the Government of India and with the Fertilizer Association of India to encourage production, promotion sales, quality control, distribution and fertilizer use. A study was instituted on the Fertilizer Control Order and its effectiveness, particularly at the production and distribution points in the states. This study revealed a need for improved organization to enforce the order to make its provisions more effective and thus insure the composition of fertilizer supplied to the cultivators. The study, which involved extensive travel to many of the States, was carried out during the past year.

Work with the Fertilizer Association of India has been in the fields of promotion and sales. Assistance has been given to the extension wings on training in fertilizer use. Training courses were developed in sales techniques and salesmanship. These courses were conducted both for the industry and the cooperatives. The Fertilizer Association of India has been assisted in making surveys where supply and distribution problems existed, and in developing advertising material for promotional purposes. A monthly salesmanship illustrated leaflet is being published and sent to a mailing list of 1,200. In cooperation with counterparts and other A.I.D. personnel, an exhaustive study of the fertilizer situation in India was made. On the basis of material accumulated in this study, a paper was prepared which makes projections of foodgrain requirements through 1975/76 and the fertilizer nutrients requirements to make possible this production. Methods of promotion, sales and distribution adequate to insure utilization

of the increasing amounts of fertilizer are proposed. The paper was approved by the Mission and distributed in the Ministry of Food and Agriculture, the Planning Commission and elsewhere.

#### Participant Training

Through FY 1964, only eight GOI officials had received participant training in the United States in the fields of soil testing and fertilizer use. The tremendous increase planned in the production and distribution of fertilizer in India during the next decade requires expansion of foreign training programs to provide requisite skills. During the period FY 1965 through FY 1971, 38 participants are expected to receive U.S. training in support of the project activities outlined herein. In addition, teams of top GOI and private industry officials concerned with the broad aspects of India's fertilizer problems will be sent on observational study tours in the U.S. and other selected countries having modern and large-scale fertilizer programs. See the attached participant table for details of the training planned in FYs 1965 and 1966.

### IV. Funding Requirements

#### a. Total Requirements

Total funding requirements during the life span of the activity are estimated at \$2,130,000 from dollar funds and the equivalent of \$1,357,000 from U.S.-owned Section 402 rupees. AID assistance in the seed improvement phase of the project is expected to terminate in FY 1967, but the fertilizer activity will continue until the end of the Fourth Plan. Breakdowns of U.S. funding are \$1,019,000 for the services of technicians and consultants; \$421,000 for training of participants; \$661,000 for commodities; \$4,000 for contract services; and \$25,000 for other costs.

GOI financing estimates assume a steadily increasing allocation from the equivalent of \$39 million in FY 1965 to \$73.5 million in FY 1971.

Other external financing, mainly by Rockefeller and Ford Foundations and UNICEF (Crop Production aspects of the All-India Applied Nutrition Program), is expected at a peak support level of about \$1.7 million in FY 1965 and a gradual decline to \$0.1 million in FY 1971.

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-130-061	Crop Production
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b. Operational Year Requirement (FY 1965)

As shown on the E-1a and E-1b tables, total funding requirement in FY 1965 is \$219,000 which consists of \$132,000 for technicians and consultants; \$4,000 for the services of a contract consultant; \$81,000 for participant training; and \$2,000 for AID-titled commodities for demonstrational purposes for use by the technicians.

In addition to the dollar funding above, U.S.-owned Section 402 rupees equivalent to \$320,000 are required to cover international travel and authorized allowances payable to the AID technicians and consultants (\$112,000), international travel of participants (\$38,000), and rupee costs of project support materials and services available locally in India (\$167,000).

c. Budget Year Requirements (FY 1966)

DG dollar funding in FY 1966 is estimated at \$153,000, or \$66,000 less than FY 1965 funding. The reason for the decline is that the 15 short-term consultants are expected to complete their assignments in FY 1965 and that no other consultants are presently contemplated in FY 1966.

In addition to the dollar funding above, U.S.-owned Section 402 rupees equivalent to \$256,000 are required, for international travel and authorized allowances payable to AID technicians and consultants (\$32,000); international travel of participants (\$24,000); and rupee costs of project support materials and services available locally in India (\$200,000).

The following tables for technicians and participants under this project in FYs 1965 and 1966 include these elements for both Foodgrain Production and Promotion and Fertilizer.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-130-061	Crop Production
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Technicians

Title and Identification of Position	D.H. or PASA	Name of Incumbent	Pos. Grade	Pos. No.	Start of Funding for FY	Date of Home Leave/Return or Transfer	Location	Funding	
								\$	Sec. 402 Rs. (\$ Eqv.)
<u>FY1965</u>									
Agron. Adv. Seed Imp	D	J.E. Douglas	4	372	7/1/64	8/66 (HL)	New Delhi	14,200	4,500
Soils Adv. Fertilizer	D	M.G. Smith	4	396	7/1/64	9/64 (HL)	New Delhi	17,000	17,000
Soils Adv. Fertilizer	D	J.L. Malcolm	4	415	7/1/64	8/66 (HL)	New Delhi	14,200	4,500
Agron. Adv. Seed Imp	P	Recruiting	4	-	9/1/64	9/66 (HL)	New Delhi	14,300	6,350
Agron. Adv. Plant Protection	P	Recruiting	4	-	1/1/65	1/67 (HL)	New Delhi	9,400	4,850
Soils Adv. Fertilizer	P	Recruiting	4	-	1/1/65	1/67 (HL)	New Delhi	9,400	4,850
15 short-term price support consultants	P	Recruiting	-	-	Variable	-		34,300	59,100
Agriculture Advisor	D	L.M. Humphrey	3	347	7/1/64	1/65 (HL)	New Delhi	19,400	8,600
Hort. Consultant (Citrus)	Contract	Recruiting	-	-	1/1/65	4/65 (ETD)	New Delhi	4,500	3,000
FY1965 Total Estimated Cost								136,700	112,750
<u>FY1966</u>									
Agron. Adv. Seed Imp	D	J.E. Douglas	4	372	7/1/65	8/66 (HL)	New Delhi	14,200	4,500
Soils Adv. Fertilizer	D	M.G. Smith	4	396	7/1/65	1/67 (TR)	New Delhi	14,200	4,500
Soils Adv. Fertilizer	D	J.L. Malcolm	4	415	7/1/65	8/66 (HL)	New Delhi	14,200	4,500
Agron. Adv. Seed Imp	P	Recruiting	4	-	7/1/65	9/66 (HL)	New Delhi	14,200	4,500
Agron. Adv. Plant Protection	P	Recruiting	4	-	7/1/65	1/67 (HL)	New Delhi	14,200	4,500
Soils Adv. Fertilizer	P	Recruiting	4	-	7/1/65	1/67 (HL)	New Delhi	14,200	4,500
Agriculture Advisor	D	L.M. Humphrey	3	347	7/1/65	5/67 (TR)	New Delhi	17,500	4,800
FY1966 Total Estimated Cost								102,700	31,800

SECURITY CLASSIFICATION UNCLASSIFIED

PAGE NO. AC-56

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-130-061	Crop Production
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Participants (Non-Contract)

<u>Brief Description of Training</u>	<u>No. of Partici- pants</u>	<u>Duration of Training</u>	<u>Target Starting Date</u>	<u>Estimated Cost</u>	
				<u>\$</u>	<u>Sec. 402 Rs. (\$ Eqv.)</u>
<u>FY1965</u>					
Fertilizer use and application	2	12 months	5/15/65	8,480	3,000
Fertilizer use and application	6	6 months		16,440	9,000
Weed Control	2	12 months	6/15/65	8,480	3,000
Weed Control	1	6 months	6/15/65	2,740	1,500
Seed Testing and Improvement	8	6 months	6/15/65	21,920	12,000
Hybrid maize and sorghum production	4	12 months	6/15/65	16,960	5,000
Hybrid maize and sorghum production	1	6 months	6/15/65	2,740	1,500
Agr. implements	1	6 months	7/1/65	<u>2,740</u>	<u>1,500</u>
			FY1965 Total Estimated Funding	80,500	37,500
<u>FY1966</u>					
Fertilizer use and application	8	6 months	5/15/66	21,920	12,000
Seed Testing	4	6 months	6/15/66	10,960	6,000
Hybrid maize and sorghum production	4	12 months	6/15/66	<u>16,960</u>	<u>6,000</u>
			FY1966 Total Estimated Funding	49,840	24,000

Note: All training described above to be given in U.S.A. FY1965 project provides 25 participants including 9 under the supplementary budget to be funded later subject to AID/W approval.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-11-130-069 386-31-130-069				4. TITLE Dairy Development							
	5. U.S. FUNDING:		BEGIN FY 1956	END FY 1962	6. PRIOR REFERENCES											
	PHYSICAL WORK:		1957	1965												
7.		e.	b.	c.	d.	e.			f.		g.		h.		i. 1/	
AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		APPROPRIATION TITLE	LOAN OR GRANT	TOTAL	CONTRACT 1/	PERSONNEL SERVICES			PARTICIPANTS		COMMODITIES		OTHER COSTS		LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	994	-	179	-	-	44	-	771	-	-	-		
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	-	-	-	-	-	-	-	-	-	-	-		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	993	-	178	-	-	44	-	771	-	-	-	32	-
	EXPENDITURES (ACTUAL YEAR)	TC	G	(2)	-	(1)	-	-	(1)	-	-	-	-	-	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	-	-	-	-	-	-	-	-	-	-	-		
	B. EXPENDITURES	TC	G	1	-	1	-	-	-	-	-	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
III. BUDGET YEAR (EST.) FY _____	A. GROSS OBLIGATIONS															
	B. EXPENDITURES															
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
IV. PLANNING YR. (EST.) FY _____	GROSS OBLIGATIONS 2/															
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	994	-	179	-	-	44	-	771	-	-	-	994	-

## REMARKS:

- 1/ This is a memorandum (non-odd) column.  
2/ Show estimated expenditures in column i.

This project assisted the GOI in the establishment of three rural creameries (at Barauni, Bihar; Junagadh, Gujerat; and Aligarh, U.P.), and four dairies (at Trivandrum, Kerala; Bhopal, Madhya Pradesh; Amritsar, Punjab; and Anand, Gujerat). All the plants, except for the ones at Barauni and Junagadh, are now in operation. Construction at Barauni has been completed and it is expected that the plant will be in operation in the near future. The Mission has filed a refund claim with the GOI against the cost of equipment provided for the Junagadh plant. This project phased out in FY1962. The unexpended balance of \$1,000 is pending an accounting adjustment. Rs. 36 million of PL-480 Sec. 104(e) obligated and disbursed; no unliquidated balance as of 6/30/64.

Refers to Annexe 6 of IAS.

SECURITY CLASSIFICATION UNCLASSIFIED

PAGE NO.

40-58

**PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES**

**E-1b**

7. OBLIGATED AND DISBURSED	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. Funding Phys. Work		BEG. FY	END FY	4. PROJECT NO.	5. TITLE				6. PRIOR REFERENCES:					
	a. FUNDS			b. TOTALS					c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)								
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED	(2) OTHER								
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED				(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED					
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/																	
	FA ACT	(ii) TRUST FUND																	
		(iii) OTHER LC																	
		B. P.L. 480 LC																	
TOTAL ACTUAL FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/																	
	FA ACT	(ii) TRUST FUND																	
		(iii) OTHER LC																	
		B. P.L. 480 LC																	
II OPERATIONAL YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/																	
	FA ACT	(ii) TRUST FUND																	
		(iii) OTHER LC																	
		B. P.L. 480 LC																	
III BUDGET YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/																	
	FA ACT	(ii) TRUST FUND																	
		(iii) OTHER LC																	
		B. P.L. 480 LC																	
IV PLANNING YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/																	
	FA ACT	(ii) TRUST FUND																	
		(iii) OTHER LC																	
		B. P.L. 480 LC																	
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/																	
	FA ACT	(ii) TRUST FUND																	
		(iii) OTHER LC																	
		B. P.L. 480 LC																	
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/																	
	FA ACT	(ii) TRUST FUND																	
		(iii) OTHER LC																	
		B. P.L. 480 LC																	

REMARKS:

1/ Exchange Rate: \$1 =

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c		PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES		BEG. FY	END FY	4. PROJECT NO.				
		1 November 1964			INDIA			PARTICIPANT TRAINING		1957	1962	386-11-130-069							
		1958			1963						386-31-130-069								
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY	b. ACTUAL FY <u>64</u>			c. OPERATIONAL FY _____			d. BUDGET FY _____			e. PLANNING FY _____			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	9	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	-
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. ON BOARD	U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II. PARTICIPANTS PROGRAMMED	A. U.S.	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	-	-
	B. THIRD CTRY.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

REMARKS:

1/ End of Fiscal Year

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-11-130-100			4. TITLE Calcutta Milk Scheme							
	5. U.S. FUNDING:		BEGIN FY 1956	END FY 1962	6. PRIOR REFERENCES											
	PHYSICAL WORK:		1958	1963												
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a.	b.	c.	d.	e. PERSONNEL SERVICES		f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
		APPROPRIATION TITLE	LOAN OR GRANT	TOTAL	CONTRACT 1/	(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	1/ (2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	518	-	64	-	-	18	-	436	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	517	-	64	-	-	17	-	436	-	-	-	18	-
	EXPENDITURES (ACTUAL YEAR)	TC	G	-	-	(1)	-	-	-	-	1	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	1	-	-	-	-	1	-	-	-	-	-	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. EXPENDITURES	TC	G	1	-	-	-	-	1	-	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	-	-	-	-	-	-	-	-	-	-	-	-	-
III. BUDGET YEAR (EST.) FY _____	A. GROSS OBLIGATIONS															
	B. EXPENDITURES															
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
IV. PLANNING YR. (EST.) FY _____	GROSS OBLIGATIONS 2/															
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	518	-	64	-	-	18	-	436	-	-	-	18	-

## REMARKS:

- 1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

This project was designed to assist in the establishment of a dairy plant in Calcutta and in the development of a cattle farm at Haringhatta to which to move the cattle from Calcutta city. The plant is in operation. The Haringhatta farm has been developed and most of the Calcutta cattle have been shifted there. The project phased out in FY1962. The unexpended balance of \$1,000 is pending accounting adjustment.

PROJECT DATA SUMMARY — AID DOLLAR COSTS

E-1a

1. DATA CURRENT AS OF:  
1 November 1964

2. COOPERATING COUNTRY  
INDIA

3. PROJECT NO.  
386-11-130-100

4. TITLE

Calcutta Milk Scheme

5. U.S. FUNDING:

BEGIN FY

END FY

1956

1962

PHYSICAL WORK:

1958

1963

6. PRIOR REFERENCES

7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)	APPROPRIATION TITLE	a.	b.	c.	d.	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	518	-	64	-	-	18	-	436	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	517	-	64	-	-	17	-	436	-	-	-	18	-
	EXPENDITURES (ACTUAL YEAR)	TC	G	-	-	(1)	-	-	-	-	1	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	1	-	-	-	-	1	-	-	-	-	-	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. EXPENDITURES	TC	G	1	-	-	-	-	1	-	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	-	-	-	-	-	-	-	-	-	-	-	-	-
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TC	G	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. EXPENDITURES															
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS <sup>2/</sup>	TC	G	-	-	-	-	-	-	-	-	-	-	-	-	-
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>	TC	G	518	-	64	-	-	18	-	436	-	-	-	518	-

REMARKS:

- 1/ This is a memorandum (non-odd) column.
- 2/ Show estimated expenditures in column 1.

This project was designed to assist in the establishment of a dairy plant in Calcutta and in the development of a cattle farm at Haringhatta to which move the cattle from Calcutta city. The plant is in operation. The Haringhatta farm has been developed and most of the Calcutta cattle have been shifted there. The project phased out in FY1962. The unexpended balance of \$1,000 is pending accounting adjustment.

**PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES**

E-1b

7. OBLIGATED AND DISBURSED	4. FUNDS			5. TOTALS				6. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		7. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
TOTAL ACTUAL FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
II OPERATIONAL YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
III BUDGET YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
IV PLANNING YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												

REMARKS:  
1/ Exchange Rate: \$1 =  
2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:	2. COOPERATING CTRY.	3.	BEG. FY	END FY	4. PROJECT NO.													
				1 November 1964	INDIA	PERSONNEL SERVICES PARTICIPANT TRAINING	1959 1958	1963 1962	386-11-130-100													
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY			b. ACTUAL FY 1964			c. OPERATIONAL FY 1965			d. BUDGET FY 1966			e. PLANNING FY 1967			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	5.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.7	-	-	
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. ON BOARD	U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II. PARTICIPANTS PROGRAMMED	A. U.S.	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	
	B. THIRD CTRY.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

REMARKS:  
1/ End of Fiscal Year

AID 1020-2 (8-64)		PROJECT DATA SUMMARY -- AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF:	2. COOPERATING COUNTRY			3. PROJECT NO.				4. TITLE							
	1 November 1964	India			386-11-110-147 386-31-110-147				U.P. Agricultural University							
	5. U.S. FUNDING:	BEGIN FY	END FY		6. PRIOR REFERENCES											
	1958	1963														
7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		a.	b.	c.	d.	e.		f.		g.		h.		i. 1/		
		APPROPRIATION TITLE	LOAN OR GRANT	TOTAL	CONTRACT 1/	PERSONNEL SERVICES		PARTICIPANTS		COMMODITIES		OTHER COSTS		LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
						(1) U.S. AGENCIES		(2)	(1) U.S. AGENCIES	(2)	(1) DIRECT AND U.S. AGENCIES	(2)	(1) DIRECT AND U.S. AGENCIES	(2)	(1) DIRECT AND U.S. AGENCIES	(2)
						AID	PASA	CONTRACT	CONTRACT	CONTRACT	CONTRACT	CONTRACT	CONTRACT	CONTRACT	CONTRACT	CONTRACT
I. THRU ACTUAL YEAR FY 1964*	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	1,110	1,110	-	-	444	-	48	-	475	-	143		
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	-	-	-	-	-	-	-	-	-	-	-		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	633	633	-	-	309	-	30	-	185	-	109	42	4
	EXPENDITURES (ACTUAL YEAR)	TC	G	-	-	-	-	-	-	-	-	-	-	-	-	-
C. UNLIQUIDATED OBLIGATIONS END OF YEAR **	TC	G	477	477	-	-	135	-	10	-	290	-	34			
II. OPERATIONAL YEAR (EST.) FY _____	A. GROSS OBLIGATIONS															
	B. EXPENDITURES															
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
III. BUDGET YEAR (EST.) FY _____	A. GROSS OBLIGATIONS															
	B. EXPENDITURES															
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
IV. PLANNING YR. (EST.) FY _____	GROSS OBLIGATIONS 2/															
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	1,110	1,110	-	-	444	-	48	-	475	-	143	-	633

## REMARKS:

1/ This is a memorandum (non-add) column.

2/ Show estimated expenditures in column 1.

\* Through FY1963.

\*\* Activity terminated in FY1963 and unexpended funds transferred to Project # 281

Refers to Annexe 6 of LAS.

SECURITY CLASSIFICATION UNCLASSIFIED

PAGE NO.

AC-62

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

SECURITY CLASSIFICATION  
UNCLASSIFIED

E-1b

1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	3. Funding 1958 1963 a/ 1959 1963	4. PROJECT NO. 386-11-110-147 386-31-110-147	5. TITLE U.I. Agricultural University
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7. OBLIGATED AND DISBURSED	e. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR b/ TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G		46		220			115			105
	FA ACT	(ii) TRUST FUND Govt. Revenue	-	15	15	71	71					71	71
		(iii) OTHER LC Sec. 402	G	224	101	1,072	485			241	32	468	212
	B. P.L. 480 LC	Sec.104(e)	G	4,512	2,547	21,600	12,191	21,600	12,191				
II OPERATIONAL YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
III BUDGET YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
IV PLANNING YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
V ALL SUBSEQUENT Fys (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G		46		220			115			105
	FA ACT	(ii) TRUST FUND Govt. Revenue	-	15	15	71	71					71	71
		(iii) OTHER LC Sec. 402	G	224	101	1,072	485			241	32	468	212
	B. P.L. 480 LC	Sec.104(e)	G	4,512	2,547	21,600	12,191	21,600	12,191				

REMARKS:  
1/ Exchange Rate: \$1 = Rs.4.7876  
2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES			4. PROJECT NO.									
	b/ 1 November 1964			India			1959 1963			386-11-110-147												
	PARTICIPANT TRAINING			1959 1963			386-31-110-147															
I PROJECT PERSONNEL	A. MAN YEARS	e. CUM. THRU ACTUAL FY			b. ACTUAL FY _____			c. OPERATIONAL FY _____			d. BUDGET FY _____			e. PLANNING FY _____			f. ALL SUBSEQUENT Fys			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract			
I PROJECT PERSONNEL	U.S.	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	
	Non U.S.	-	-	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	
II. PARTICIPANTS PROGRAMMED	U.S.	-	-	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	
	B. THIRD CTRY.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

REMARKS:  
1/ End of Fiscal Year  
Notes: a/ The unliquidated balances of \$ equivalent 123 out of Sec.402 funds and \$ equivalent 1965 out of PL 480 funds have been transferred to Project # 281.  
b/ Through FY1963 only.

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

E-1b

7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED	
														AS OF:
1. DATA CURRENT AS OF:	2. COOPERATING COUNTRY	3. Funding	BEG. FY	END FY	4. PROJECT NO.		5. TITLE							
1 November 1964	India	Phys. Work	1958	1963	386-11-110-147		U.P. Agricultural University							
6. PRIOR REFERENCES:														
I CUMULATIVE THRU ACTUAL YEAR b/	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G		46		220			115			105	
	FA ACT	(ii) TRUST FUND			15	15	71	71					71	
		(iii) OTHER LC	Sec. 402	G	224	101	1,072	485			241	32	468	212
	B. P.L. 480 LC	Sec. 104(e)	G	4,512	2,379	21,600	11,390	21,600	11,390					
	TOTAL ACTUAL	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G										
	FY 1964	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC	Sec. 402	G										
	B. P.L. 480 LC	Sec. 104(e)	G											
II OPERATIONAL YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC													
III BUDGET YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC													
IV PLANNING YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC													
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC													
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G		46		220			115			105	
	FA ACT	(ii) TRUST FUND			15	15	71	71					71	
		(iii) OTHER LC	Sec. 402	G	224	101	1,072	485		241	32	468	212	
	B. P.L. 480 LC	Sec. 104(e)	G	4,512	2,379	21,600	11,390	21,600	11,390					

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES		BEG. FY	END FY	4. PROJECT NO.											
	b/			1 November 1964			India			PARTICIPANT TRAINING		1959	1963	386-11-110-147											
I PROJECT PERSONNEL	A. MAN YEARS	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract			
	U.S.	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10			
	Non U.S.	-	-	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15			
	B. ON I/BOARD	U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
II. PARTICIPANTS PROGRAMMED	A. U.S.	-	-	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13			
	B. THIRD CTRY.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			

REMARKS:

Note: a/ The unliquidated balances of \$ equivalent 123 out of Sec.402 funds and \$ equivalent 2133 out of PL 480 funds have been transferred to Project # 281.

1/ End of Fiscal Year

b/ Through FY1963 only.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-11-120-156 386-31-120-156				4. TITLE Soil and Water Conservation						
	5. U.S. FUNDING:		BEGIN FY		END FY		6. PRIOR REFERENCES									
	PHYSICAL WORK:															
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. 1/ LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	718	-	459	-	-	203	-	45	-	11	-		
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	160	-	80	-	-	61	-	15	-	4	-		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	635	-	456	-	-	140	-	26	-	13	-	51	-
	EXPENDITURES (ACTUAL YEAR)	TC	G	143	-	81	-	-	46	-	10	-	6	-	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	214	-	107	28	-	76	-	3	-	-	-		
	B. EXPENDITURES	TC	G	196	-	106	27	-	58	-	7	-	(2)	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	101	-	4	1	-	81	-	15	-	-	-		
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TC	G	212	-	101	43	-	68	-	-	-	-	-		
	B. EXPENDITURES	TC	G	211	-	101	42	-	63	-	5	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	102	-	4	2	-	86	-	10	-	-	-		
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/	TC	G	223	-	108	46	-	69	-	-	-	-	-	222	-
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	718	-	432	108	-	178	-	-	-	-	-	821	-
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	2085	-	1207	225	-	594	-	48	-	11	-	2085	-

## REMARKS:

- 1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

Refers to Annex 6 of LAS

SECURITY CLASSIFICATION UNCLASSIFIED

PAGE NO. AC-64

AID 1020-3 (7-64)	PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES										SECURITY CLASSIFICATION UNCLASSIFIED					
E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		END FY		4. PROJECT NO.		5. TITLE					
	1 November 1964		INDIA		Funding 1959		1971		386-11-120-156		Soil & Water Conservation					
7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)						
	(1) TYPE	(2) SOURCE	(3) LOAN GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED		(2) DISBURSED		(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED	OBLIGATED	DISBURSED	(a) U.S. PERS.	(b) NON- U.S. PERS.	(a) OBLIGATED	(b) DISBURSED			
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G		51		245					92			153	
	FA ACT	(ii) TRUST FUND	Govt. Revenue	G	17	17	82	82	-	-	-	-	-	83	82	
		(iii) OTHER LC	Sec. 402	G	205	177	981	850	-	-	-	-	444	-	535	406
		B. P.L. 480 LC	Sec. 104(e)	G	13,880	13,880	66,450	66,450	66,450	66,450	-	-	-	-	-	-
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G													
	FA ACT	(ii) TRUST FUND	Govt. Revenue	G	8	8	40	40	-	-	-	-	-	40	40	
		(iii) OTHER LC	Sec. 402	G	14	55	67	262	-	-	-	-	85	-	11	177
		B. P.L. 480 LC	Sec. 104(e)	G	5,525	10,220	26,450	48,930	26,450	48,930	-	-	-	-	-	-
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT	(ii) TRUST FUND	Govt. Revenue	G	19	19	91	91	-	-	-	-	-	91	91	
		(iii) OTHER LC	Sec. 402	G	338	227	1,618	1,086	-	-	-	-	359	-	1,254	727
		B. P.L. 480 LC	Sec. 104(e)	G	8,219	8,219	39,350	39,350	39,350	39,350	-	-	-	-	-	-
III BUDGET YEAR (EST.) FY 1966	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT	(ii) TRUST FUND	Govt. Revenue	G	19	19	91	91	-	-	-	-	-	91	91	
		(iii) OTHER LC	Sec. 402	G	245	247	1,173	1,184	-	-	-	-	292	-	882	892
		B. P.L. 480 LC														
IV PLANNING YEAR (EST.) FY 1967	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT	(ii) TRUST FUND	Govt. Revenue	G	19	19	91	91	-	-	-	-	-	91	91	
		(iii) OTHER LC	Sec. 402	G	314	286	1,503	1,371	-	-	-	-	293	-	1,212	1,078
		B. P.L. 480 LC														
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT	(ii) TRUST FUND	Govt. Revenue	G	45	45	215	216	-	-	-	-	-	215	216	
		(iii) OTHER LC	Sec. 402	G	738	903	3,533	4,317	-	-	-	-	694	-	2,843	3,623
		B. P.L. 480 LC														
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G		51		245					92			153	
	FA ACT	(ii) TRUST FUND	Govt. Revenue	G	119	119	571	571	-	-	-	-	-	571	571	
		(iii) OTHER LC	Sec. 402	G	1,840	1,840	8,808	8,808	-	-	-	-	208	-	6,726	6,726
		B. P.L. 480 LC	Sec. 104(e)	G	22,099	22,099	105,800	105,800	105,800	105,800	-	-	-	-	-	-

## REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:		2. COOPERATING CTRY.		3. PERSONNEL SERVICES		BEG. FY		END FY		4. PROJECT NO.									
	1 November 1964			INDIA		PARTICIPANT TRAINING		1959		1971		386-11-120-156											
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY	b. ACTUAL FY 1964			c. OPERATIONAL FY 1965			d. BUDGET FY 1966			e. PLANNING FY 1967			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS						
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract				
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	37.2	-	-	50	-	-	5.5	1.5	-	7	3	-	7	3	-	24	6	-	80.7	13.5	-
	Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B. ON I BOARD	U.S.				6			7	3			7	3										
	Non U.S.																						
II. PARTICIPANTS PROGRAMMED	A. U.S.		65			20			31			25			25			65			211		
	B. THIRD CTRY.																						

## REMARKS:

1/ End of Fiscal Year

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO.

AC-65 (Revised)

**PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES**

E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		END FY		4. PROJECT NO.		5. TITLE					
	1 November 1964		INDIA		Funding		1959		1971		386-11-120-156		Soil & Water Conservation			
					Phys. Work		1959		1971				6. PRIOR REFERENCES:			
7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)				d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED		(2) DISBURSED		(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED	OBLIGATED	DISBURSED	(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED			
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO S ACCTS. 2/	G		51		245				92			153		
	FA ACT	(ii) TRUST FUND Govt. Revenue	G		17	17	85	82					83	82		
		(iii) OTHER LC Sec. 402	G		205	177	981	850			444		535	406		
		B. P.L. 480 LC Sec. 104(e)	G		13,880	13,880	66,450	66,450	66,450	66,450						
	TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO S ACCTS. 2/	G												
		FA ACT	(ii) TRUST FUND Govt. Revenue	G		8	8	40	40					40	40	
		(iii) OTHER LC Sec. 402	G		14	55	67	262			85		11	177		
		B. P.L. 480 LC Sec. 104(e)	G		5,525	10,220	26,450	48,930	26,450	48,930						
II OPERATIONAL YEAR (EST.)	A.	(i) LC COSTS CHGD TO S ACCTS. 2/														
	FA ACT	(ii) TRUST FUND Govt. Revenue			19	19	91	91					91	91		
		(iii) OTHER LC Sec. 402	G		338	227	1,618	1,086			359		1,254	727		
		B. P.L. 480 LC Sec. 104(e)			8,219	8,219	39,350	39,350	39,350	39,350						
III BUDGET YEAR (EST.)	A.	(i) LC COSTS CHGD TO S ACCTS. 2/														
	FA ACT	(ii) TRUST FUND Govt. Revenue			19	19	91	91					91	91		
		(iii) OTHER LC Sec. 402	G		245	247	1,173	1,184			292		882	892		
		B. P.L. 480 LC														
IV PLANNING YEAR (EST.)	A.	(i) LC COSTS CHGD TO S ACCTS. 2/														
	FA ACT	(ii) TRUST FUND Govt. Revenue			19	19	91	91					91	91		
		(iii) OTHER LC Sec. 402	G		314	286	1,503	1,371			293		1,212	1,078		
		B. P.L. 480 LC														
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO S ACCTS. 2/														
	FA ACT	(ii) TRUST FUND Govt. Revenue			45	46	215	216					215	216		
		(iii) OTHER LC Sec. 402	G		738	903	3,533	4,317			694		2,843	3,623		
		B. P.L. 480 LC														
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO S ACCTS. 2/	G		51		245				92			153		
	FA ACT	(ii) TRUST FUND Govt. Revenue			119	119	571	571					571	571		
		(iii) OTHER LC Sec. 402	G		1,840	1,840	8,808	8,808			208		6,726	6,726		
		B. P.L. 480 LC Sec. 104(e)	G		22,099	22,099	105,800	105,800	105,800	105,800						

REMARKS:

1/ Exchange Rate: \$1 = RS. 4.7576

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS		1. DATA CURRENT AS OF:		2. COOPERATING CTRY.		3. PERSONNEL SERVICES		BEG. FY		END FY		4. PROJECT NO.										
			1 November 1964		INDIA		PARTICIPANT TRAINING		1959		1971		386-11-120-156										
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			a. CUM. THRU ACTUAL FY			b. ACTUAL FY: 1964			c. OPERATIONAL FY: 1965			d. BUDGET FY: 1966			e. PLANNING FY: 1967			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract				
			Non-U.S.																				
II. PARTICIPANTS PROGRAMMED	A. U.S.				65			20			31			25			62			221			
		Non-U.S.																					
	B. THIRD CTRY.																						

REMARKS:

1/ End of Fiscal Year

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-120-156 386-31-120-156	Soil & Water Conservation
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I. Activity Target

Background

This project is designed to assist the Ministry of Food and Agriculture (MFA) and/or the State Departments of Agriculture in:

1. The development of an effective organization manned by a cadre of technically trained personnel to assist the cultivator in the field in order to attain optimum benefits from soil and water resources in areas under irrigation (gravity water and ground water) and in areas having an annual rainfall of over 20".

2. Securing basic information on soils for the economic and effective use of water, fertilizer, improved seeds, etc., through the development and expansion of the All-India Soil and Land Use Survey.

Of India's 625 million acres of agricultural land (estimated total production 80 million tons of foodgrains), about 264 million acres (producing 63 million tons of foodgrains) are cultivated under rainfed conditions and about 61 million acres (17 million tons of foodgrains) are under irrigation. Despite the fact that over 82 percent of the 465 million people are rural and are dependent on agriculture for a living, India's foodgrain yields are among the lowest in the world. One of the most important factors contributing to low agricultural production is the prevailing inefficient utilization of available soil and water resources.

With agriculture contributing about 50 percent of the national income, gross national product and export earnings, the importance and necessity of improving agriculture cannot be over-emphasized. From time immemorial, Indian agriculture has been functioning at a subsistence level. Shortfalls in foodgrain production have been compensated for in recent years with massive imports from abroad. This continues to be necessary, and the alarming food crisis the country faces now has forced national leaders to focus concentrated efforts on agricultural development.

The Fourth Plan proposals provide top priority to increased agricultural production at a much more accelerated rate in order to accommodate a continuing population increase. The attainment of the proposed target of 115 million tons of foodgrains by the end of the Fourth Plan in 1971 is dependent largely upon efficient utilization of India's soil and water resources.

II. Course of Action

It is contemplated to divide this project into two separate projects at the end of FY 1966, i.e. (1) Farm Irrigation and Drainage, (2) Soil and Land Use Survey. Transition toward such separation will begin in FY 1965.

Under this project AID assistance is directed toward India's solution of her soil and water management problems through the assignment of U.S. technicians, training of Indian technicians abroad, and the supply of limited amounts of equipment for demonstrational purposes. Beginning in FY 1966, it is planned that the 10 technicians expected to be on board will adopt a team approach to increase the effectiveness of their assignment. They all will be working under agreements with MFA. Of the 10 three will work with the All-India Soil and Land Use Survey, one at the Center and the others in field positions. Three of the remaining seven will work with the Central Ministry of Food and Agriculture with nation-wide responsibility and the other four will be assigned in areas to be selected in consultation with GOI, and each will work directly with one or more projects. They will be assigned temporarily as need arises to provide assistance in their specialized fields.

There now are seven technicians in India, two of whom will leave by the end of the calendar year. The positions will be maintained and recruitment of replacements will be based upon reorientation of the project as described above. Otherwise all present project technicians qualify to meet the changed job requirements.

When fully converted to the LAS concept, the 10 technicians under this project will be as follows:

Farm Irrigation Team

- |                                   |        |
|-----------------------------------|--------|
| 1. Soils Adv. Mgt. Conservation   | Center |
| 2. Water Resources Advisor        | Center |
| 3. Agr. Engineer (Drainage)       | Center |
| 4. Irrigation Development Advisor | Field  |
| 5. Agr. Eng. (Irrigation)         | Field  |
| 6. Water Use Advisor              | Field  |
| 7. Farm Irrigation Advisor        | Field  |

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-120-156 386-31-120-156	Soil & Water Conservation
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### Soil Survey Team

- |                                    |        |
|------------------------------------|--------|
| 1. Soil Adv. (Soil Classification) | Center |
| 2. Soil Adv. (Soil Correlator)     | Field  |
| 3. Soil Adv. (Soil Correlator)     | Field  |

Of the three advisors to be assigned to the All-India Soil and Land Use Survey, one will be located (headquartered) in New Delhi working with the soil and water personnel of the MFA. The other two will work in northern and southern India, respectively, in close association with the Regional Soil Survey Units. They will assist the Units in conducting soil surveys, both extensively and intensively, in order to collect comprehensive data on soils and crop responses based on soils information, which in turn will enable cultivators to apply proper soil and water management measures on their agricultural lands.

Surveys to date mainly have been extensive rather than intensive and there has been very little coordination in MFA between the All-India Soil and Land Use Survey and the section handling soil and water management. The soils data collected from the surveys have seldom been interpreted in a manner understandable to the cultivator and agricultural worker who apply remedial or improved measures to maintain the productivity of the land. However, this problem is now being solved.

The recent reorganization which brought the All-India Soil and Land Use Survey directly under the administrative and technical purview of the soil and water management division of the MFA is indicative of a healthy trend towards better coordination, and it will increase the effectiveness of the work.

Since agriculture is a State action responsibility, the actual field work aimed at increased production should be at the State level. The Central Government, besides giving overall guidance, has responsibilities for training and conducting research. The following will summarize the courses of action contemplated at Central, State, district, block and cultivator levels.

#### Center Government

Under the new administrative set up of MFA the Center is moving towards providing more guidance in the States by asserting its influence in coordination and responsibility. They are seeking guidance in carrying out the responsibilities to develop and train the engineering staff in planning, development,

operation, maintenance and evaluation of water management, (irrigation and drainage) projects in selected areas with good food-grain production potential, now known as Intensive Agricultural Areas. Criteria of land classification, availability of adequate water at appropriate time, drainage outfalls, farmer interest and economic feasibility will guide the selection of areas for assignment of work. Projects will be taken up on areas basis, associated with present research, demonstration and training Centers, or as related to other problem areas.

#### State

The States are to develop and train staff who will have responsibility for water use and management based on the criteria and standards set forth by the Central organizations. The State staff will be trained to select, through reconnaissance and cost-benefit studies, those areas for concentration of activities on a priority basis in order to derive comparatively short-term but sustained returns by way of foodgrain production. Particular attention will be given to providing intensive training to field staff (counterparts) who will be directly responsible for the implementation of planned projects of about 5,000 to 10,000 acres in size.

All the training activities will focus on "Productive Training". This is a process by which the necessary practices will simultaneously be applied on land so that the training will have immediate impact on foodgrain production. At the same time the trainees will gain complete knowledge of practical field application of farm irrigation, drainage, land levelling and smoothing, and water management practices.

#### District, Block and Cultivator

Activities under this project will provide direct subject-matter support to the intensified agricultural extension program now contemplated. Extension personnel will arouse farmer interest by setting up demonstration plots on cultivator's fields. AID soil and water use technicians (with counterparts) will provide on-the-job training on these demonstration plots through collecting soil data, interpreting of maps, laying out of irrigation channels and drainage ditches. Short courses will also be provided to extension personnel, as well as to cultivators, covering all aspects of soil and water management practices. Attention will be given to providing adequate knowledge of operation and maintenance once the productivity of land has been enhanced.

UNCLASSIFIED

SECURITY CLASSIFICATION

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AID (020-1 (7-64)	1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-120-156 386-31-120-156	Soil & Water Conservation
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The following are the goals for the end of the Third and Fourth Five-Year Plans, insofar as the availability of within-India trained personnel are concerned:

Goal	Center		States
	Officers	Assistants	Sub-Assistants
Third Plan	594	2,771	10,586
Fourth Plan	1,550	8,300	24,000
Total	2,144	11,071	34,586

The officers will be assigned at Central and State levels directly involved with policy, administration, planning and approval of projects; assistants will be posted at District level and will be responsible for developing the plans and applying the practices directly on the land and for supervision of the sub-assistants, who will undertake the layout and field construction of work. Four areas are to be selected later and will receive special attention on our part.

#### Participant Training

Beginning in FY 1966, participants mostly will be drawn from the Intensive Agricultural Areas, from among those who are or will be directly connected with project work. These participants, prior to their selection, will have undergone within-India training and will possess adequate background and field experience. U.S. Training will be designed to provide the specific skills now lacking but essential to the success of the outlined program.

It is contemplated that during the period from FY 1966 through FY 1971 a total of 115 participants will be trained, i.e. FY 1966 and FY 1967 - 25 each; FY 1968 - 20; and FY 1969, FY 1970 and FY 1971 - 15 each.

#### III. Progress To Date

Starting from practically nothing in FY 1953, India has made significant progress since the inception of this project in 1958, as reflected by the present favorable changes in attitude on the part of the Indian policy makers and administrators, towards a technically sound and economically feasible soil and water management program. India has built up an organization which, with adequate technical training and backstopping, can implement an effective program in this field. The accomplishments from FY 1953 through FY 1964 are summarized below:

1. Although the Central Soil Conservation Board was established in 1953 in the Ministry of Food and Agriculture, significant progress and real accomplishments occurred only after 1958 when AID began assistance in the development of the project. Originally three directors with equal authority were in charge of the functions of the Board. This organizational pattern is being revised and a single director will be in overall charge with Directorate status in the MFA. This is a significant step toward the implementation of the recommendations made by U.S. Soil Conservation Service Administrator Don Williams when he visited India in 1960 as a GOI-requested AID consultant.

2. Enabling legislation has been enacted in 11 States and 3 Union Territories for improvement and effective utilization of soil and water resources.

3. Nine Central Soil Conservation Research and Demonstration Centers have been established in representative problem areas to collect information on soil and water resources and their utilization, carry out demonstrations and conduct problem-oriented research work.

4. Pilot demonstrations in rain-fed areas have been conducted at 43 locations covering an area of 31,388 acres.

5. There are five Central Training Centers in operation -- one to train the gazetted officers who will have charge of programs at both Central and State levels and the other four to train their assistants who will have responsibility for planning and implementation of projects at district, block and village levels. As of June 30, 1964, these training centers had trained 228 officers and 1,145 assistants.

6. Central Government agencies outside of soil conservation have made use of the training facilities, in order to give their personnel basic knowledge and understanding of soil and water management principles, practices and planning. These agencies include community development, extension, land revenue, forestry, irrigation and power, and soil survey.

7. States have established 17 training centers, where 6,228 sub-assistants have been trained in basic engineering skills and who now work closely with the cultivators in establishing soil and water management practices on their lands.

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SECURITY CLASSIFICATION

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-120-156 386-31-120-156	Soil & Water Conservation
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8. During the last three years, the training program has undergone considerable improvement in quality. Special courses have been developed for engineers, agronomists, soil survey and irrigation personnel. A course of "Training the Trainers" has been developed and many staff members at the training centers have completed this course. Increased emphasis is being given to practical aspects of field work by the trainees, on the basis of "10% Tell; 25% Show; and 65% Do".

9. The GOI now fully recognizes the necessity of laying out adequate surface drainage in order to increase and sustain the productivity of irrigated land. Necessary steps are being taken to launch an extensive farm drainage program closely associated with the overall agriculture program emphasis in Extension.

10. The GOI attaches priority importance to the soil and water management program, as reflected in its budget. From the insignificant Rs. 16 million in the First Five Year Plan, support rose to Rs. 200 million in the Second Plan and to a record allocation of Rs. 750 million in the Third Plan. The outlay during the Fourth Plan is expected to be Rs. 2,800 million.

11. Reconnaissance surveys have been carried out on 8.4 million acres and detailed surveys on 1.8 million acres; recently an aerial photo interpretation section was added to the survey unit.

12. Though FY 1964, 65 participants received U.S. training in various aspects of soil and water management under this project while an additional 17 participants were trained in the project "Soil Fertility and Fertilizer Use" (004) and four others were trained under the project "Water Resources Survey and Minor Irrigation Works" (044). Most of these men upon return have been retained in the organization and are increasingly assuming positions of authority and responsibility for program development and direction.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION Unclassified	386-11-120-156 386-31-120-156	Soil and Water Conservation
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Technicians

Title and Identification of Position	D.H. or PASA	Name of Incumbent	Pos. Grade	Pos. No.	Start of Funding For FY	Date of Home Leave/Return or Transfer	Location	Funding	
								\$	Sec. 402 Rs. (\$ Eq.)
<u>FY 1965</u>									
Agr. Engr. Conservation	D	W.J. Leatham	4	363	7/1/64	3/11/66 (HL)	Chandigarh	14,200	4,500
Soils Adv Mgt Consvr	D	H. Rinnan	4	431	7/1/64	3/27/65 (HL)	New Delhi	15,100	8,300
Irrig Farm Advisor	D	D.J. Minchart	5	423	7/1/64	12/5/64	Sheopur	14,100	15,100
* (Replacement of Minchart)	D	Under Recruitment	5		12/5/64	12/5/66	)		
Soils Adv Mgt Consvr	D	D.W. Klaus	3	410	7/1/64	5/21/65 (HL)	Poona	18,400	8,600
Agr Engr (Irrigation)	D	J.A. Griffin	4	379	7/1/64	11/5/64 (TL)	Aligarh	8,300	5,600
Replacement for Griffin	D	Under Recruitment			4/1/65	4/1/67 (HL)	Aligarh	5,800	3,700
Irrig Farm Advisor	D	G.C. McColm	5	462	7/1/64	6/19/66 (HL)	Poona	11,700	4,500
*Hydrologist (Water Resources)	P	Under Recruitment	4		1/1/65	1/1/67 (HL)		9,400	4,850
*Soils Adv Mgt Consvr	P	"	4		1/1/65	1/1/67 (HL)		9,400	4,800
*Agr Engr (Drainage)	P	"	4		1/1/65	1/1/67 (HL)		9,400	4,800
Soils Adv Mgt Consvr	D	M.H. Taylor	4	405	7/1/64	5/19/65 (HL)	New Delhi	<u>19,000</u>	<u>10,100</u>
FY1965 Total Estimated Cost								135,300	75,950

\*Locations yet to be decided.

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AID 1020-1 (7-64)	1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION Unclassified	386-11-120-156 386-31-120-156	Soil and Water Conservation
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Participants (Non-Contract)

<u>Brief Description of Training</u>	<u>No. of Partici- pants</u>	<u>Duration of Training</u>	<u>Target Starting Date</u>	<u>Estimated Cost</u>	
				<u>\$</u>	<u>Section 402 Rs. (\$ Equiv.)</u>
<u>FY1965</u>					
Soil and land use survey and Interpretation	10	6 months	6/1/65	27,400	15,000
Soil and water management, watershed manage- ment, erosion control, farm irrigation, soil conservation engineering, etc.	17	6 months	6/1/65	46,580	25,500
Observation and study tour in Jordan and Israel to study irrigation practices and agricultural development	4	15 days	11/15/64	1,400	4,000
FY1965 Estimated Total Funding				75,380	44,500
<u>FY1966</u>					
Farm irrigation, and engineering aspects of farm irrigation	10	6 months	6/1/66	27,400	15,000
Water use and land drainage	4	6 months	6/1/66	10,960	6,000
Soil and water management	3	6 months	6/1/66	8,220	4,500
Soil survey and land classification	8	6 months	6/1/66	<u>21,920</u>	<u>12,000</u>
FY1966 Estimated Total Cost				68,500	37,500

Note: All training described above to be given in U.S.A. In FY1965 the project provides a total of 31 participants, which includes 5 under supplementary budget subject to AID/W approval.

PROJECT DATA SUMMARY — AID DOLLAR COSTS

E-1a

1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	3. PROJECT NO. 386-22-230-199 386-42-230-199**	4. TITLE Trombay Fertilizer Plant
5. U.S. FUNDING: PHYSICAL WORK:	BEGIN FY 1961 1962	END FY 1964 1966	6. PRIOR REFERENCES

7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)	a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES		f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
					(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT
					AID	PASA									
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	DL L*	30,000	-	-	-	-	-	-	30,000	-	-	-	-	
	GROSS OBLIGATIONS (ACTUAL YEAR)	DL L	-	-	-	-	-	-	-	-	-	-	-	-	
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	DL L*	24,896	-	-	-	-	-	-	24,896	-	-	-	-	
	EXPENDITURES (ACTUAL YEAR)	DL L*	3,714	-	-	-	-	-	-	3,714	-	-	-	-	
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS														
	B. EXPENDITURES	DL L*	3,000	-	-	-	-	-	-	3,000	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL L*	2,104	-	-	-	-	-	-	2,104	-	-	-	-	
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS														
	B. EXPENDITURES	DL L*	2,104	-	-	-	-	-	-	2,104	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR														
IV. PLANNING YR. (EST.) FY	GROSS OBLIGATIONS 2/														
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/														
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	DL L*	30,000	-	-	-	-	-	-	30,000	-	-	-	30,000	

REMARKS:

- 1/ This is a memorandum (non-add) column.
- 2/ Show estimated expenditures in column i.

1/ An additional amount of \$1.84 million has been provided from AID Loan #104 (Project 386-22-290-268) to meet increased costs of the fertilizer plant.

\* Loan DLF # 162.

\*\* Rs.134.3 million of PL 480 Section 104(g) obligated in FY 1961 and disbursed; no unliquidated balance as of 6/30/1964.

Refers to Annexe 6 of LAS.

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-230-199 386-42-230-199	Trombay Fertilizer Plant
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### 1. Activity Target

To provide to the Fertilizer Corporation of India (F.C.I.), a G.O.I. concern, the foreign exchange and local currency required to build a fertilizer plant.

India's economic development requires that enough foodgrain be grown internally to feed its own population. To increase food-grain production in India, more extensive use of fertilizers is one of the primary requirements. To achieve a greater use of fertilizers in India, it is imperative that fertilizers be produced locally, especially in view of India's adverse foreign exchange position. To produce enough foodgrains to feed itself, it is estimated that India must produce three million tons of nitrogen, 1½ million tons of P<sub>2</sub>O<sub>5</sub>, and ¾ million tons of K<sub>2</sub>O per year by 1970, and almost twice this amount by 1975. India's present fertilizer capacity is approximately 500,000 tons of nitrogen.

The Trombay plant will be capable of producing 99,000 tons of urea (nitrogen content: 45,000 tons) and 330,000 tons of nitrophosphate (nitrogen content: 42,600 tons) per year. It will be the largest of a number of fertilizer plants now being built in India, and India's only indigenous producer of nitrophosphate fertilizer. The production of the Trombay plant will amount to about 9 percent of the 1965/66 targetted consumption of nitrogenous fertilizer and about 11 percent of that of phosphatic fertilizer.

### 2. The Course of Action

The plant will manufacture as intermediate materials ammonia, and nitric acid and as end products urea and nitrophosphate. Argon gas will be a by-product. One-half of the raw material for ammonia production will be refinery gas and one-half naphtha (gasoline) from nearby refineries. Two major raw materials, sulphur and phosphate rock, must be imported.

The ammonia plant will carry out the steps of part oxidation, sulphur removal and recovery, carbon monoxide shifting, carbon dioxide removal, liquid nitrogen wash, compression, synthesis, and storage. Its capacity will be 350 metric tons per day.

The urea plant will have an installed capacity of 300 metric tons of prilled urea per day. The ammonia content of the urea tail gas will be sufficient to meet the requirements of the ammoniation step in the nitrophosphate plant. The required quantity of carbon dioxide for urea manufacture will be supplied from the ammonia plant and the necessary purification steps for the carbon dioxide incorporated.

The nitric acid plant design is based on a capacity of 320 metric tons per day of nitric acid (as 100 percent of HNO<sub>3</sub>) in a concentration of 53 to 54 percent. Conventional catalytic oxidation processes are planned.

The nitrophosphate plant will provide for the use of either the carbonnitric process or the sulphonitric process. The expected production capacity of 330,000 tons per year of nitrophosphate is based on the use of the sulphonitric process, producing water-soluble nitrophosphate, which normally will be used.

The necessary utilities, storage, raw materials and products handling facilities, water treatment system, power facilities, and necessary auxiliaries will be included in the project. Fuel for steam will be obtained from the plant waste heat sources and from coal or fuel oil.

The main units of the plant will be completed in 1964 and testing started in early 1965.

Financing: Funding for the project has been obligated as follows:

FY 61 - DLF Loan No. 162, signed December 29, 1960: \$30,000,000  
Project Agreement No. 108, signed April 3, 1961  
PL 480 rupees in dollar equivalent : \$28,052,000  
FY 64 - AID Loan No. 104, signed June 1964 : \$ 1,840,000  
(AID Loan No. 104 is for \$7.8 million -- \$1.84 million for fertilizer plant and \$5.96 million for the methanol plant. See project 386-22-290-268).

### 3. Progress to Date

Progress on major items of the project as of July 1, 1964, is shown in the following table:

Summary of Progress for Main Plants on Percentage Basis

Item of Work	Ammonia Plant	Urea Plant	Nitric Acid Plant	Nitro-phosphate Plant	Water Treatment Plant
1. Civil Work	97.2	98.8	99.3	77.45	82.7
2. Mech. Erection	68.60	62.2	79.0	53.6	51.0
3. Instrumentation	31.90	45.0	33.2	3.3	-
4. Electrical	41.10	58.0	45.0	6.6	-
5. Insulation	13.6	10.2	-	-	-
6. Overall	71.44	62.94	70.39	60.52	60.3

SECURITY CLASSIFICATION

UNCLASSIFIED

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AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-230-199 386-42-230-199	Trombay Fertilizer Plant
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Originally it was estimated that the plant would be ready by the latter part of 1963 and on stream in early 1964; however, indications now are that the plant will not be ready to produce ammonia before January or February 1965. Individual pieces of equipment and portions of the complex will be ready for testing by November 1964.

PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED						
1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY			3. PROJECT NO.			4. TITLE								
E-1a 1 November 1964		INDIA			386-11-250-223			Construction Equipment Training & Utilization								
5. U.S. FUNDING:		BEGIN FY		END FY		6. PRIOR REFERENCES										
PHYSICAL WORK:		1954*		1965												
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES		f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	389	362	-	-	165	27	-	-	75	-	122	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	130	112	-	-	50	18	-	-	25	-	37	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	144	136	-	-	60	8	-	-	30	-	46	-	-
	EXPENDITURES (ACTUAL YEAR)	TC	G	144	136	-	-	60	8	-	-	30	-	46	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	245	226	-	-	105	19	-	-	45	-	76	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	201	159	12	-	91	30	-	-	-	-	68	-	-
	B. EXPENDITURES	TC	G	173	146	12	-	73	15	-	-	22	-	51	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	273	239	-	-	123	34	-	-	23	-	93	-	-
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TC	G	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. EXPENDITURES	TC	G	273	239	-	-	123	34	-	-	23	-	93	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	-	-	-	-	-	-	-	-	-	-	-	-	-
IV. PLANNING YR. (EST.) FY	GROSS OBLIGATIONS 2/															
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	590	521	12	-	256	57	-	-	75	-	190	69	521

## REMARKS:

- 1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

This activity addresses Annex 6, Agricultural Production and Annex 3, Energy Development of L.A.S.

\*Physical work was started in FY 1954 for similar objectives under earlier projects #386-42-019 and 386-11-250-019, and 386-11-250-059.

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

E-1b

1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	3. Funding Phys. Work	BEG. FY 1963	END FY 1965	4. PROJECT NO. 386-11-250-223	5. TITLE Construction Equipment Training & Utilization
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7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1)		(2)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				DOLLAR EQUIVALENTS (000) 1/		LOCAL CURRENCY UNITS (000)				(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED						
I CUMULATIVE THRU ACTUAL YEAR	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/		G	-	-	-	-	-	-	-	-	-	-
	FA ACT (ii) TRUST FUND	Govt. Revenue	-	7	7	21	32	-	-	-	-	34	32
	(iii) OTHER LC	Sec. 402	G	85	33	407	158	-	-	116	9	91	33
	B. P.L. 480 LC												
TOTAL ACTUAL FY 1964	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/		G	-	-	-	-	-	-	-	-	-	-
	FA ACT (ii) TRUST FUND	Govt. Rev.	-	5	5	23	23	-	-	-	-	23	23
	(iii) OTHER LC	Sec. 402	G	8	33	36	157	-	-	116	9	36	32
	B. P.L. 480 LC												
II OPERATIONAL YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/		G	-	-	-	-	-	-	-	-	-	-
	FA ACT (ii) TRUST FUND	Govt. Rev.	-	9	9	44	44	-	-	-	-	44	44
	(iii) OTHER LC	Sec. 402	G	131	70	627	337	-	-	242	14	165	81
	B. P.L. 480 LC												
III BUDGET YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/		G	-	-	-	-	-	-	-	-	-	-
	FA ACT (ii) TRUST FUND	Govt. Rev.	-	8	8	37	39	-	-	-	-	37	39
	(iii) OTHER LC	Sec. 402	G	-	113	-	539	-	-	378	19	-	142
	B. P.L. 480 LC												
IV PLANNING YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/		G	-	-	-	-	-	-	-	-	-	-
	FA ACT (ii) TRUST FUND	Govt. Rev.	-	24	24	115	115	-	-	-	-	115	115
	(iii) OTHER LC	Sec. 402	G	216	216	1034	1034	-	-	736	42	256	256
	B. P.L. 480 LC												

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:	2. COOPERATING CTRY.	3. PERSONNEL SERVICES PARTICIPANT TRAINING	BEG. FY	END FY	4. PROJECT NO.														
				1 November 1964	India		1963	1966	386-11-250-223														
I PROJECT PERSONNEL	A. MAN YEARS	a. CUM. THRU ACTUAL FY			b. ACTUAL FY 64			c. OPERATIONAL FY 65			d. BUDGET FY 66			e. PLANNING FY 67			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
	U.S.	-	-	8	-	-	6	-	-	7	-	-	5	-	-	-	-	-	-	-	-	-	20
	Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. ON BOARD						7			7			7										
	U.S.	7	-	-	5	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	17	-
	Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

REMARKS:

1/ End of Fiscal Year

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-250-223	Construction Equipment Training & Utilization
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### 1. The Activity Targets

In 1953, heavy construction equipment valued at Rs. 40 crores (about \$84 million) was in service in India. Through purchases of additional equipment and replacement of worn-out machinery, the inventory value stood at Rs.70 crores (\$145 million) in 1960. The anticipated Third Plan outlay of Rs.60 crores (about \$ 126 million) will bring the total of about \$270 million by 1966. This will be subject to some depreciation and retirement, but available information indicates that the value of equipment in use by 1966 will approximate \$200 to \$210 million. The December 1963 equipment census by the Central Mechanical Liaison Units showed 3,212 pieces of major earth-moving equipment having an estimated value of \$130,000,000 are now in the possession of the States and projects in India.

Despite the large investment, little was done before 1953 to promote effective operation and maintenance practices, and much equipment was unwisely selected, inefficiently used and prematurely worn out.

Even a modest improvement in the utilization of the equipment in so heavy an inventory would result in important savings in scarce foreign exchange and appreciably increase the rate of construction on development projects. Realization of this fact by the GOI Central Water & Power Commission (CWPC) resulted in 1954 in a GOI request for U.S. technical assistance in this field.

Initial U.S. technical assistance was provided under the FY 1954 project 386-25-019. The target of the original project, superseded in FY 1963 by the current project, was establishment of two technical training centers, each capable of training 40 persons per year as heavy earthmoving equipment operator-mechanics.

The scope of this original U.S. assistance was expanded, and the present project has the following specific targets:

#### a. To expand the training program to include:

- (1) Four technical training centers, each to give 12 months' training to 60 operator-mechanics per year in the operation, maintenance and repair of the most commonly used types of heavy earth-moving equipment.

- (2) Three-month, 20-trainee courses at four construction projects to train "single machine" operators or mechanics.

- (b) To promote improved practices in the procurement, utilization and maintenance of construction equipment by providing:
  - (1) Advisory services to the CWPC in planning, procuring, maintaining and deploying heavy construction equipment.
  - (2) Advisory services to Central Mechanical Liaison Units in procuring, allocating, controlling, supervising and maintaining heavy construction equipment in the States.

- (1) Advisory services to the CWPC in planning, procuring, maintaining and deploying heavy construction equipment.

- (2) Advisory services to Central Mechanical Liaison Units in procuring, allocating, controlling, supervising and maintaining heavy construction equipment in the States.

- (c) To provide U.S. training to Indian engineers from CWPC and from State construction projects in American techniques of construction equipment management, including selection, operation, maintenance and repair.

The long range objective of the project is the permanent enhancement of Indian operational and management capabilities in this field.

### 2. The Course of Action

#### a. Technical Training Centers

Shortly after signing the agreement for Project 386-25-019 in 1954 the first two training centers were opened, one at Kotah, Rajasthan, in December 1955 and the other at Nagarjunasagar, Andhra Pradesh, in July 1956. They have operated continuously since and the GOI plans to operate them for an indefinite further period.

The present project includes two additional centers, one opened at Mangal, Punjab, in July 1963 and the other at Kakrapar, Gujerat, in November 1963. Plans for continuing and expanding the program at these centers include: /four

- (1) Increased enrollment in each school from 40 to 60 students.
- (2) Operation of the Kotah and Nagarjunasagar schools without the assistance of American technicians, except for periodic monitoring and advice visits.

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-250-223	Construction Equipment Training & Utilization
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- (3) Assignment of two U.S. technicians to each of the new schools (Nangal and Kakrapar). Construction equipment to be used for training at these schools will be transferred from surplus equipment at Indian construction projects. The U.S. is financing procurement of hand tools and training aids for the two schools.

#### Equipment

U.S. financed equipment valued at \$425,160 for the first two schools was ordered, under project 386-42-019 in FY 1954, sufficiently early to permit training equipment to arrive at least concurrently with their opening. That equipment included one motor crane, two crawler tractors (one with bulldozer), one motor scraper, one towed scraper, one motor grader, three end dump trucks, one flat rack truck, one truck-mounted equipment servicing unit and one truck-mounted mobile machine shop for each school. The GOI furnished to each two 1½ cu. yd. crawler shovels from surplus equipment from Bhakra Dam Project. The new schools will have similar equipment, plus some minor equipment (principally tool sets and training aids) being purchased by the Ralph M. Parsons Company.

#### Instructor Personnel

A December 28, 1955 contract with the Vinnell Company provided one year services of four instructors, two for each school.

The Vinnell Company, the GOI agencies, and the Mission had no previous experience with training schools of this nature, and the project got off to a poor start. Two Vinnell technicians remained in India for one year, a third for about 16 months, and the fourth for nine months. After the departure of the last technician, the Vinnell contract was allowed to expire.

A contract (ICA-W-636) with the Ralph M. Parsons Company was executed on June 24, 1958 under which two American instructors were assigned to each of the two original centers during most of 1958 to 1962 and thereafter one to each center until the withdrawal of American personnel from Kotah in the autumn of 1963 and Nagarjunasagar in the late summer of 1963. These centers are now entirely under CWPC control and are being run by Indian instructor personnel. The U.S. technicians have been transferred to the new centers at Nangal and Kakrapar.

#### Training Methods

The U.S. instructors prepared a set of 46 lesson plans, each with a text summarizing the classroom and field material on a given subject. Instruction is by lecture and demonstration in the classroom, shop, and field, with U.S. and Indian instructors closely cooperating. The training consists of a one-year course in operation, maintenance and repair of heavy construction equipment, including tractors, motorized scrapers, drawn scrapers, graders, shovels, cranes, dump-trucks etc. About 25 percent of the students' time is spent in classroom study and lectures and about 75 percent in practical field instruction.

After acquiring a basic knowledge of equipment operation and utilization the students put their knowledge to practical use on desirable public works in the vicinity.

#### Short-term Training Courses at Construction Projects

Three-month "single machine" training courses for qualified mechanical engineers will be held at Beas, Ukai and Ramganga construction projects to be conducted on the basis of 75 working days, 7 hours of actual training a day. U.S. technicians will be detailed from the Nangal and Kakrapar training centers for short periods to assist in organizing and conducting these courses in the field.

These courses will help the project engineers to familiarize themselves with the operation of the heavy earthmoving and construction equipment, their maintenance, detection of the troubles and field repairs. The engineers thus will be able to demonstrate to their trained operators how to handle their machine without faults.

Equipment and training staff will be furnished by the project authorities concerned.

#### b. Advisory Services to Promote Improved Construction Equipment Utilization.

##### Advisory Services to CWPC

Mr. R. F. Koken, Construction Plant and Equipment Advisor (CPEA) arrived in India on September 30, 1958, as advisor to the CWPC. His services, originally funded under Project No. 386-25-059 - Technical Services in Water Resources and Power Development, are now part of the construction equipment project here discussed. Mr. Koken for several years before 1958 had served as a member of the GOI Construction Plant and Machinery Committee, on whose report much of the project effort is based.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-250-223	Construction Equipment Training & Utilization
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Mr. Koken advises and assists CWPC in:

- (1) Analysis and assessment of project needs for construction equipment.
- (2) Procurement of new machinery and utilization of surplus equipment.
- (3) Problems relating to operation, repair and maintenance of equipment.
- (4) Development of schedules such as machinery census and history sheets, log books, maintenance charts and other records.
- (5) Setting up maintenance staff training programs.
- (6) Reviewing efficiency of performance of the Heavy Equipment Training Centers.

Advisory Services to Central Mechanical Liaison Units.

Two Central Mechanical Liaison Units (CMLU) were established at New Delhi and Bangalore to monitor equipment and spare parts inventories, establish procedures for inter-project transfers of equipment as needed, and guide and assist state organizations in improving their maintenance and repair facilities. The CMLU also assist in the procurement of new machinery for new projects and help to ensure effective utilization of surplus equipment. Both units are operated directly under Central Water and Power Commission and staffed by the GOI, with one American advisor at each.

These Central Units have contributed to the establishment in several states of State Mechanical Unit organizations which are entirely Indian operated. They operate shops for major equipment repair and reconditioning, in addition to carrying out the functions listed above.

Typically U.S. technicians advise and assist in:

- (1) Setting up standard systems for obtaining and keeping records of census of machines and stores of spares.
- (2) Developing standard log books and other necessary forms, to cover the complete preventive maintenance program for each machine.
- (3) Developing standard plans for the various shops required to care for given amounts of equipment.

- (4) Developing lists of tools and plant required in the operation of those shops.
- (5) Developing methods for overhauling machines and reconditioning components, including exchange of components when machines are overhauled.
- (6) Reviewing the utilization of existing machines at projects.
- (7) Selection of types of and preparation of specifications for new machines.
- (8) Fixing values on machines on a basis of age and actual condition for either intra or inter-state transfers.
- (9) Making proper use of existing surplus machines and spare parts.
- (10) Developing criteria for purchases of spare parts.
- (11) Setting up by the states of their CMUs and, later, promotion in them of efficient construction equipment operation and maintenance procedures and proper distribution of available equipment amongst the state projects and the CMLUs in acquiring country-wide information on construction equipment utilization and availability, to facilitate inter-state transfers.

U.S. Training of Participants

Engineers and technicians from CWPC and from State water resources and power construction agencies are sent for training and observation tours in the U.S. to learn American practices in construction equipment selection, operation and maintenance. They visit American construction projects and attend equipment maintenance and repair courses given by manufacturers.

U.S. Program for FY 1965:

(1) Project Manager:

Beginning July 1, 1964, Mr. James J. Carson, Industrial Development Advisor, Position #427, will be assigned as Project Manager with liaison responsibilities between the GOI, the contractor, and the Mission. Cost: \$11,700 plus Sec. 402 rupees equiv. to \$4,500 funded FY 1965.

(2) The following seven R.M. Parsons contract technicians will continue in India during the year.

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Technician	Title	Present Location	Termination Date
R.F. Koken	Constr.Plant & Equip. Adv.	CWPC, New Delhi	March 31, 1966
George Hansen	Heavy Constr. Equip. Spec.	CMLU, New Delhi	"
M.D. Miller	Heavy Constr. Equip. Spec.	CMLU, Bangalore	"
W.H. Davis	Mechanic Specialist	TTC, Nangal	"
F.O. Stadler	Operator Spec.	TTC, Nangal	"
G.T. Childs	Mechanic Spec.	TTC, Kakrapar	"
J.G. Klepich	Operator Specialist	TTC, Kakrapar	"

and utilization by:

a. Furnishing land, buildings, equipment and staff for the training centers.

b. Continuing to assist the States in organizing and staffing State Mechanical Units under State control.

c. Making available staff and facilities for the CWPC Directorates concerned in the operation of the project and for the Central Mechanical Liaison Units.

d. Supplying the required administrative support such as clerical assistance and office facilities for U.S. technicians; contribution to U.S.A.I.D. rupee travel reimbursement fund; within-India travel of participants and transport of GOI-titled commodities; etc.

GOI obligations for 1964-65 (April 1, 1964 to March 31, 1965) are as follows:

FY 1965 funding provided for contract period July 1, 1965, to its March 31, 1966 termination: \$159,000, plus Sec. 402 rupees equiv. to \$112,000. This includes salary and allowances, international travel, overhead, fixed fee, other costs, and local miscellaneous expenses including printing of lesson plan books, etc.

(3) Ten Indian engineers will receive five months U.S. training designed to upgrade and intensify their knowledge and ability in operation and maintenance of heavy construction equipment. Cost: \$30,000, plus Sec. 402 rupees to \$15,000. Lequiv.

(4) Procurement of \$25,000 worth of training aids and audio-visual equipment funded in FY 1964 and equipment worth \$15,000 remaining from FY 1963 obligations will be completed by the contractor. These training aids will be used at the new Technical Training Centers at Nangal and Kakrapar.

FY 1966 Program:

No funding has been proposed in FY 1966. During this year the contract will be terminated, and all technicians will have departed by its expiry date, March 31, 1966. Funds provided in previous fiscal years will cover all estimated costs of phasing out contract operations. All commodities will have been delivered and transferred to GOI possession and control.

o. GOI Participation

The GOI provides for continuing and expanding activities in heavy construction equipment training

	Obligation in \$ Equivalent	
	Operating Budget	Capital Budget
CWPC Directorate	\$ 14,000	-
Central Mech. Liaison Units	14,000	-
Kotah Training Center	98,500	\$ 95,000
Nagarjunasagar Center	98,500	38,000
Nangal Center	140,500	25,000
Kakrapar Center	140,000	25,000
<b>TOTAL:</b>	<b>505,000</b>	<b>183,000</b>

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AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-250-223	Construction Equipment Training & Utilization
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### 3. Progress to Date

This activity was started in FY 1963 and funding will end in FY 1965.

Although there always has been much high-level interest in the training aspects of this project, progress during its early stages frequently was disheartening due to lack of capability or interest at the actual working level. This was overcome gradually by the assignment of competent personnel with real interest in the program. The present GOI project personnel are capable, efficient, and interested. Much of the replacement of personnel was done at U.S. A.I.D. urging, against a GOI tendency to avoid the troubles inherent in such personnel adjustments.

Maintaining good Indian instructor staff at the schools would have been much less difficult if GOI salary levels for skilled operators and mechanics were as high as they should be. Traditional GOI over-emphasis on the importance of advanced formal education has kept salaries of good "practical" men (who seldom have college degrees) too low.

Before 1963 the Central Government paid a monthly stipend of Rs.100 (\$21) to each student; in that year GOI announced that the State or project sponsoring the individual trainee must pay the stipend thereafter. This appreciably increased the workload of the Technical Manpower Directorate of CWPC, which now must negotiate with sponsors on the selection of desirable candidates. In some cases local political pressures have forced a lowering of qualifications standards for admission to the Centers.

However, high-level interest has increased. The savings possible through skilled, intelligent operation and maintenance of equipment are becoming apparent. The changes in Indian thinking and activities with regard to machinery management and utilization and the demand for graduates of the Technical Training Centers provide ample proof of the success of the program. As an example, during the recruitment of the 60 trainees for the session opening at Nagarjunasagar Technical Training Center on July 1, 1964, offers of sponsorship for 202 candidates were received from the various projects and the States. A recent survey of possible future demands for skilled operators and mechanics revealed a potential requirement, from the States and other using agencies, of 3,800 operators and 1,800 mechanics by the commencement of the Fourth Five Year Plan. Even the four Training Centers (including the new ones at Nangal and at Kakrapar) will not be able to satisfy such

a requirement. The graduates (many of whom are already foremen and others of whom will undoubtedly attain similar responsibility), who will number about 1,100 by that time, will be able to provide a great amount of on-the-job training of apprentices and other workers.

Technical Training Centers: A total of 635 trainees have been graduated since inception of this activity, 308 from Kotah through December 1, 1963, and 327 from Nagarjunasagar through July 1, 1964; 225 are undergoing training at the four centers, 55 at Kotah, 60 at Nagarjunasagar, 56 at Nangal, and 54 at Kakrapar. Since the first, all trainee graduates have been employed immediately on many multi-purpose river valley and other projects under construction in India. Several of them have progressed to supervisory positions of considerable responsibility and are providing on-the-job training to apprentices and other workers. Demand for skilled operators and mechanics from the States and other using agencies has increased considerably. There is intense competition for the graduates' services among the operating agencies who send representatives to conduct recruitment in person.

It is difficult to quantify accomplishments in an advisory function, such as that of the Construction Plant and Equipment Advisor. His work, however, has contributed greatly to construction plant planning and to improvement in Indian systems of procuring, operating, and maintaining construction equipment. The establishment and operation of the Mechanical Units by the State Governments is due largely to the concepts and programs devised and successfully promoted by the Advisor. He has given valuable advice in many construction activities, including:

- (1) Preparation of equipment list and specifications for the Nagarjunasagar Dam Phase II, Panset Dam (Maharashtra) and Ramganga Project.
- (2) Planning construction plant layout for Nagarjunasagar Dam and Panset Dam. Preparation of maintenance facilities plan for Ramganga Project.
- (3) Planning operating methods for the State Mechanical Units, including detailed procedures for inventory (census) of machinery and maintenance of equipment operating data and necessary forms, tables, standards, etc.
- (4) Planning and developing procedures and standards for operations of the Central Mechanical Liaison Units of the CWPC.

Two Central Mechanical Liaison Units (CMLU's) and most of the State Mechanical Units have been operating for about two years. The CMLU's coordinate the efforts of the State Mechanical Organizations, monitor equipment and spare parts inventories, assist in the project-to-project transfers of equipment as needed, and advise on the improvement of maintenance and repair facilities for heavy equipment. They also

advise on the procurement of new machinery for both major and minor projects and will help to ensure the effective utilization of surplus equipment from completed projects. Both the Central Mechanical Liaison Units have been staffed by the GOI and are functioning. An American Advisor is attached to each Unit, one at Bangalore and one at New Delhi.

The State Mechanical Organizations are operated by the concerned States and staffed entirely with Indian personnel. In addition to carrying on the functions outlined above, these units will operate shops and have facilities for major repair and conditioning of equipment. The progress during the last year in the implementation of the program for establishing State Mechanical Units (or Organizations) is shown in the following:

Stage of Implementation	No. of States	
	Sept. 1963	Sept. 1964
Functioning	5	5
Organization and partial operation	5	5
Initial Implementation	4	3
Under Consideration	1	2
	<u>15</u>	<u>15</u>

Commodities:

Training aids and audio-visual equipment worth \$35,000 against the \$50,000 obligated in FY 1963, have been purchased by the contractor for use at the two new technical training centers. The breakdown is as follows:

Items	Amount
Books	\$ 3,000
Visual Aids	5,000
Classroom Equipment	6,000
Small Tools	10,000
Special Mechanical Equip. as Fuel Injection, etc.	10,000
Cut-away Models	1,000
	<u>\$ 35,000</u>

Participant Training:

Five Indian engineers and technicians from CWPC and State water resources and power construction agencies are receiving U.S. training in heavy construction equipment selection, operation and maintenance, under the FY 1964 program; two were trained under the FY 1963 program and five received such training under a similar previous program. Ten more are programmed in FY 1965. One of the five early trainees is now the CWPC Deputy Director in charge of the Nagarjunasagar Training Center. The trainings received in an American construction equipment training school has greatly increased his ability to direct the operations of a similar school in India. Another returned participant is the Director of CWPC, Plant and Machinery Directorate. His visits to American construction projects and equipment manufacturers have given him many new ideas on ways of improving equipment utilization in India. Other returned participants who are now working on Indian construction projects undoubtedly have been able to make practical use of much of the knowledge which they acquired in the U.S.

The project activity is carried on under the jurisdiction of the Central Water & Power Commission, through the Directorate of Plant & Machinery and the Directorate of Technical Manpower & Stores.

This program has only an indirect relationship with other US AID activities, but will contribute to more adequate utilization of equipment purchased with non-project loan assistance. Its relation to the Third Five Year Plan program is similar, inasmuch as this program is intended to assist the projects in attaining their scheduled targets. As regards India's development in this field, this program is inadequate to meet increasing demands for trained people or for advice on utilization of equipment and construction plant.

4. Funding Requirements

Total Requirements:

FY of Funding	Project Elements	A.I.D. Cost		
		Dollar	Rupees in \$ Equiv.	Total \$ Equiv.
1963	Contract Services: 7 Technicians Training Aids	\$ 200,000 50,000	\$ 75,000 -	\$ 275,000 50,000
	Participants (two)	9,000	2,000	11,000

Contd. ..

AID 1020-1 (7-84)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-250-223	Construction Equipment Training & Utilization
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FY of Funding	Project Elements	Dollars	Rupees in	Total \$
			\$ Equip.	Equip.
1964	Contract Services:			
	7 Technicians	\$ 87,000	-	87,000
	Training Aids	25,000	-	25,000
	Participants (five)	18,000	8,000	26,000
1965	U.S. Tech. (Direct-Hire Project Manager)	12,000	4,000	16,000
	Contract Services:			
	7 Technicians	159,000	112,000	271,000
	Participants (ten) for 5 months each	30,000	15,000	45,000
	<b>Total:</b>	<b>\$590,000</b>	<b>216,000</b>	<b>806,000</b>

<u>Total Project Costs</u>	Dollars	Rupees in	Total \$
		\$ Equip.	Equip.
Direct-Hire Project Manager:	\$12,000	4,000	16,000
Contract Technicians:	\$ 446,000	187,000	633,000
Contract Commodities:	\$ 75,000	-	75,000
Non-contract Participants:	\$ 57,000	25,000	82,000
<b>Total</b>	<b>\$ 590,000</b>	<b>216,000</b>	<b>806,000</b>

Contract costs incurred earlier than 1963 were charged to projects 386-11-250-019 and 386-11-250-059, which were terminated in FY 1962.

**PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES**

E-1b

1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	3. Funding	BEG. FY 1965	END FY 1965	4. PROJECT NO. 386-31-140-231	5. TITLE Agricultural Refinance Corporation
		Phys. Work	1965	1965		

7. OBLIGATED AND DISBURSED	6. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
TOTAL ACTUAL FY	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	Sec. 104(e) G	10,444	10,444	50,000	50,000	50,000	50,000	-	-	-	-	-
III BUDGET YEAR (EST.) FY	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
IV PLANNING YEAR (EST.) FY	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	Sec. 104(e) G	10,444	10,444	50,000	50,000	50,000	50,000	-	-	-	-	-

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c

**PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS**

5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																				
		Non U.S.																				
B. ON BOARD	U.S.																					
	Non U.S.																					
II. PARTICIPANTS PROGRAMMED	A. U.S.																					
	B. THIRD CTRY.																					

REMARKS:

1/ End of Fiscal Year

Refers to Annex 6 of LAS

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-31-140-231	Agricultural Refinance Corporation
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### 1. The Activity Target

To support and strengthen a GOI-supported autonomous agricultural credit institution -- the Agricultural Refinance Corporation (ARC).

There exists in Indian agriculture a number of legal agricultural enterprises of substantial acreage under competent management. Productivity of these holdings could be expanded greatly by the introduction of major capital improvements in the form of small irrigation installations, pump lifts, etc. Similarly, opportunities are available for contour levelling, quick-growing and profitable forest products, etc. There also exists a number of specialty crop enterprises with potential for substantial profits such as sugarcane, tea, coffee, spice and cardamom. The production of these crops in a number of instances could be increased substantially with moderate amounts of well placed long term mortgage credit.

This group of agricultural enterprises is operating at less than optimal levels of production due to credit deficiencies. It is the purpose of the Agricultural Refinance Corporation to finance a carefully selected number of such enterprises where the security is of a top quality and the opportunities for increased production are clearly apparent.

To meet this important opportunity, the GOI has set up the Agricultural Refinance Corporation to encourage existing institutions such as central land mortgage banks, state cooperative banks, scheduled banks and cooperative societies to supply long term credit for agricultural development programs.

Authorized capital of the Corporation is Rs. 250 million, guaranteed by the central government both for its repayment and for a minimum dividend of  $4\frac{1}{2}\%$ . To augment its resources, ARC can raise funds from the Reserve Bank and the organized money market up to 20 times its paid-up capital.

The Corporation can refinance loans given by, or subscribe to debentures of, any eligible institution and can guarantee deferred payments in respect of import of capital equipment. An individual loan is not to exceed Rs. 5 million, with the normal lending rate as  $5\frac{1}{2}\%$ .

### 2. The Course of Action

- a. To pass the enabling legislation covering the Corporation;
- b. To establish the Corporation; and
- c. To make the necessary resources available to the Corporation initially Rs. 50 million from issued capital and Rs. 50 million from an interest-free loan by the GOI, the latter to be fully covered by a U.S. contribution under this project during FY 1965.

### 3. Progress to Date

Necessary legislation has been passed, and the ARC came into being in July 1963. Of the authorized capital Rs. 50 million has been subscribed by the Reserve Bank of India, state cooperative banks, central land mortgage banks, scheduled banks, insurances and investment companies, and the Life Insurance Corporation.

Recourse to the ARC has been slow. At the first annual meeting of the shareholders, the chairman of the Corporation announced that refinance of only four development schemes involving a total outlay of Rs. 63.7 millions has been approved during the first year of operation. He attributed this low level of activity to a failure of the states to present suitable projects. Indications are that the ARC is taking steps to encourage use of its facilities, particularly in the finance of the plantation industries, such as tea, coffee and cardamom, which are commercialized and most likely to yield a profit. In view of these initial difficulties, which are more or less inherent in the first year of operation of a development institution operating in a difficult field, the PL 480 assistance originally programmed for FY 1964 is now projected for FY 1965.

PROJECT DATA SUMMARY — AID DOLLAR COSTS

E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY India		3. PROJECT NO. 386-22-120-233				4. TITLE Beas Dam Project						
	5. U.S. FUNDING:		BEGIN FY 1965	END FY 1965	6. PRIOR REFERENCES						7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
	PHYSICAL WORK:		1965	1969	PERSONNEL SERVICES		PARTICIPANTS		COMMODITIES		OTHER COSTS		1/		
		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. (1) U.S. AGENCIES		f. (1) U.S. AGENCIES		g. (1) DIRECT AND U.S. AGENCIES		h. (1) DIRECT AND U.S. AGENCIES		i. (1) DIRECT AND U.S. AGENCIES	
						AID	PASA	CONTRACT	CONTRACT	CONTRACT	CONTRACT	CONTRACT	CONTRACT	CONTRACT	CONTRACT
I. THRU ACTUAL YEAR FY _____	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR														
	GROSS OBLIGATIONS (ACTUAL YEAR)														
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR														
		EXPENDITURES (ACTUAL YEAR)													
		C. UNLIQUIDATED OBLIGATIONS END OF YEAR													
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS		DL	L*	33,000	-	-	-	-	33,000	-	-	-		
	B. EXPENDITURES		DL	L*	8,000	-	-	-	-	8,000	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L*	25,000	-	-	-	-	25,000	-	-	-		
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS														
	B. EXPENDITURES		DL	L	12,000	-	-	-	-	12,000	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L	13,000	-	-	-	-	13,000	-	-	-		
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/		DL	L	-	-	-	-	-	-	-	-	10,000		
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/		DL	L	-	-	-	-	-	-	-	-	3,000		
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/		DL	L	33,000	-	-	-	-	33,000	-	-	33,000	-	

REMARKS:

- 1/ This is a memorandum (non-add) column.
- 2/ Show estimated expenditures in column i.

Refers to Annex 6 of L.A.S.

\* AID Loan # 126

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964.	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-120-233	Beas Dam Project
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## 1. The Activity Target

The dam and power plant project at Pong on the Beas River is one of the three projects or "units" planned for developing the irrigation and hydroelectric power potentials of the Beas River. The principal targets of the over-all Beas development plan are the annual irrigation of 2.9 million acres of land, now largely desert, and the installation of 996 MW of new hydroelectric generating capacity. The plan also provides for some extension and improvement of existing irrigation and power developments. The U.S. will assist in the attainment of these targets by providing part of the required foreign exchange financing for the construction of Beas Dam.

Background: Development of the Beas River is part of a comprehensive plan for utilization of the waters of the Ravi, Beas and Sutlej Rivers, the tributaries of the Indus River which originate in India. The basic Indian plan for Indus Basin development was formulated and partly implemented before the signing of the Indus Waters Treaty by India and Pakistan in 1960. (Bhakra Dam and the Bhakra-Nangal irrigation system of the Sutlej development were substantially completed before 1960.) Briefly, the Indian Plan for Indus Basin development provides for river to river diversion of water (Ravi to Beas and Beas to Sutlej) to maximize power and irrigation benefits, construction of large storage reservoirs on the Sutlej and Beas (and possibly Ravi) and extensive irrigation canal systems in Punjab and Rajasthan. The formal allocation of Ravi, Beas and Sutlej waters to India by the Indus Waters Treaty has accelerated the development of these rivers.

In 1960, in connection with the Indus Waters Treaty, the International Bank for Reconstruction and Development (World Bank) tentatively agreed to loan GOI \$23 million for the purchase of equipment required in constructing irrigation works on the Beas River and in the Rajasthan desert, and the Development Loan Fund allocated \$33 million for a Beas Project loan. The originally proposed DLF loan was to be for Beas Dam (Unit II of the presently planned Beas-Rajasthan development) and it was understood that the loan would be contingent upon the project's meeting technical and economic feasibility requirements. Originally, this determination was to be made by the World Bank, but after some time the World Bank elected not to make a detailed feasibility study. Consequently, A.I.D. in the spring of 1963 engaged the U.S. Bureau of Reclamation to investigate the technical and economic feasibility of the project and to make a brief review of plans for the other units of the Beas-Rajasthan development plan.

## Plan for Beas Development:

The three units of the Beas-Rajasthan development plan are:

Unit I - Beas-Sutlej Link, a tunnel, canal and power plant project which would divert 3.8 million acre feet of water annually from the Beas River into the Bhakra Reservoir on the Sutlej, include a new 636 MW power plant and augment the power and irrigation benefits of the Bhakra Project. This Unit will be completed in 1974.

Unit II - Dam and Power Plant at Pong, consisting of a 35 to 40 million cubic yard earthfill dam and an adjacent 360-MW power plant with six 60-MW units. The 380-foot high dam, located on the Beas River, about 100 miles downstream from the Unit I diversion dam, will form a reservoir with 6.55 million acre feet of gross storage capacity and live storage of 5.5 million acre feet. Unit II is primarily an irrigation storage project. Storage of water for the downstream Rajasthan Canal irrigation development is far more important than power development and flood control benefits have not been considered in estimating the project benefit-cost ratio. It is this Unit which the AID loan will assist in financing. This Unit will be completed in 1972.

Unit III - Rajasthan Canal consists of a 134-mile feeder canal, a 292-mile main canal and a 3,920-mile system of lateral canals to carry Beas-Sutlej water to the Rajasthan desert. The Rajasthan Feeder Canal, which begins at the Harike Diversion Barrage about 100 miles downstream from Pong, and immediately below the confluence of the Beas and Sutlej Rivers, has a capacity of 18,500 cu.ft. per second. The total culturable area commanded by the canal system is 3.9 million acres, but the water supply (principally from releases from Beas Reservoir) is estimated by project engineers to be sufficient for irrigating only 2.9 million acres annually. Construction of the main channels of this Unit will be completed about 1978.

## 2. Course of Action

An A.I.D. loan of \$33.0 million was authorized in August 1964 on the basis of the 1960 DLF allocation. The loan is for Beas Unit II and it will be used primarily to finance the procurement of earthmoving equipment and spare parts for construction of the dam. However, foreign exchange costs of engineering and construction consulting services for the Dam and Power Plant and of agro-economic investigations and studies needed to promote successful development of the Rajasthan Canal Irrigation Project also will be eligible for financing with loan funds.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-120-233	Beas Dam Project
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No U.S. financing has been provided for the Beas-Sutlej Link (Beas Unit I), but in the FY 1965 CAP it was proposed that the U.S. finance foreign exchange costs for this project. This proposal cannot be acted upon until more detailed studies of this Unit are completed (see paragraph 3 below). Moreover, approximately \$19 million from the proposed \$23 million World Bank loan for Beas-Rajasthan irrigation development is tentatively allocated for financing construction equipment for this Unit. With the probability that construction equipment financing requirements for the Unit will be covered largely by the World Bank loan, and that the permanent power plant equipment will be obtained from indigenous sources, the prospect that the U.S. will be involved in project financing of the Beas-Sutlej Link is diminished.

### 3. Progress to Date

Unit I: Colony and access road construction is substantially complete and tunnel portal excavation is just under way. Some subsurface investigation and much detailed design work for the diversion dam, tunnels, canal, reservoir, and powerhouse remain to be done.

Unit II: The construction of access roads, colony, shops and warehouses has been substantially completed. Open-cut and tunnel excavations for the diversion and permanent river outlet works are approximately half completed. Much construction equipment has been obtained by transfer from the Bhakra Project and by new acquisition; and procurement of additional earth-moving equipment required for the construction of Beas Dam itself is under way and procurement action will be accelerated after U.S. loan funds become available.

Project planning is virtually complete and much of the detailed design work has been done. The U.S. Bureau of Reclamation, in addition to making its 1963 study of the Beas Project as part of AID's pre-loan investigation, has assisted project engineers in many problems of planning and design. Virtually all of the engineering recommendations made by the Bureau in its 1963 report to AID have been or are being adopted by the project authorities. The actual design work is being done entirely by Indian engineers, but in addition to receiving assistance from the Bureau of Reclamation they are advised by a Board of Consultants which includes an American engineer and an American geologist. Negotiations are going on to obtain construction services from a U.S. firm and the project is endeavoring to recruit a full time American resident advisor on earth dam construction.

A detailed on-site review of progress and plans for Unit II and for the closely related Rajasthan Canal Irrigation Project was made by AID personnel during the month of September, 1964. As a result of this review, (concentrated primarily on the Rajasthan Canal Project) all outstanding points have been resolved and necessary action agreed upon. Negotiation of a loan agreement currently is under way.

Unit III: The 134-mile long Rajasthan Feeder Canal, the upstream 13.8 miles of the Rajasthan Main Canal, a 70-mile long branch canal and some smaller distributary canals have been completed and are in operation. (The Rajasthan Feeder Canal began carrying water in the summer of 1964, but irrigation in the extreme upstream portion of the Rajasthan Canal command area began in 1961-62, with water delivered from another canal system.) Construction work is under way as far downstream as mile 48 of the Rajasthan Main Canal.

About 600,000 acres of land have been classified, agricultural research work applicable to the new irrigation development is under way, and a project colonization organization is beginning to function. However, little has been done in agro-economic studies and there is need for more effective coordination between the various agencies involved in planning and implementing the development of the irrigation project. An application to the U.N. for assistance in land classification work has been made by GOI. In connection with discussion of this loan, AID has urged acceleration of the land classification program, proper consideration of land classification information in the planning of the irrigation distribution system, adequate study of salt balance and drainage problems and attention to problems of farm economics, settler training, etc.

### 4. Funding Requirements

Current estimated costs (in millions of dollars) for Unit II are given below.

	<u>Local Currency</u>	<u>Foreign Exchange</u>	<u>Total</u>
Unit II - Dam and Power Plant at Pong	191.6	41.0	232.6

It is noted that the estimated foreign exchange cost for Unit II shown above is approximately \$14 million less than that shown in the FY 1965 CAP. This reduction is due to the current GOI assumption that the permanent equipment for the Pong Power Plant will be produced indigenously instead of being imported as had previously been assumed.

It is expected that \$3.9 million from the proposed World Bank loan will be used for Unit II foreign exchange costs other than dollars and that any shortfall in Unit II foreign exchange financing (after use of the \$33 million U.S. loan) will be met by the GOI.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED						
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY India		3. PROJECT NO. 386-24-230-272				4. TITLE Hindustan Shovels									
	5. U.S. FUNDING:		BEGIN FY 1965		END FY 1965		6. PRIOR REFERENCES											
	PHYSICAL WORK:		1965		1967													
7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		e.	b.	c.	d.	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS			
		APPROPRIATION TITLE	LOAN OR GRANT	TOTAL	CONTRACT 1/	(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	1/ (2)		
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT		
I. THRU ACTUAL YEAR FY _____	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR																	
	GROSS OBLIGATIONS (ACTUAL YEAR)																	
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR																	
EXPENDITURES (ACTUAL YEAR)																		
C. UNLIQUIDATED OBLIGATIONS END OF YEAR																		
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS		DL	L*	2,950	-	-	-	-	-	2,950	-	-	-	-	-	-	
	B. EXPENDITURES		DL	L	1,000	-	-	-	-	-	1,000	-	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L	1,950	-	-	-	-	-	1,950	-	-	-	-	-	-	-
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS		DL	L	-	-	-	-	-	-	-	-	-	-	-	-	-	
	B. EXPENDITURES		DL	L	1,950	-	-	-	-	-	1,950	-	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR																	
IV. PLANNING YR. (EST.) FY _____	GROSS OBLIGATIONS 2/																	
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/																	
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/		DL	L	2,950	-	-	-	-	-	2,950	-	-	-	-	2,950	-	

## REMARKS:

- 1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column 1.

\*AID Loan #119.

refers to Annex 6 of IAS.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-24-230-272	Hindustan Shovels
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### 1. The Activity Target

To assist Hindustan Motors Limited, Calcutta in the establishment and enlargement of facilities to produce and assemble excavating shovels, with an annual capacity of 36 power shovels.

India's development program is set down in economic development plans, of which the current is the Third Five Year Plan. The Third Plan envisages the commencement of significant internal manufacture of heavy earthmoving equipment such as shovels, dumpers, scrapers, and crawler tractors, most of which now have to be imported. Hindustan Motors Ltd., Calcutta is one of the firms licensed by the Government to undertake the manufacture of such items.

Background: The Hindustan Motors Company entered into a collaboration agreement for assistance in the manufacture of excavating shovels with Universal Marion Corporation in 1959.

The Government of India, which under its economic development plans both licenses projects and authorizes private firms to approach foreign financial institutions for loan funds, authorized Hindustan Motors in 1961 to approach the U.S. Government for foreign exchange financing of this project. A partial application and various other documents were presented to the DLF in 1961, and exploratory conversations with the applicant's representatives took place at that time. However, work on the application was discontinued when the Government of India subsequently requested that DLF, and then A.I.D., consider other higher priority applications. The application for the Hindustan Shovel Project subsequently was reconsidered by mutual consent between the company, the Government of India, and A.I.D. late in 1962.

### 2. The Course of Action

To provide an AID development loan of \$2,950,000 in FY 1965 to Hindustan Motors to meet the foreign exchange costs of U.S. machinery and equipment necessary to:

- a. increase the output of Marion Model 93-M power shovels from the current approximate 9 per annum to about 3 per month or 36 per annum, and;
- b. increase the indigenously manufactured components of these shovels from the present approximate 28% per annum to about 70% per annum.

Subsequently the output of shovels would be increased to 48 per annum, at 95% indigenous manufacture.

Detailed lists of the items of equipment to be purchased with the A.I.D. loan have been arrived at by officers and technicians of Hindustan Motors and Marion Shovel. The purchase of equipment, the

increase in the production of complete shovels, and the increase in the percentage of indigenous manufacture of the shovels, will take place on a phased basis.

The loan funds also will finance technical services with respect to installation, start-up, and initial operation of the major items of equipment. Costs for these services will be included as part of the cost of the equipment being purchased, as is the normal custom. Local currency costs for site work, buildings, equipment foundations, utilities, and the like, will be borne by Hindustan Motors.

The product being produced by Hindustan Motors is the Marion Model 93-M excavator shovel. This is a 2½ cubic yard diesel powered shovel which is convertible to crane, dragline, clamshell, backhole and lifting operations. The shovel is marketed in India under the name Hind-Marion.

The Model 93-M is a modern proven well-tested heavy duty excavating shovel. It is in wide use in both this country and abroad, and enjoys a fine reputation.

Marion of course manufacture various kinds, sizes, and types of excavating shovels. The 93-M was selected by Hindustan Motors and Marion for initial assembly and manufacture in India for a number of reasons. Hindustan Motors surveyed the primary user industries, such as coal mining, construction, and quarrying, and determined that machines of the 93-M type were preferred machines because they are efficient and economical producers. Second, the 93-M is the largest size of this general type of shovel excavator which can now easily be shipped by rail within India with a minimum amount of dismantling to meet tunnel and bridge clearance requirements. Hindustan Motors and Marion hope to move into production of other sizes and types of excavating shovels in the future.

Financing: The total cost of the Hindustan Shovel Project stated in dollars is estimated at the equivalent of \$4,783,153, of which \$2,950,000 is in dollars and the equivalent of \$1,833,153 is in rupees. Stated in rupees, the total cost is the equivalent of about Rs.22,900,000 of which about Rs.14,123,000 is in dollars. The proposed A.I.D. loan would finance over 60% of the project's estimated total cost and 100% of its foreign exchange cost.

The phasing and general purposes of these costs are summarized in the following table. The A.I.D. loan would be expended only for Phases II through V of the project (the cranes also would be purchased during these phases). Rupee funds would be spent during every phase. As mentioned earlier, Phase I is in fact completed and some production of Hind-Marion shovels now is taking place.

AID 1020-1 (7-84)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-24-230-272	Hindustan Shovels
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Estimated Costs  
(In U.S. Dollar Equivalents)

Expansion Phase No.	Site Pre- paration & Buildings	Equipment		Equipment Installa- tion	Tooling	Total
		Foreign Exchange	Local Currency			
I	831,600	-	-	-	2,100	833,700
II	-	900,720	21,000	181,587	16,800	1,120,107
III	-	238,500	14,700	48,069	2,100	303,369
IV	-	967,882	31,500	195,132	23,100	1,217,614
V	231,000	662,962	4,200	133,665	10,500	1,042,327
VI	-	-	10,500	-	-	10,500
VII	-	-	12,600	-	-	12,600
Cranes	-	147,500	-	63,000	-	210,500
Conti- gencies	-	32,436	-	-	-	32,436
Total	1,062,600	2,950,000	94,500	621,453	54,600	4,783,153 say 4,783,000

3. Progress to Date

The loan was authorized in June 1964, and a loan agreement currently is being negotiated with the company.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION Unclassified					
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY India			3. PROJECT NO. 386-24-230-276				4. TITLE Cochin Fertilizer Plant (F.A.C.T.)							
	5. U.S. FUNDING:		BEGIN FY 1965		END FY 1965		6. PRIOR REFERENCES										
	PHYSICAL WORK:		1966		1968												
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		p. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
						(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	
						AID	PASA										
I. THRU ACTUAL YEAR FY _____	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR																
	GROSS OBLIGATIONS (ACTUAL YEAR)																
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR																
	EXPENDITURES (ACTUAL YEAR)																
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR																
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS		DL	L	25,000	-	-	-	-	-	25,000	-	-	-			
	B. EXPENDITURES		DL	L	-	-	-	-	-	-	-	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L	25,000	-	-	-	-	-	25,000	-	-	-			
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS		DL	L	-	-	-	-	-	-	-	-	-	-			
	B. EXPENDITURES		DL	L	12,000	-	-	-	-	-	12,000	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L	13,000	-	-	-	-	-	13,000	-	-	-			
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/		DL	L	-	-	-	-	-	-	-	-	-	-	10,000	-	
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/		DL	L	-	-	-	-	-	-	-	-	-	-	3,000	-	
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/		DL	L	25,000	-	-	-	-	-	25,000	-	-	-	25,000	-	

## REMARKS:

- 1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

Refers to Annex 6 of L.A.S.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION Unclassified	386-24-230-276	Cochin Fertilizer Plant (F.A.C.T.)
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### 1. The Activity Target

To assist in financing the foreign exchange costs of a fertilizer plant in Cochin, 17 miles from F.A.C.T.'s plant, to produce 350,000 tons per year of nutrients, as part of the Fertilizer and Chemicals Travancore Limited's expanding organization.

India's most pressing need is an adequate supply of foodgrain to feed its population. A semi-nourished or under-nourished populace has neither the inclination nor the will to develop rationally, and tends more to accept so-called panaceas that usually lead ultimately to starvation and political instability. One of the Mission's basic concerns, therefore, has become the improvement of India's agricultural economy.

To increase foodgrain production, the Mission recommends more use of fertilizer, improved irrigation, and better extension services. To produce enough foodgrain to feed itself India must have approximately 5½ million tons of fertilizer nutrients per year by 1970 and twice this amount by 1975. By 1968 India will produce from its own plants approximately 1½ million tons of fertilizer nutrients. The difference between what India can produce and the needs can be met partly from outside sources, but the entire supplies eventually must come from her own factories.

Background: The Fertilizers and Chemicals, Travancore, Limited (F.A.C.T.) came into being as a private concern with some government aid during the critical food shortage in the Second World War. The original plant, which came into production in 1948, had a capacity of 17,000 tons of fertilizer nutrients and used gas produced from wood charcoal as feed stock. In 1958 F.A.C.T. undertook the first of a series of expansions which by 1965-66 will produce over a 100,000 tons of nutrients, as the following table shows:

	1960	1961	1962-63	(1965-66) (Estimated)
	(Quantity in Tons)			
Nitrogen	10,000	20,000	30,000	70,000
Phosphoric acid	7,000	15,000	15,000	33,500
Ammonium sulphate	44,000	44,000	100,000	200,000
Ammonium phosphate	...	35,000	35,000	135,000
Ammonium chloride	8,000	8,000	8,000	25,000
Superphosphate	45,000	45,000	45,000	45,000
Mixtures	10,000	20,000	150,000	350,000

During its history F.A.C.T. has built a successful production as well as marketing unit. By agreement with the Central Government's fertilizer pool, F.A.C.T. was given the authority to market its own product in the state of Kerala

and the surrounding areas. Operating a network of 55 central depots and about 1,800 sub depots, F.A.C.T. has fertilizers so distributed that in Kerala a farmer anywhere in the state need go no more than five kilometers to get his fertilizer requirements, a sharp contrast with the situation elsewhere in India. Apart from having a highly sophisticated distribution system, the Company does all it can to promote an awareness of fertilizers in farming communities. Besides using the traditional channels of publicity like the press, direct mail, exhibitions, and films, F.A.C.T. organizes fertilizer festivals, gala affairs where, after agricultural discussions and demonstrations are held, the day is topped with a highly entertaining program which includes a film show, a dance recital and a play by local amateur talent.

The sales success of F.A.C.T. is best illustrated perhaps by its invitation from the neighbouring state of Madras to activate a similar sales organization there.

### 2. The Course of Action

It is proposed to provide during FY 1965 an A.I.D. dollar development loan in the amount of \$25 million to the Fertilizer and Chemicals Travancore Limited to assist in financing the foreign exchange costs of its proposed expansion described above.

### 3. Progress to Date

An informal request from the GOI Ministry of Finance is under consideration. A preliminary report is expected by December 1964.

## PROJECT DATA SUMMARY — AID DOLLAR COSTS

E-10

1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY India		3. PROJECT NO. 386-11-110-281 386-31-110-281		4. TITLE Agricultural Universities Development	
U.S. FUNDING: 1964		BEGIN FY 1964		END FY 1970		6. PRIOR REFERENCES	
PHYSICAL WORK:		1964		1972			

7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)	e. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
					(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	
					AID	PASA										
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	3,605	3,380	6	-	1,421	-	497	219	1,111	-	351		
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	678	678	-	-	296	-	111	-	188	-	83		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	944	938	6	-	453	-	139	-	230	-	116	-	-
	EXPENDITURES (ACTUAL YEAR)	TC	G	944	938	6	-	453	-	139	-	230	-	116	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	2,661	2,442	-	-	968	-	358	219	881	-	235		
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	993	975	18	-	469	-	406	-	-	-	100		
	B. EXPENDITURES	TC	G	1,040	969	18	-	458	-	214	53	185	-	112	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	2,614	2,448	-	-	979	-	550	166	696	-	223		
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TC	G	1,302	1,284	18	-	890	-	294	-	-	-	100		
	B. EXPENDITURES	TC	G	1,144	1,086	18	-	596	-	236	40	146	-	108	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	2,772	2,646	-	-	1,273	-	608	126	550	-	215		
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/	TC	G	1,326	1,308	18	-	944	-	264	-	-	-	100	48	1,172
68-70 V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	2,728	2,674	54	-	1,920	-	454	-	-	-	300	150	5,456
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	9,954	9,621	114	-	5,644	-	1,915	219	1,111	-	951	333	9,621

## REMARKS:

1/ This is a memorandum (non-add) column.

2/ Show estimated expenditures in column i.

\* Includes unliquidated balances as of 6/63 from Project 147 and 028 and obligations for FY1964.

\*\* Expenditures for FY1964 only.

AID 1020-3 (7-84)	PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES										SECURITY CLASSIFICATION UNCLASSIFIED			
E-1b	1. DATA CURRENT AS OF:	2. COOPERATING COUNTRY		3.	BEG. FY	END FY	4. PROJECT NO.		5. TITLE					
	1 November 1964	India		Funding	1964	1970	386-11-110-281		Agricultural Universities Development					
7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
	(1)	(2)	(3)	(1)		(2)		(1)	(2)	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
				DOLLAR EQUIVALENTS (000) 1/		LOCAL CURRENCY UNITS (000)				OBLIGATED	DISBURSED	(a)	(b)	(a)
	TYPE	SOURCE	LOAN OR GRANT	(a)	(b)	(a)	(b)	OBLIGATED	DISBURSED					
I CUMULATIVE THRU ACTUAL YEAR	A.	(I) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	-	-	-	-	-	-	-	-	-	
	FA ACT	(II) TRUST FUND	Govt. Revenue	-	34	33	166	160	-	-	-	-	166	160
		(III) OTHER LC	Sec. 402	G	1,882	468	9,007	2,239	-	-	1,149	142	3,936	948
		B. P.L. 480 LC	Sec.104(e)	G	1,965	1,965	9,409	9,409	9,409	9,409	-	-	-	-
TOTAL ACTUAL FY 1964	A.	(I) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	-	-	-	-	-	-	-	-	-	
	FA ACT	(II) TRUST FUND	Govt. Rev.	-	34	33	166	160	-	-	-	-	166	160
		(III) OTHER LC	Sec. 402	G	1,449	468	2,152	2,239	-	-	1,149	142	950	948
		B. P.L. 480 LC	Sec.104(e)	G	-	1,965	-	9,409	-	9,409	-	-	-	-
II OPERATIONAL YEAR (EST.)	A.	(I) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	-	-	-	-	-	-	-	-	-	
	FA ACT	(II) TRUST FUND	Govt. Rev.	-	50	50	240	240	-	-	-	-	240	240
		(III) OTHER LC	Sec. 402	G	874	566	4,184	2,710	-	-	1,229	144	2,561	1,337
		B. P.L. 480 LC	Sec.104(e)	G	19,000 1/	19,000	90,964	90,964	90,964	-	-	-	-	-
III BUDGET YEAR (EST.)	A.	(I) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	-	-	-	-	-	-	-	-	-	
	FA ACT	(II) TRUST FUND	Govt. Rev.	-	57	57	275	275	-	-	-	-	275	275
		(III) OTHER LC	Sec. 402	G	998	674	4,778	3,226	-	-	1,578	145	2,025	1,503
		B. P.L. 480 LC	Sec.104(e)	G	8,000	8,000	38,301	38,301	38,301	-	-	-	-	-
IV PLANNING YEAR (EST.)	A.	(I) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	-	-	-	-	-	-	-	-	-	
	FA ACT	(II) TRUST FUND	Govt. Rev.	-	57	57	275	275	-	-	-	-	275	275
		(III) OTHER LC	Sec. 402	G	1,036	765	4,960	3,661	-	-	1,893	147	1,992	1,621
		B. P.L. 480 LC	Sec.104(e)	G	6,000	6,000	28,726	28,726	28,726	-	-	-	-	-
V ALL SUBSEQUENT FYs (EST.)	A.	(I) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	-	-	-	-	-	-	-	-	-	
	FA ACT	(II) TRUST FUND	Govt. Rev.	-	150	151	720	726	-	-	-	-	720	726
		(III) OTHER LC	Sec. 402	G	2,271	4,588	10,873	21,966	-	-	10,425	878	5,558	10,663
		B. P.L. 480 LC	Sec.104(e)	G	10,000	10,000	47,876	47,876	47,876	-	-	-	-	-
VI TOTAL ALL YEARS (EST.)	A.	(I) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	-	-	-	-	-	-	-	-	-	
	FA ACT	(II) TRUST FUND	Govt. Rev.	-	348	348	1,676	1,676	-	-	-	-	1,676	1,676
		(III) OTHER LC	Sec. 402	G	7,061	7,061	33,802	33,802	-	-	16,274	1,456	16,072	16,072
		B. P.L. 480 LC	Sec.104(e)	G	44,965	44,965	215,276	215,276	215,276	215,276	-	-	-	-

## REMARKS:

1/ Exchange Rate: \$1 = Rs.4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS										1. DATA CURRENT AS OF:	2. COOPERATING CTRY.		3.	BEG. FY	END FY	4. PROJECT NO.							
	1964										1 November 1964	India		PERSONNEL SERVICES	1964	1972	386-11-110-281							
													PARTICIPANT TRAINING	1964	1973	386-31-110-281								
I PROJECT PERSONNEL	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			6. CUM. THRU ACTUAL FY			b. ACTUAL FY 1964			c. OPERATIONAL FY 1965			d. BUDGET FY 1966			e. PLANNING FY 1967			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract		
A. MAN YEARS	U.S.	-	-	81	-	-	48	1	-	48	1	-	55	1	-	58	-	-	121	3	-	363		
	Non U.S.	-	-	120	-	-	70	-	-	70	-	-	70	-	-	70	-	-	210	-	-	540		
B. ON BOARD	U.S.	-	-	-	-	-	48	1	-	48	1	-	55	1	-	58	-	-	-	-	-	-		
	Non U.S.	-	-	-	-	-	70	-	-	70	-	-	70	-	-	70	-	-	-	-	-	-		
II. PARTICIPANTS PROGRAMMED	A. U.S.	-	-	262 1/	-	-	63	-	-	63	-	-	49	-	-	44	-	-	79	-	-	497		
	B. THIRD CTRY.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

REMARKS: a/ Obligations - Include unliquidated balances as of 6/63 from projects 147 and 028 and obligations for FY1964 in project 028

1/ End of Fiscal Year Expenditures - only FY1964.

b/ Excludes U.S. use rupees equivalent to \$7,000,000. /Proj.#028.

c/ 199 of 262 participants were trained under

UNCLASSIFIED

PAGE NO.

AC-96

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY: India	SECURITY CLASSIFICATION: UNCLASSIFIED	386-11-110-281 386-31-110-281	Agricultural Universities Development
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## I. The Activity Targets

The overall target of the Center and State Governments for this activity is the development of seven integrated Indian agricultural universities, named below, in representative states of India, each to consist initially of agriculture and veterinary science colleges and a school of basic sciences and humanities and to include, within a few years, colleges of agricultural engineering, home science, and graduate studies, besides the research and extension activities outlined below.

**Teaching:** It is projected that such universities in seven states, organized on the U.S. land-grant college functional pattern, will need administrative personnel, 40 deans and 165 professors with doctorate degrees and 2,000 other staff members, at least half of them with master's degrees. Total enrollment will be about 14,000 undergraduate and 1,400 graduate students. Plans provide for a main library with at least 30,000 books and 200 journals for each university, smaller branch libraries at outlying colleges, and textbooks adapted to Indian conditions for all students.

**Research:** Within the first three years after each university is created by law, it is expected that agricultural research programs in the assisted states will be directed chiefly by the universities. A main experiment station manned by some of the personnel shown above is planned for each institution, with an average of four sub-stations per state at which limited staff will do field research work. Immediate and major attention will be given to solving problems impeding Indian agricultural production, especially of food crops.

**Extension:** It is expected that within six years of its establishment, each University will be able to administer its State's extension programs. The seven state programs will ultimately require a total of 5,000 extension agents, each serving an average of 7,200 rural families, and 100 or more subject-matter specialists to backstop them. In addition to modern production techniques, increasing attention must be given to administrative organizations, sociological matters, youth activities, etc.

Concurrent with development of the overall programs in agricultural extension demanded by India's pressing needs for increased production, U.S. assistance will emphasize training of extension workers to produce strong subject-matter specialists and to improve the use by field workers of the results of problem-solving research. The universities will cooperate and assist in training Block and District personnel for an effective agricultural extension organization directed towards increasing agricultural production.

**Facilities:** It is expected that full integration of teaching, research and extension, with coordination between colleges, will make for at least 50 percent greater efficiency in the use of existing

facilities. Nevertheless these physical facilities, if they are to accommodate the enlarged student body and staff and permit carrying on the necessary research on a suitable scale, must be doubled during the next four to six years.

**Other States:** It appears likely that seven other states (Assam, Bihar, Gujarat, Kerala, Maharashtra, Madras and West Bengal) will start agricultural universities during the Fourth Plan period. It is not expected that these universities should require comprehensive U.S. technical assistance, since those now being aided should then be able to help the others in developing a planned nation-wide agricultural university program in India.

**Completion Date:** The Center and State governments expect to accomplish most of the university development outlined above during the Fourth Five Year Plan. Unless now unforeseen conditions slow down the rate of progress, U.S. help through FY 1970 should complete these phases of the development.

## II. The Course of Action

**Contracts:** A U.S. university will provide annually to each Indian university from six to nine specialists in university and college administration and critical technical fields, and U.S. training in administration and key technical fields for seven to nine Indian staff members. Procurement of scientific books and equipment not available in India will be financed by the Government of India.

Contractors will provide assistance to Indian universities, as follows:

University of Illinois - Uttar Pradesh Agricultural University  
University of Illinois - (Madhya Pradesh) Jawaharlal Nehru  
Agricultural University  
The Ohio State University - Punjab Agricultural University  
The Ohio State University - (Rajasthan) University of Udaipur  
University of Missouri - Orissa Univ. of Agriculture & Technology  
Kansas State University - Andhra Pradesh Agricultural University  
University of Tennessee - (Mysore) Univ. of Agricultural Sciences

**Technicians and Participants:** The U.S. specialists will not occupy administrative or technical posts, but will serve as advisors to Indian officials on the job while the specialists are in India. The specialists, however, will conduct special demonstration teaching, and research projects as means of establishing the value

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of such projects and of training Indian staff members and students. Special attention will be given to training within India to meet the future needs of the new universities, and thus make it possible to limit training in the U.S. mainly to key staff members.

**Coordination:** The work of the U.S. universities will be coordinated by the Mission's Agriculture Division, which provides policy guidance to the activity and serves as liaison between the contractors, the GOI and other Mission offices.

**Cooperating Country Support:** The States, with GOI assistance, are expected to meet all ordinary Indian staff salary costs and provide for the operation and maintenance of university facilities. The total current annual operating costs are about Rs.49 million, and are expected to be Rs.89 million in 1966. All additional land needed for the university campus and research stations will be provided by the concerned States; they have already provided land, buildings, facilities, and equipment valued at Rs.200 million. It is probable that most of the needs for additional staff, buildings and facilities; estimated at Rs.250 million, will be supported by transfers of U.S.-owned local currency to the Center Government which, in turn, will make grants to the States. Imported scientific books and laboratory and field equipment, estimated to cost a total of about \$5,000,000 will be provided by the GOI.

### III. Progress to Date

**A. General Assistance:** The Agricultural Education and Research project (O28), an India-wide program which at various times assisted from 44 to 80 institutions, was started in 1955 and phased out in 1963 (1963 FY funds). This project added significant professional strength to many agricultural and veterinary colleges. During the course of this project, it became evident that integrated agricultural teaching, research, and extension programs for a State could not be accomplished under the existing organizations and administration. The overall effort led to the present project which supports establishment by seven states of agricultural universities patterned after the U.S. land grant institutions.

A total of about \$10.1 million and \$1.2 million equivalent of Section 402 rupees was expended on this general, India-wide program.

**B. U.P. Agricultural University:** Project 147 providing assistance to the U.P. Agricultural University started in 1959 and was closed out as a separate project in FY 1963. Assistance to the Uttar Pradesh Agricultural University is being continued as a part of the present project.

**C. Agricultural Universities:** This project to assist the U.P. Agricultural University and six others (listed in II above) started in late 1963 using FY 1963 funds. A detailed analysis of the status of each university (including U.P. Agricultural University) is given in Appendix A of this E-1.

**Administration:** Each of the seven States has enacted an agricultural university law. For each, a Vice Chancellor has been appointed, a Board of Management has been constituted, official Statutes have been adopted, and key administrative officers and deans have been appointed, all have started functioning. Most of the key officials are of the "old school" and, although they accept the new concepts of the agricultural universities, constant and painstaking efforts will be necessary for several years to convert them fully to new methods and to prevent reversion to the old traditional ways of seniority and status quo.

**Teaching:** The U.P. Agricultural University started from nothing in 1959; to date it has graduated about 275 students in agriculture and veterinary sciences. At each of the six other universities, two to eight existing colleges have been brought under one centralized administration. The old classical curricula and the dictate-memorize teaching methods are being replaced by a new knowledge-for-use approach. This change, a slow and difficult one, is now from 10 to 20 percent completed.

Within the seven Indian agricultural universities there are now 141 deans and professors, 76 with doctoral degrees; and 708 other staff members, 367 having advanced degrees. The present enrollment is about 9,850 undergraduates, and 1,100 candidates for advanced degrees. The libraries average 20,100 books, but virtually no textbooks are used regularly or owned by students. Classrooms and laboratories for existing colleges are reasonably adequate, but there are still great needs for new libraries, buildings and facilities for new colleges, and staff housing on most of the new university campuses.

**Research:** In Punjab, state research programs have been transferred to the new university. In other States, the programs transferred to the new universities represent from 10 to 50 percent of the total research effort. This rate of transfer is desirable because the new universities are giving first attention to sound academic programs, and only now are becoming capable of planning and administering good, problem-solving research programs on a state-wide basis. Many readjustments are involved because some of the projects to be transferred must be reoriented and coordinated, and some projects, staffs, and research stations must be phased out. In the meantime the universities have started teacher-research and student research projects, within the colleges and in the fields, directed at solving some of the practical problems impeding agricultural production by individual cultivators.

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**Extension Education:** To date, the administration of agricultural extension programs in the seven states has been assumed by the new universities in very limited degree. The existing state Community Development programs, which include agricultural extension, are multipurpose and relatively ineffective with respect to improved agriculture. The agriculturists in the field positions are poorly trained in subject matter, and they are not under the direction of an agriculture-oriented agency. The new universities must become very strong before they attempt to organize and direct sound state extension programs.

As the first step in that direction, the new universities have made extension training and demonstrations an important part of their programs. They have assumed responsibility for agricultural extension education work in groups of villages near the various colleges. All of the students are required to take extension courses and perform practical field work. Staff members, for the first time, are required to go to the fields to teach and to learn. The colleges and extension services of the universities are giving increased attention to the preparation of educational material for extension workers and cultivators. Field days are arranged so that the cultivators can come to the universities and bring their problems, discuss them and find solutions. Thus the university staffs are slowly but definitely giving strength in planning and directing state-wide agricultural extension programs.

**Buildings and Equipment:** In the past and at present, the new universities have had fair amounts of funds for new buildings of the conventional type (classrooms, laboratories, and dormitories) and for new libraries. However, funds for staff housing, ancillary services, transportation to the villages, field equipment, etc. have not been readily forthcoming, a shortage that will continue to handicap development. It will be necessary to prove, by successful demonstrations, the value of and need for such innovations before the universities can compete favorably for State funds. It is estimated that investment in the physical facilities for the agricultural universities, now valued at 200 million rupees, must be increased to at least 450 million during the next four to six years.

**Status of Each University:** Appendix A contains a status report for each of the assisted agricultural universities. The first column lists the more important elements of a complete agricultural university. The second column gives the status of each element in August 1964. The last column summarizes the best estimates of the concerned Indian and American university officials regarding the status of each element in October 1967, the end of the FY 1966 funding period. Of course, the predicted status in 1967 necessarily falls short, in a different degree for each University, of the objectives to be met by the target date of 1971, given in I above.

#### IV. FUNDING REQUIREMENTS

##### (a) Total Requirements (FYs 1963-70 incl.)

Dr. M.L. Baker, who made a special study for AID of our agricultural universities program in early 1964, did not make a quantitative determination of the US assistance required to bring the new universities to a self-development status. He indicated, however, that the earlier estimate of 50 technician man-years per university seemed to be a reasonable basis for project planning. He urged that the amount of assistance provided in any one year should match the capacity of each university to make full use of the aid. Experience has indicated that a newly developing institution can effectively use five to seven technicians initially, and later eight to nine technicians at its peak rate of development. As the assisted development phase comes to an end, three to four specialized technicians may be sufficient. On this basis, the following schedule of technician services is indicated:

Indian Agricultural Universities	FY Funds provided for thru 1964	Man-years of Technician Services						Totals
		Operational Year beginning November 1						
		1965	1966	1967	1968	1969	1970	
Uttar Pradesh	25½*	8	8	7	6	5	3½	63*
Madhya Pradesh	6	6	7	9	9	8	5	50
Punjab	13	9	9	7	5	4	3	50
Rajasthan	8½	6	8	8	8	7	4½	50
Orissa	9	6	8	9	8	6	4	50
Andhra Pradesh	9	6	7	9	9	6	4	50
Mysore	10	7	8	9	9	5	2	50
<b>Totals</b>	<b>81</b>	<b>48</b>	<b>55</b>	<b>58</b>	<b>54</b>	<b>41</b>	<b>26</b>	<b>363</b>

\*Additional assistance required from beginning in 1959 because the University started from the ground and required completely new facilities, staff, etc.

It must be recognized that this long range schedule of assistance may require some revision and a longer period of assistance if any particular university develops more slowly than

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recognized that at the end of the target period, limited assistance predicted. It also must be of a special nature, especially in the areas of research and extension, may be well justified. In addition, some universities may need more help in a given year than others. The adjustments needed to deal with these factors will be made as required.

In addition to technician services, the need for U.S. training of an average of about 70 Indian staff members per university is evident. The following data show staff members already provided U.S. training in the respective universities and the numbers which should be deputed for training in the next six years. More extensive use will be made increasingly of training facilities available at the Indian Agricultural Research Institute and the new agricultural universities.

Indian Agricultural Universities	Staff Members Trained & To be Trained in the U.S.							
	Trained	1964	1965	1966	1967	1968	1969	Total
Uttar Pradesh	11	9	9	8	8	8	1	60
Madhya Pradesh	40	9	9	6	6	6	6	82
Punjab	28	9	9	1	6	6	5	10
Rajasthan	27	9	9	1	6	6	6	70
Orissa	29	9	9	7	6	5	5	10
Andhra Pradesh	34	9	9	1	6	5	5	75
Mysore	30	9	9	7	6	5	4	70
Totals	199	63	63	49	44	41	38	491

In the following summary of dollar funding requirements, the estimated costs of technicians and U.S. training are based on the following average factors:

Technician man-year: \$18,000 and Rupees equivalent to \$15,000  
(Includes local costs of demonstrations and training)

Participants: 18 months each: \$6,000 and Rupees equivalent to \$1,500

Elements	FY Dollar Costs (in thousands)						FY Rupee Costs, Dollar Eq. (in 000s)						
	Thru 1/1964		1965	1966	1967	1968	Total	Thru 1/1964		1965	1966	1967	1968
Technicians	968	469	890	944	1920	5191	790	774	820	865	1845	5094	
Participants	358	406	294	264	454	1716	624	95	173	166	411	1469	
On Campus Costs	235	100	100	100	300	835	-	-	-	-	-	-	-
Project Manager	-	18	18	18	54	108	-	5	5	5	15	30	
US-Financed Commodities	1100	-	-	-	-	1100	-	-	-	-	-	-	-
Total	2661	993	1302	1326	2728	9010	1414	874	998	1036	2271	6593	

GOI-Financed Commodities - 800 1000 1000 2200 5000 - - - - -

1/ Balances available from 7/1/63 under Projects 028 and 147.

2/ Includes balance of \$219,000 as Tech. aids.

2/ Partly financed by carry-over (of \$295,000) from 1964 funds committed to contracts.

4/ Includes rupee funds (\$100,000 each in FY 1966 and FY 1967, and \$300,000 in FYs 1968-70) to support increased training in India as planned and largely directed by U.S. technicians at the training institutions.

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PL-480 rupees have been used and should be available about as follows:

<sup>1/</sup>  
Through 1964 Joint Use Rupees: \$1,965,000 for UP Agr. University  
FY 1965 Joint Use Rupees: \$19,000,000 for six universities  
<sup>2/</sup>  
FY 1965 U.S. Use Rupees: \$7,000,000 special uses at all univ.  
FY 1966 Joint Use Rupees: \$8,000,000 for seven universities  
FY 1967 Joint Use Rupees: \$6,000,000 for seven universities  
1968-70 Joint Use Rupees: \$10,000,000 for seven universities

<sup>1/</sup> includes balances as of 7/1/63 under Project 147.

<sup>2/</sup> not included in E-1 face-sheet

(b) Operational Year Requirements (FY 1965):

The FY 1965 funding required to carry the activity through October 1966, by major project elements and in terms of dollars and dollar equivalents of local currency, is as follows:

DG

1 Project Manager DH	
U.S. technicians (48), salaries & other dollar costs:	\$ 469,000*
On campus costs (salaries and others)	100,000
Project Coordinator	18,000
U.S. training of participants (63 for 70 man-years)	280,000
Supplemental request to add 31½ man-years of participant training	126,000
	<hr/>
Total DG grant ...	\$ 993,000
Imported books and equipment, GOI financed ...	\$ 800,000

Section 402 rupees

Administrative and logistic costs of technicians and participants and Project Coordinator	\$ 436,000
Demonstration projects, within-India training etc.	\$ 438,000
	<hr/>
Total Sec. 402 Rupees ..	\$ 874,000

Grants for improved physical facilities-PL 480 Rupees \$19,000,000  
Grants for special features - US-use PL-480 Rupees \$ 7,000,000

\*\$295,000 carry-over from funds already Total \$ 26,000,000  
in contracts reduces this item from \$764,000.

(c) Budget Year Requirements (FY 1966):

The FY 1966 funding required to carry contract operations through October 1967, by major elements and in terms of dollars and dollar equivalents of local currency, is as follows:

DG

1 Project Manager DH	
U.S. technicians (55)*, salaries and other dollar costs:	\$ 890,000
On campus costs (salaries and others)	100,000
Project Coordinator	18,000
U.S. training of participants (49 for 18 months each)	294,000
	<hr/>
Total DG grant ..	\$ 1,302,000

Imported books and equipment, GOI-financed	.. \$ 1,000,000
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\* Includes an extra technician per university to give special impetus to training of staff and field workers for agricultural extension education.

Section 402 Rupees

Administrative and logistic costs of technicians & Project Coordinator	\$ 575,000
Participants travel costs:	73,000
Teaching & demonstration aids and services for technicians:	250,000
Within India training	100,000
	<hr/>
Total Sec. 402 Rupees	\$ 998,000
Grants for improved physical facilities-PL-480 Rupees	\$8,000,000

The details on technicians and participants are shown in Appendix B.

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(d) Planning Year Requirements (FY 1967):

The estimated FY 1967 funding required to carry contract operations through October 1968, by major components and in term of dollars and dollar equivalents of local currency, is as follows:

DG

U.S. technicians (58), salaries and other dollar costs:	\$	944,000
On campus costs (salaries and others)		100,000
Project Coordinator		18,000
U.S. training of participants (44 for 18 months each)		264,000
		<hr/>
Total DG grant	\$	1,326,000
		<hr/>
Imported books and equipment, GOI financed	..	\$ 1,000,000
		<hr/>

Section 402 Rupees

Administrative and logistic costs of technicians & Project Coordinator	\$	620,000
Participants travel costs		66,000
Teaching & demonstration aids and services for technicians		250,000
Within India training		100,000
		<hr/>

Total Section 402 Rupees.. \$ 1,036,000

Grants for improved physical facilities - PL-480 Rupees.... \$ 6,000,000

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APPENDIX 'A'

Report on Status of U.P. Agricultural University - August 1964 and October 1967

Elements of an Agr. University providing Coordinated Research, Teaching and Extension Programs	Present Status as of August 1964	Status Expected by October 1967 (end of FY 1966 funding)
1. Enactment of suitable legislation for Agr. University.	Reasonably good law was passed in 1959. No change made to-date.	Several amendments as needed to provide for better research and extension.
2. Establishment of adequate statutes	Quite complete	Some minor amendments are needed
3. Appointment of effective Board of Management	Weak, because of conflicts of interest.	Need replacement of some government members and a clearer definition.
4. Appointment of qualified Vice Chancellor	Good man now serving as acting Vice Chancellor	Need a Vice Chancellor with good academic background and broad experiences.
5. Appointment of needed key officers, Controller, Registrar, Deans, etc.	About 60% on board. Too many delays in appointing key officers.	90% good key officers. Some improvement in concepts.
6. No. of colleges and school faculties	Five - Agr. Engg., Agr., Basic Sci. & Humanities, Vet. Med. & Post-Graduate.	Seven. Home Science and Agr. Education to be added.
7. Adequacy of College & Hostel buildings	Adequate for present student body	Increased by 30% to be adequate.
8. Adequacy of staff housing	About 60% of needs provided. This needs early attention.	250 new houses to meet needs.
9. Amount and adequacy of land for campus use	1000 acres. Adequate but some development needed.	Additional developments as irrigation, drainage, etc.
10. Adequacy of equipment, etc. for colleges	50% of present needs provided. Some still to be imported.	80% of needs expected to be met. Will depend upon GOI and State action.
11. No. and adequacy of teaching staff	115 - 70% of present needs. Most of them permanent.	200-300 of ultimate needs. Expect to be regular appointments.
12. Total size and student body	1054 - one campus	1750 expected
13. No. Graduates per year, BS, MS, Ph.D.	125 Bachelor & 20 M.S.	175 Bachelor & 75 M.S. Quality of training should be improved.

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Elements of an Agr. University providing Coordinated Research, Teaching and Extension Programs	Present Status as of August 1964	Status Expected by October 1967 (end of FY 1966 funding)
14. Amount and adequacy of research land	500 acres. Sufficient for present needs	500 acres. Should be 90% of full needs.
15. Adequacy of equipment & facilities for research	50%. Some additional equipment and improvements needed.	Should have 80% of needs.
16. No. of University staff primarily on research	Two - Twenty teachers are doing some research.	30 or $\frac{1}{2}$ of ultimate needs. 100 will be doing some research.
17. Adequacy of total State research to meet needs of Agriculture	Inadequate. Probably not more than 30%	Effectiveness upto 40% of needs of state.
18. Percent of State research done by University	5%. No schemes transferred to University except maize.	30%. This would be all University can handle by 1967.
19. No. University staff on field extension work	Four B.S., and two Ph.D.	50. About 20% of ultimate needs.
20. No. Districts, Blocks, etc. under University charge.	3 blocks for extension education work.	2 districts; responsible only for extension education and training.
21. Adequacy of University transport facilities for field work.	Very poor. Bicycles & partial use of two jeeps.	Only fair. This will continue as a large problem.
22. Percent total State extension training and education done by University.	Trace. The program in the University has just started.	10%. About all the University will be capable of doing.
23. Adequacy of total State extension work	10%. Poor training divided authority.	25%. Largely due to poorly qualified staff and transport.

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Report on Status of M.P. Agricultural University August 1964 & October 1967

Elements of an Agr. University Providing Coordinated Research, Teaching and Extension Programs	Present Status as of August 1964	Status Expected by October 1967 (end of FY 1966 funding)
1. Enactment of suitable legislation for Agricultural University.	Reasonably adequate. One amendment pending.	A few amendments will be needed.
2. Establishment of adequate Statutes and Regulations	Will be passed after October 2 inauguration.	Changed situations will require change.
3. Appointment of effective Board of Management	None appointed yet	An efficient Board is expected
4. Appointment of qualified Vice Chancellor	Excellent administrator. Uses democratic approach.	V.C. still working toward goals and objectives.
5. Appointment of needed key officers, Controller, Registrar, Deans, etc.	Only Vice Chancellor appointed	All key officers on the job.
6. No. of colleges and school faculties	Six separate Agriculture units. Two Vet. units.	Expect Agriculture Engg. and Home Science.
7. Adequacy of college & hostel buildings	Jabalpur agriculture and outlying units 50% adequate.	80% adequate. Vet. College to be relocated
8. Adequacy of staff housing	Averages of 8 units is 30% adequate	75% adequate to the needs in 1967.
9. Amount and adequacy of land for campus use	Adequate in acreage. Needs development. Gwalior needs land.	Securing dirt fill will cause considerable delay.
10. Adequacy of equipment, etc. for colleges	50% adequate in outlying units; Jabalpur 75% adequate.	Only 75% adequate for the needs then.
11. No. and adequacy of teaching staff	270 positions with 25% vacancies. Expansion will require 30% more.	384 which will be 80% of staff needed.
12. Total size of student body	8 units total 2600	30% more or 34000
13. No. Graduates per year, BS, MS, Ph.D.	B.S. 400; M.S. 120; Ph.D. 1	B.S. 550; M.S. 120; Ph.D. 5
14. Amount and adequacy of land for research	Adequate except Jabalpur needs 40 acres and Gwalior needs 100 acres	Adequate in size, but many improvements needed.
15. Adequacy of equipment and facilities for research	Very poor	Still in dire need of foreign exchange.

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Elements of an Agr. University Providing Coordinated Research, Teaching and Extension Programs	Present Status as of August 1964	Status Expected by October 1967 (end of FY 1966 funding)
16. No. of University staff primarily on research.	None at present; 280 State employees to be transferred.	Probably 100 staff added.
17. Adequacy of total State research to meet needs of agriculture.	Only 10% of research needed.	Possibly 40% of problem solving research needed.
18. Percent of State research done by University	None at present	All
19. No. University staff on field extension work	None at present	150. 30% of ultimate needs.
20. No. Districts, Blocks, etc. under University charge	Twenty five villages	50% of one Block. University will not be ready for more.
21. Adequacy of University transport facilities for field work.	Very poor transport. This is the big bottle-neck.	Transport will still be bottle-neck.
22. Percent total State extension training and education done by University	One per cent	20 per cent
23. Adequacy of total State extension work	10%. Training not problem solving	30%. The bottle-neck is experienced teachers and transportation.

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Report on Status of Punjab Agricultural University - August 1964 and October 1967

Elements of an Agr. University providing Coordinated Research, Teaching and Extension Programs	Status as of August 1964	Status Expected by October 1967 (end of FY 1966 funding)
1. Enactment of suitable legislation for Agricultural University	Reasonably adequate. Minor amendment drawn	Only needed changes on basis of experience.
2. Establishment of adequate Statutes & Regulations	Statutes are inadequate. Clarification needed.	Fully adequate on basis of experience.
3. Appointment of effective Board of Management	Strong, effective Board	No changes required
4. Appointment of qualified Vice Chancellor	Very capable administrator	No change required
5. Appointment of needed key officers, Controller, Registrar, Deans, etc.	All selected except one. Three not yet on job.	Few additional positions as needed.
6. No. of colleges & school faculties	2 Agr., 1 Vet., and 1 Basic Sci.	Agr. Eng. & Home Science to be added.
7. Adequacy of college & hostel buildings	Reasonably adequate for present student body	Present building plans will meet all needs.
8. Adequacy of staff housing	Reasonably adequate	Necessary additions fully expected.
9. Amount and adequacy of land for campus use	Fairly adequate for present	50 acres to be added to Ludhiana campus.
10. Adequacy of equipment, etc. for colleges	Inadequate, and poor maintenance	Depends on needed foreign exchange.
11. No. and adequacy of teaching staff	172 posts filled and 81 vacant. Reasonably adequate	Necessary additions now being made.
12. Total size of student body	1174 undergraduates and 260 post-graduates	1174 BS candidates, 668 MS 7 Ph.D. students
13. No. graduate per year, BS, MS, Ph.D.	BS -222, MS 63	BS 370, MS 170, Ph.D. 35
14. Amount and adequacy of land for research	Area approaching adequacy. Further development needed.	350 acres added for field stations. All areas developed.
15. Adequacy of equipment and facilities for research	Far from adequate, especially field equipment	\$400,000 foreign exchange to bring to 50% of needs.
16. No. of University staff primarily on research	129 senior and 177 junior 168 posts unfilled.	Reduce unfilled posts to extent qualified persons are available.
17. Adequacy of total State research to meet needs of agriculture	97 projects probably meet only 25% needs	Improved research should meet 35% of needs.
18. Percent of State research done by University	100%	Same

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Elements of an Agr. University providing Coordinated Research, Teaching and Extension Programs	Status as of August 1964	Status Expected by October 1967 (end of FY 1966 funding)
19. No. University staff on field extension work	82 posts filled, 46 vacant	Fill vacancies, and add 100 positions
20. No. Districts, Blocks, etc. under University charge	All the State	Same
21. Adequacy of University transport facilities for field work	Grossly inadequate	Hope to add 40 vehicles
22. Percent total State extension training and education done by University	100% of extension education and training	100%. Double level of effectiveness
23. Adequacy of total State extension work	Probably not more than 5% of full program	May reach 15 to 20% of adequacy.

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Report on Status of Udaipur Agricultural University - August 1964 & October 1967

Elements of an Agr. University Providing Coordinated Research, Teaching and Extension Programs	Present status as of August 1964	Status expected by October 1967 (end of FY 1966 funding)
1. Enactment of suitable legislation for Agricultural University	Reasonably adequate law passed in 1962. Amended in 1963.	Expect a few amendments.
2. Establishment of adequate Statutes and Regulations	About 2/3rd complete	Complete - with some changes.
3. Appointment of effective Board of Management	Board of Control too large Executive Committee more effective	Continue to be too large
4. Appointment of qualified Vice Chancellor	A very good man appointed in November 1963	Same Vice Chancellor to continue
5. Appointment of needed key officers, Controller, Registrar, Deans etc.	Most key appointment made. Except Dir. Ext. & Res. & Dean Agr. Engineering	All appointments confirmed
6. No. of colleges and school faculties	4-Agr., Vet. Med., Agr. Engg. and School of Basic sciences	Home Science from affiliated to constituent College.
7. Adequacy of College & Hostel buildings	Barely adequate for present enrollment	Expect 25% increase
8. Adequacy of staff housing	About 10% of staff living in University housing	Expect 25% of staff in University housing
9. Amount and adequacy of land for campus use	Bikaner 1800 acres; Jobner 450 acres; Udaipur 220 acres.	Expect to have 800 acres additional for campus
10. Adequacy of equipment, etc. for colleges	About 75% - textbooks a critical need	Some improvement
11. No. and adequacy of teaching staff	Udaipur 70; Jobner 58; Bikaner 40	20 to 25% increase in staff
12. Total size of student body	Udaipur 650; Jobner 500; Bikaner 250. Total: 1400	10 to 15% increase
13. No. Graduates per year, BS, MS, Ph.D.	250 - 18 - 0	BS 250; MS 100; Ph.D. program started
14. Amount and adequacy of research land	Very limited at Udaipur and Jobner	Expect to have additional 1500 for research (Udaipur)
15. Adequacy of equipment and facilities for research	Very limited	25 to 30 increase in facilities
16. No. of University staff primarily on research	8 primarily on research	15 to 20 on research plus some joint teaching appointments.

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Elements of an Agr. University Providing Coordinated Research, Teaching and Extension Programs	Present status as of August 1964	Status Expected by October 1967 (end of FY 1966 funding)
17. Adequacy of total State research to meet needs of Agriculture	Most in Department of Agriculture not adequate - quality questionable.	Most Agr. research still with the Department of Agriculture
18. Percent of State research done by University	5 to 10% - "basic" research	20 to 25% depending on facilities acquired.
19. No. University staff on field extension work	14 full time plus part helps as needed	30 - 40 if scheme approved to Director of Extension.
20. No. Districts, Blocks, etc. under University charge	Part of a block near each of the three campuses	At least one block near each campus
21. Adequacy of University transport facilities for field work	Limited - More Jeeps being requested	Several additional motor transports
22. Percent total State extension training and education done by University	Very small - Most Ext. Education under Department of Agriculture	Will increase - depends on approval of scheme
23. Adequacy of total State extension work	Not adequate - A.E.O.S. do mostly service work No Subject matter Specialists	Some improvement as University increase Extension program

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Report on Status of Orissa University of Agriculture & Technology - August 1964 & October 1967

Elements of an Agr. University Providing Coordinated Research, Teaching and Extension Programs	Present Status as of August 1964	Status Expected by October 1967 (end of FY 1966 funding)
1. Enactment of suitable legislation for Agr. University	Reasonable good law was passed in 1961.	Some amendments based on experience.
2. Establishment of adequate statutes	Statutes written in 1962. Some minor conflicts with Acts.	Some modifications based on experience.
3. Appointment of effective Board of Management	Board formed 1962, needs strengthening	Improved with experience. Changes in Govt. Members
4. Appointment of qualified Vice Chancellor	President appointed 1962 Unsatisfactory.	More capable and effective President
5. Appointment of needed key officers, Controller, Registrar, Deans, etc.	All appointed - 30% post filled with good men	75% posts filled with good men.
6. No. of colleges and school faculties	Three Agriculture - 1 Veterinary Science and An. Husb. Basic Science	Five Post-Graduate and Home Science added
7. Adequacy of College and Hostel buildings	80% adequate	80%. Increased enrollments will utilize added capacity.
8. Adequacy of staff housing	50% adequate	50%. Increased staff will continue acute shortage.
9. Amount and adequacy of land for campus use	75 acres. 75% adequate for present use. No shortage.	125 acres. 75% new Colleges will utilize land added.
10. Adequacy of equipment, etc. for colleges	40% adequate	75% adequate. Increased enrollment will require more
11. No. and adequacy of teaching staff	120 -, 50% adequate.	175 - 75% adequate new Colleges require more staff.
12. Total size of student body	1093 - 256 V.S. 678 Ag., 65 P.G., 94 Basic Sc.	1500
13. No. Graduates per year, BS, MS, Ph.D.	116 B.S. Ag., 40 B.Sc. V.S. & A.H., M.Sc. 24	175 B.Sc. Ag., 40 B.Sc. V.S. & A.H., 40 M.Sc.
14. Amount and adequacy of research land	1000 acres - need land for V.S. and A.H.	1500 - adequate for present needs.
15. Adequacy of equipment and facilities for research	40% (other than land)	60%
16. No. of University staff primarily on research	10% staff working on research	Work-load staff divided. 20% research & 80% teaching.

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Elements of an Agr. University Providing Coordinated Research, Teaching and Extension Program	Present Status as of August 1964	Status Expected by October 1967 (end of FY 1966 funding)
17. Adequacy of total State research to meet needs of Agriculture	25% - quality fair	40% quality fair to good
18. Percent of State research done by University	60% mostly in agriculture	75% with increase in V.S. and A.H.
19. No. University staff on field extension work	10 Ext. Specialists, 3 Ext. Teachers	12 Ext. Specialists, 5 Ext. Teachers, 150 Field Agents.
20. No. Districts, Blocks, etc. under University charge	3 blocks	10 blocks
21. Adequacy of University transport facilities for field work	3 vehicles - 50% adequate	10 vehicles - 50% adequate
22. Percent total State extension training and education done by University	3%	10%
23. Adequacy of total State extension work	10%	20%

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Report on Status of A.P. Agricultural University - August 1964 and October 1966

Elements of an Agr. University Providing Coordinated Research, Teaching & Extension Programs	Present status as of August 1964	Status Expected by October 1967 (end of FY 1966 funding)
1. Enactment of suitable legislation for Agricultural University.	Law enacted December 1963. Satisfactory in most respects.	A few needed amendments as needed will have been made.
2. Establishment of adequate Statutes and Regulations	First statutes A-M have been revised. Later ones M-on are better. More will be needed.	Statutes with necessary amendments generally satisfactory.
3. Appointment of effective Board of Management	Appointments not made. Expected shortly. Statutory ad hoc committee operating at present.	Effective board will be operating.
4. Appointment of qualified Vice Chancellor	Well qualified man chosen as Vice Chancellor	A good man will be maintained as Vice Chancellor
5. Appointment of needed key officers, Controller, Registrar, Deans, etc.	Registrar, Dy. Registrar and Controller appointed. Dean & others not selected.	Staff will be completed
6. No. of colleges and school faculties	7 -- 3 Agr., 2 Vet., 1 H.Sc., 1 Basic in 7 locations: 4 Hyderabad, 1 Bapatla, 2 in Tirupati.	8 colleges (1 Agr. Eng.), 3 campuses by Oct. '67 is possible. May not be ready.
7. Adequacy of college & hostel buildings	Building needed at Rajindernagar, Bapatla o.k. Tirupati needs buildings	Many of the buildings now planned could be ready at Rajindernagar and Tirupati.
8. Adequacy of staff housing	Not available at present, but plans for construction moving	Should be 75% available
9. Amount and adequacy of land for campus use	Main campus 2500 acres adequate. Bapatla could use more area. Tirupati about o.k.	Adequate space.
10. Adequacy of equipment, etc. for colleges	Many imported items needed. 60-70% adequate now buildings will need new equipment.	Depending on GOI action 85-90% available
11. No. and adequacy of teaching staff	384 teachers, 116 ministerial staff, 169 technical staff. Upgrading needed. Appointments and selections not completed. More staff needed.	500 selections and other conditions will be generally completed. Still need better qualified staffs.
12. Total size of student body	2220	3000 depends on facilities
13. No. graduates per year, BS, MS, Ph.D.	378 B.S., 30 M.S., Ph.D.O	450 B.S., 40 M.S., 5 Ph.D.
14. Amount and adequacy of land for research	Generally adequate. Not under APAU at present	Expected to be under APAU and adequate area.

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Elements of an Agr. University Providing Coordinated Research, Teaching & Extension Programs	Present status as of August 1964	Status Expected by October 1967 (end of FY 1966 funding)
15. Adequacy of equipment and facilities for research	More and better equipment and facilities appear needed. No complete survey made.	With GOI clearance upto 85% of needs may be met.
16. No. of University staff primarily on research	None actually at present.	If research is under APAU, 50 researchers equal 30% needs.
17. Adequacy of total State research to meet needs of agriculture	Budget appears generally o.k. Results need to be stepped up 50%	Some improvements but more needed. Probably only 60%
18. Percent of State research done by University	None	If under APAU at this time 50%
19. No. University staff on field extension work	Tirupati 3; Bapatla 3; Hyderabad 8; Total 14	If all APAU responsibility 300 in staff above VLM.
20. No. Districts, Blocks, etc. under University charge	120 under APAU now.	30% under APAU in 3 years.
21. Adequacy of University transport facilities for field work	Inadequate in number and maintenance. All types of transport needed.	Transport still needing improvement.
22. Percent total state extension training and education done by University	A.E.O. and other top grade trained or re-trained by University. 15%	35% more coordination between groups should be achieved in training.
23. Adequacy of total State extension work	Too much time has to be given to other duties transport needed. 25%	More and better trained staff still needed. 40%

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Report on status of Mysore Agricultural University - August 1964 & October 1967

Elements of an Agr. University Providing Coordinated Research, Teaching and Extension Programs	Present Status as of August 1964	Status Expected by October 1967 (end of FY 1966 funding)
1. Enactment of suitable legislation for Agr. University	A very acceptable law passed in 1963	Few amendments to be made based on experience.
2. Establishment of adequate Statutes and Regulations	Reasonably complete statutes have been drawn and soon to be approved.	Complete with some amendments.
3. Appointment of effective Board of Management	Some of the appointed or/and elected members have favorable attitude, others need to be watched.	Hoping it will be better with replacements.
4. Appointment of qualified Vice Chancellor	Excellent man of wide experience and scientific background already appointed.	Present V.C. appointed for only a 3-year term. Hoping to be re-elected.
5. Appointment of needed key officers, Controller, Registrar, Deans, etc.	No key officers appointed as yet.	Hope to have competent men in these positions.
6. No. of colleges and school faculties	Three: 2 agriculture and one vet. science	Six. Agr. Engineering, Basic sci. & Home Sc. added
7. Adequacy of college and hostel buildings	Adequate for present student body	Hope to expand by at least 50% over present facilities.
8. Adequacy of staff housing	Very inadequate. 500 needed.	Will need at least 500 of various categories at Dharwar and Hebbal. Probably not more than 25 filled.
9. Amount and adequacy of land for campus use	800 at Dharwar, 255 at Hebbal, 1200 at Hassarghatta and 50 Res. stations	No additional land needed.
10. Adequacy of equipment, etc. for colleges	About 50%. Most supplied from AID funds	Hoping to have been greatly augmented from GOI, AID and other sources. Depends on GOI action.
11. No. and adequacy of teaching staff	Total of 107 professors and lecturers in the 3 colleges. Adequate but weak.	Possibly doubled, and strongly up-graded.
12. Total size of student body	1150 divided between two campuses	Assuming 20% increase about 1400 on the two campuses.
13. No. graduates per year, BS, MS, Ph.D.	208 - 12 - 0	350 - 25 - 0 Quality greatly improved.

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Elements of an Agr. University Providing Coordinated Research, Teaching & Extension Programs	Present Status as of August 1964	Status Expected by October 1967 (end of FY 1966 funding)
14. Amount and adequacy of land for research	More than adequate but not effectively used	Acreage adequate and expected to be reduced to fewer units and more effectively utilized.
15. Adequacy of equipment and facilities for research	Very inadequate (30%)	Probably not over 50%. Foreign exchange limited.
16. No. of Univ. staff primarily on research	Most of staff are on both teaching and research	Largest percentage possible to be on research either full or part time.
17. Adequacy of total State research to meet needs of Agriculture	OK as to size - poor quality - not oriented to specific problems	Effectiveness greatly increased.
18. Percent of State research done by University	At most 5% - Habbal and Dharwar	100% projected
19. No. Univ. staff on field extension work	Part time attention of 3 faculty members	Impossible to estimate until organization is finalized.
20. No. Districts, Blocks, etc. under University charge	None as yet - Work being conducted cooperatively with 10 districts.	Statewide extension program contemplated on a phase basis.
21. Adequacy of Univ. transport facilities for field staff	Limited no. of buses, vans & jeeps for students but not satisfactory.	Only fair. Will continue to be a problem
22. Percent total state extension training and education done by University	Nil, except in connection with student teaching and demonstrations.	Will depend on transfer of training centers to University as expected.
23. Adequacy of total State extension work	Totally inadequate, poor guidance, dissipated effort ineffective generally	Depends on control of the entire Extension Education program by the university.

APPENDIX 'B'

Uttar Pradesh Agricultural University

Position	Tech. or Consultant	ETA	Man-months beginning Nov. 1				Remarks
			1963	1964	1965	1966	
Univ. Adm.	Lambert	7/65	12	8 plus 4	12	12	Replacement
Agr. Res.	Long	11/64	-	12	12	12	
Agr. Ext. (Adm.)	Bay		12	5 plus 7	12	5	
Agr. Ext. (Trg.)		7/65	-	4	12	8	
Vet. Med.	Beamer	2/67	10	-	-	5	Consultant
Vet. Clinics	Smith		3	12	9		
Agr. Eng.	Hay	8/66	8	-	3	12	
Farm Mng.	Webb		8				
Land & Water	Minehart	12/64		11	12	1	
Stnt. Welfare	Rognier		12	8			
Soil Sc.		4/55		7	12	5	
Dairy		5/65		6	12	6	
Home Science		11/66				12	
Home Science		11/66				12	
Basic Sc.		1/67				6	Consultant
Total man-months per year			65	84	96	96	

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Uttar Pradesh Agricultural University

<u>Participants</u>	<u>Numbers to be trained</u>			
	1963	1964	1965	1966
Crop Production	1	1	2	2
Animal Sciences	4	3	1	2
Soils & Water	1	-	2	1
Extension	-	-	3	2
Others	1	5	1	1
	<u>7</u>	<u>9</u>	<u>9</u>	<u>8</u>

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Madhya Pradesh Agricultural University

Position	Tech. or Consultant	ETA	Man-months beginning Nov. 1				Remarks
			1963	1964	1965	1966	
Univ. Adm.	Buddemeier	11/64	-	12	12	12	
Agr. Ext. (Gen)	Shuman	2/65	12		9	12	Replacement
Ext. (Trg.)		5/65	-	6	12	6	
Agr. Research		2/65		9	12	3 plus 9	
Agr. College		1/65		10	12	2 plus 10	
Vet. College		3/65		8	12	4	
Campus Dev.		2/65		9	3		1 yr.
Agr. Engg.		11/66				12	
Home Science		11/66				12	
Registrar		3/65		6			Consultant
Controller		4/65		6			Consultant
Student Welfare		5/65		6			Consultant
			12	72	72	32	

Participants

	Numbers to be trained			
	1963	1964	1965	1966
Crop Production	-	1	3	1
Animal Sciences	-	1	1	2
Soil & Water	1	2	2	-
Extension	-	1	2	2
Adm. & Others	6	4	1	1
	7	9	9	6

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Rajasthan Agricultural University

Position	Tech. or Consultant	ETA	Man-months beginning Nov. 1				Remarks
			1963	1964	1965	1966	
Univ. Adm.	(Weber)	1/65	-	10	12	2 plus 10	
Agr. Ext. (Gen)	Robinson	4/65	7	7	12	5	Return
Agr. Res.		1/65		10	12	2 plus 10	
Agr. Eng.	Byg	11/66	8	-	-	12	Replacement
Home Science	Warfield		3	12	9 plus 3	12	
Poultry	Clayton		9	12	3		
Farm Mgt.	Boomer	10/65	10	-	1	12	Asplac ment
Agr. Ext. (Trg.)		6/65		5	12	7	
Vet. College		3/65		7	12	5	
Registrar	Thompson		5				Consultant
Controller		5/65		6			Consultant
Student Welf.		4/65		6			Consultant
Soil & Water		12/66				11	
Dairy		2/67					
			42	75	75	98	

Participants

	Numbers to be trained			
	1963	1964	1965	1966
Crop Production	2	2	2	1
Animal & Vet. Sciences	2	4	1	2
Soils & Water	1	1	2	1
Extension	-	1	2	2
Others	1	1	2	1
	6	9	9	7

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Punjab Agricultural University

Position	Tech. or Consultant	ETA	Man-months beginning Nov. 1				Remarks
			1963	1964	1965	1966	
Agr. Ext. Adm.	Wood		12	11 plus 1	12	11	
Agr. Soc.	Yoder		12	8 plus 4	12	8	
Agr. Ext. (Trg)		6/65		5	12	7 plus 5	
Agr. College	Sutton	10/65	3	5 plus 1	12	11	Replacement
Agr. Eng.	Huber	11/65	2	4	12	12	"
Home Science	(Ramseyer)	2/65		9	12	3 plus 9	
Vet. College	(Krill)	11/65			12	12	
Farm Mgt	Carpenter		2 plus 10	12	2		
Agr. Info	Chapman		3	12	9		
Poultry	Clayton & Winter		3 plus 5	12	7		
Registrar	Thompson		5				Consultant
Controller		3/65		6			Consultant
Campus Dev.		4/65		6			Consultant
Soils & Water		11/66				12	
Dairy Science		11/66				12	
Student Welfare		1/67				5	Consultant
			57	95	102	107	

Participants

	Numbers to be trained			
	1963	1964	1965	1966
Crops, Plants	3	3	3	2
Animals & Vet. Sc.	3	3	2	2
Soils & Water	1	1	1	2
Extension	1	-	2	1
Others	-	2	1	-
	8	9	9	7

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Orissa University of Agriculture & Technology

Position	Tech. or Consultant	WTA	Man-months beginning Nov. 1				Remarks
			1963	1964	1965	1966	
Univ. Adm.	Rogers/McKinsey	11/64	6	12	12	12	
Agr. Ext. (Gen)	Meeker		11 plus 1	12	11 plus 1	12	Replacement
Agr. Ext. (Tr.)		11/65			12	12	
Agr. Res.	Pochlman		12	10 plus 2	12	10	Return
Agr. Eng.	Johnson		9	12	3		
Farm Tools	Parker		4	12	8		
Vet. College		9/65		2	12	10	
Registrar		3/65		6			Consultant
Controller		4/65		6			Consultant
Soils & Water		9/66			2	12	
Home Science		11/66				12	
Basic Science		12/66				<u>11</u>	
			<u>43</u>	<u>74</u>	<u>73</u>	<u>91</u>	

Participants	Numbers to be trained			
	1963	1964	1965	1966
Crop Production	2	3	1	1
Animal & Vet. Sciences	2	4	1	2
Soil & Water	1	-	2	2
Extension	3	2	3	1
Other	-	-	2	1
	<u>8</u>	<u>9</u>	<u>9</u>	<u>7</u>

Andhra Pradesh Agricultural University

<u>Position</u>	<u>Tech. or Consultant</u>	<u>LTA</u>	<u>Man-months beginning Nov. 1</u>				<u>Remarks</u>
			<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	
Univ. Adm.		3/65		8	12	4 plus 8	
Agr. College	Pickett		12	12	4		
Agr. Research		5/65		6	12	6 plus 6	
Agr. Ext. (Gen)	Prawl		12	12	7		
Agr. Ext. (Trg.)		5/65		6	12	6 plus 6	
Home Science	Baird		4	12	8 plus 4	12	
Campus Dev.	Miller		3	3			Consultant
Controller	Dodge	11/64		2	4		Consultant Return
Registrar	Gerritz	1/65		6			Consl. trip
Horticulture	Amstein		12				
Soils & Water		11/66				12	
Vet. College & Dairy		5/65		6	12	6 plus 6	
Basic Sc.		12/66				11	
			43	73	75	83	

<u>Participants</u>	<u>Numbers to be trained</u>			
	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>
Crop Production	4	4	1	3
Animal & Vet. Sciences	4	4	1	1
Soil & Water	1	-	2	1
Extension	-	-	2	1
Other	-	1	3	1
	9	9	9	7

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Mysore Agricultural University

Position	Tech. or Consultant	ETA	Man-months beginning Nov. 1				Remarks
			1963	1964	1965	1966	
Univ. Adm.	Buehrer		9	12	3+9	12	
Agr. Res.	Badenhop	11/65	10	-	12	12	Replacement
Agr. Ext. (Gen.)	Ross		12	12			
Agr. Ext. (Trg.)		5/65		6	12	6+6	
Agr. College	Skold		12	1+11	12	1	
Farm Mgt.	Henderson	10/65	1	12	11+1	12	Return
Vet. College	Garlick	11/64		12	12	12	
Controller		3/65		6			Consultant
Registrar		4/65		6			Consultant
Campus Dev.		5/65		6			Consultant
Home Science		11/65			12	12	
Agr. Eng.		11/66				12	
Soils & Water		11/66				12	
Basic Sciences		11/66					
			44	84	84	97	

Participants	Numbers to be trained			
	1963	1964	1965	1966
Crop Production	1	1	2	3
Animal & Vet. Sciences	3	5	2	1
Soil & Water	1	1	2	2
Extension	-	-	1	-
Others	$\frac{1}{6}$	$\frac{2}{9}$	$\frac{2}{9}$	$\frac{1}{7}$

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PROJECT DATA SUMMARY — AID DOLLAR COSTS

E-1a

1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA		3. PROJECT NO. 386-11-140-282		4. TITLE Agricultural Production Incentives	
5. U.S. FUNDING:		BEGIN FY 1965		END FY 1971		6. PRIOR REFERENCES	
PHYSICAL WORK:		1965		1971			

7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)	e. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT <sup>1/</sup>	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
					(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	
					AID	PASA										
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR															
	GROSS OBLIGATIONS (ACTUAL YEAR)															
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR															
	EXPENDITURES (ACTUAL YEAR)															
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	44	-	-	44	-	-	-	-	-	-	-		
	B. EXPENDITURES	TC	G	41	-	-	41	-	-	-	-	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	3	-	-	3	-	-	-	-	-	-	-		
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TC	G	172	105	-	57	105	10	-	-	-	-	-		
	B. EXPENDITURES	TC	G	102	42	-	56	42	4	-	-	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	73	63	-	4	63	6	-	-	-	-	-		
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS <sup>2/</sup>	TC	G	128	87	-	41	87	-	-	-	-	-	-	45	60
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>	TC	G	527	368	-	159	368	-	-	-	-	-	-	165	458
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>	TC	G	871	560	-	301	560	10	-	-	-	-	-	311	560

REMARKS:

- <sup>1/</sup> This is a memorandum (non-odd) column.
- <sup>2/</sup> Show estimated expenditures in column i.

Refers to Annex 7, 8 & 9 of LAS.

AID 1020-3 (7-64)	PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES										SECURITY CLASSIFICATION UNCLASSIFIED			
E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		END FY		4. PROJECT NO.		5. TITLE			
	1 November 1964		INDIA		Funding 1965		1971		386-11-140-282		Agricultural Production Incentives			
7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED	
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC													
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC													
II OPERATIONAL YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND	Govt. Rev.	-	1	23	5	108	-	-	-	5	5	
		(iii) OTHER LC	Sec. 402	G	43	105	205	513	-	-	39	119	69	
	B. P.L. 480 LC													
III BUDGET YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND	Govt. Rev.	-	15	105	72	513	-	-	-	72	337	
		(iii) OTHER LC	Sec. 402	G	183	105	876	513	-	-	176	531	337	
	B. P.L. 480 LC													
IV PLANNING YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND	Govt. Rev.	-	15	134	72	643	-	-	-	72	419	
		(iii) OTHER LC	Sec. 402	G	159	134	761	643	-	-	224	478	419	
	B. P.L. 480 LC													
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND	Govt. Rev.	-	60	772	288	3,685	-	-	-	288	288	
		(iii) OTHER LC	Sec. 402	G	649	772	3,107	3,685	-	-	1,707	1,675	1,978	
	B. P.L. 480 LC													
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND	Govt. Rev.	-	91	1,034	437	4,949	-	-	-	437	437	
		(iii) OTHER LC	Sec. 402	G	1,034	1,034	4,949	4,949	-	-	2,146	2,803	2,803	
	B. P.L. 480 LC													

## REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:		2. COOPERATING CTRY.		3. PERSONNEL SERVICES		BEG. FY		END FY		4. PROJECT NO.										
	1 November 1964			INDIA		PARTICIPANT TRAINING		1965		1971		386-11-140-282												
	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			a. CUM. THRU ACTUAL FY			b. ACTUAL FY 1964			c. OPERATIONAL FY 1965			d. BUDGET FY 1966			e. PLANNING FY 1967			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract		
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	-	-	-	-	-	-	1	-	-	3	6	-	2	6	-	8	24	-	14	36		
		Non-U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	B. ON BOARD	U.S.	-	-	-	-	-	-	3	-	-	3	6	-	2	6	-	-	-	-	-	-		
		Non-U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
II PARTICIPANTS PROGRAMMED	A. U.S.	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	5	-	-		
	B. THIRD CTRY.	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	5	-	-		

## REMARKS:

1/ End of Fiscal Year

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO. AC-126 (Revised)

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-140-282	Agricultural Production Incentives
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## Introduction

In section 1. The Activity Targets of the accompanying E-1 narrative for Agricultural Extension, Project 386-11-110-007, to which reference is hereby made, the FY1965 reorientation and the FY 1966 restructuring of the Mission's agricultural technical assistance program are outlined. An integral part of this modification of our aid in the agricultural field, in order to implement LA5 proposals as effectively as possible, is the establishment of this new project. Initially addressed to several high priority areas of assistance in the broad fields of agricultural economics and agrarian reforms, it is expected that activities hereunder will follow a future pattern which is responsive to evolving GOI programs supporting the creation of economic incentives to the average Indian cultivator. By modifying his farming activities under the stimulus of such incentives, the individual farmer can indisputably increase his production of essential foods in substantial degree.

### 1. The Activity Targets

This project is designed to assist and stimulate GOI action in providing effective incentives for expanded output of agricultural commodities, particularly foodgrains. Specific objectives are to assist GOI to:

- a. Develop workable and effective programs of price support for foodgrains, so oriented that producers as well as consumers benefit equitably therefrom.
- b. Strengthen marketing mechanisms and improve storage facilities for foodgrains, fertilizers and pesticides.
- c. Assure the improvement and enlargement of credit facilities necessary to support expanded agricultural production and further the effective operation of cooperatives dealing with agricultural commodities, in both instances emphasizing attention to foodgrains, fertilizers and pesticides.
- d. Apply, in broad principle and actual practice, such critical agrarian reform measures as land consolidation, security of land tenure and ceilings on land holdings.

### 2. The Course of Action

Major courses of action hereunder will be:

- a. Assign an eminent agricultural economist, well versed in the development of agricultural economies in emerging countries, to the project staff of the Mission's Agriculture Division. This technician, in consultation with Mission and Country Team economists and officials and technicians of the GOI Planning Commission and Center and State ministries concerned, will chart and monitor the course of technical

assistance in this field following such basic economic surveys and evaluations of Indian agriculture as are deemed necessary.

- b. To reinforce the work of the economist and his Indian and American colleagues through assignment of a highly qualified agricultural credit consultant and a highly qualified cooperatives consultant for short-term appraisals of and reports upon current GOI programs in these fields and the role AID might best play in strengthening these programs. Based on the findings of these two consultants, assign a carefully selected senior agricultural advisor and a senior agricultural cooperatives advisor to the project staff of the Agriculture Division. These advisors would possess the background of training and foreign experience needed to deal effectively with Indian situations in the credit and cooperatives areas as evaluated by the two short-term consultants. In consultation with concerned Mission officers and other external aid agencies active in this field, these advisors will develop operational plans for the additional technical aid, including the assignment of U.S. contract technicians, needed to bolster these elements of modernized agriculture in India. It is now believed that the assignment of six district or regional agricultural credit and cooperatives contract technicians, to work primarily on the within-India training required to strengthen management aspects in these areas will be required; but this may be modified as findings of the preliminary studies indicate. Emphasis again will be placed on the credit and cooperatives aspects of foodgrain production and the distribution and demonstration of fertilizer and pesticides. Assistance will be given primarily through training programs.

- c. Continue to provide the services of a team of short-term consultants to advise GOI regarding development of national and state price policies and support programs for foodgrains, if these services are required. Such assistance was initiated in FY1965 and is now in progress as part of our activity under Crop Production, Project 386-11-130-061. Procurement, transport, storage, distribution and marketing of foodgrains are covered by this activity, which involves coordination of effort and close cooperation with other external aid agencies. The future course of action in this field will depend upon GOI policy decisions in the next few months.

- d. Utilize every opportunity which develops to influence GOI to enforce existing land reform legislation in the Indian states. This involves suggestion, persuasion and encouragement directed at policy makers, administrators and other Indian leaders, all in the framework of legislation already enacted and aimed at the improvement of small-scale Indian agriculture. If needed, we will also offer technical assistance in specific agrarian reform areas and financial support for observation tours or other activities conducive to enlightened approaches to basic land reforms. Other Mission technical and capital assistance to

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-140-282	Agricultural Production Incentives
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Indian agriculture will be adapted as fully as practical to the solution of problems and needs that emerge from these activities. At the outset, guidance in land reform matters will be provided by the Agricultural Economist on the Agriculture Division's staff, in consultation with top officials of the Country Team and through coordination with other external aid agencies active in this field.

### 3. Progress to Date

Although some technical assistance and consultant services have been provided GOI in the past, particularly effective in cooperative membership training, modernization of foodgrain storage and proposals for improving agricultural economic policies and programs, the U.S. contribution to date in areas covered by this project has been quite limited. Currently we are providing significant consultant services in the development of Indian price supports for foodgrains. Other recent work involving surveys and appraisals of existing conditions relative to agricultural economics, credit and cooperatives and land reform are discussed in the Mission's LAS document.

Because this project addresses problem areas in which our objectives and activities are only now evolving, this project narrative is deliberately very brief. Next year's E-1 is expected to clarify our approach to these problems and provide more adequate detail concerning both project objectives and courses of action.

### 4. Funding Requirements

#### a. Total Requirement

Total funding requirements during the life span of the project from FY1965 thru FY1971, are estimated at \$871,000 from dollar funds and equivalent to \$1,034,000 from U.S.-owned Section 402 rupees. The breakdowns of the funds are as follows:

	\$	Rs. (\$ Equiv.)
Participants	10,300	15,000
Technicians	301,000	99,380
Contract Services	559,440	344,880
Project Support Costs	=	575,000
	870,740	1,034,260

#### b. Operational Year Requirements (FY1965)

As shown on the E-1a and E-1b tables, total FY 1965 funding requirement is estimated at \$44,000 from dollar funds - to cover the services of three technicians and two short-term consultants - and the

equivalent of \$43,000 from U.S.-owned Section 402 rupees. Rupee provision consists of international travel and authorized allowances payable to U.S. technicians (\$18,000) and rupee costs of project support materials and services available locally in India (\$15,000).

#### c. Budget Year Requirements (FY1966)

Total budget year requirements of \$172,000 include \$10,000 for two Indian high-level teams, each consisting of 5 members - one team to visit Japan for 1 month and the other to visit U.S. for 2 months; \$57,000 for the services of three technicians and \$105,000 for contract services involving six U.S. technicians whose exact assignments will be determined later.

In addition to the dollar funding above, U.S.-owned Section 402 rupees equivalent to \$183,000 are required for international travel and authorized allowances payable to U.S. technicians (\$72,000); international travel of participants (\$15,000); and rupee costs of project support materials and services locally available in India (\$96,000).

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-140-282	Agricultural Production Incentives
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Technicians - PASA

<u>Title and Identification of Position</u>	<u>D.H. or PASA</u>	<u>Name of Incumbent</u>	<u>Pos. Grade</u>	<u>Pos. No.</u>	<u>Start of Funding for FY</u>	<u>Date of Home Leave/Return or Transfer</u>	<u>Location</u>	<u>Funding</u>	
								<u>\$</u>	<u>Sec. 402 Rs. (\$ Eqv.)</u>
					<u>FY1965</u>				
Agr. Credit Adv.	P	Recruiting	3	-	4/1/65	4/1/67	New Delhi	10,800	7,400
Agr. Cooperatives Adv.	P	Recruiting	3	-	4/1/65	4/1/67	New Delhi	10,800	7,400
Agr. Economics Advisor	P	Recruiting	2	-	1/1/65	1/1/67	New Delhi	13,140	7,400
Agr. Cooperatives Consultant	P	Recruiting	\$70/day	-	1/1/65	4/1/65	New Delhi	4,830	2,980
Agr. Credit Consultant	P	Recruiting	\$70/day	-	1/1/65	4/1/65	New Delhi	4,830	2,980
							Total FY1965 Estimated Cost	44,400	28,160
					<u>FY1966</u>				
Agr. Credit Adv.	P	Recruiting	3	-	7/1/65	4/1/67	New Delhi	17,500	4,800
Agr. Cooperatives Adv.	P	Recruiting	3	-	7/1/65	4/1/67	New Delhi	17,500	4,800
Agr. Economics Adv.	P	Recruiting	2	-	7/1/65	1/1/67	New Delhi	21,500	4,800
							Total FY1966 Estimated Cost	56,500	14,400

Contract Staff

<u>Field Staff Position Title</u>	<u>Incumbent</u>	<u>Date of Arrival</u>	<u>Date of Departure</u>	<u>Estimated Cost</u>	
				<u>\$</u>	<u>Sec. 402 Rs. (\$ Eqv.)</u>
Six Agriculture Credit and Coop. Advisors	Vacant	7/1/65	-	105,000	58,000

FY 1965 funding is included in the Supplementary Budget, which is subject to AID/W approval.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-140-282	Agricultural Production Incentives
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Participants (Non-Contract)

<u>Brief Description of Training</u>	<u>No. of Participants</u>	<u>Duration of Training</u>	<u>Target Starting Date</u>	<u>Estimated Cost</u>	
				<u>\$</u>	<u>Sec. 402 Rs. (\$ Eqv.)</u>
<u>FY 1966</u>					
Observation and study tour of a high level team in Japan to observe land reforms and cooperatives	5	1 month	11/1/65	3,600	7,500
Observation and study tour of a high level team in the United States to observe movement, storage, distribution, market reporting, etc. of foodgrains	5	2 months	11/1/65	6,700	7,500
Total FY1966 Estimated Cost				10,300	15,000

Note: No participant training under this project in FY1965.

**E-1a**

1. DATA CURRENT AS OF: 1 November 1964

2. COOPERATING COUNTRY: INDIA

3. PROJECT NO.

4. TITLE: Goal: Foreign Private Investment in India

5. U.S. FUNDING: BEGIN FY 1960, END FY 1963

6. PRIOR REFERENCES

7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)	a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES		f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS			
					(1) U.S. AGENCIES		(2)	(1) U.S. AGENCIES	(2)	(1) DIRECT AND U.S. AGENCIES	(2)	(1) DIRECT AND U.S. AGENCIES	(2)	(1) DIRECT AND U.S. AGENCIES	(2)	
					AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	CONTRACT	CONTRACT	CONTRACT	CONTRACT			
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	660	513	13	-	513*	89	-	31	-	14	-		
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	-	-	-	-	-	-	-	-	-	-	-		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	433	298	13	-	298	89	-	28	-	5	-	15**	37
	EXPENDITURES (ACTUAL YEAR)	TC	G	130	118	-	-	118	1	-	7	-	4	-	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. EXPENDITURES	TC	G	80	75	-	-	75	-	-	2	-	3	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	147	140	-	-	140	-	-	1	-	6	-	-	-
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TC	G	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. EXPENDITURES	TC	G	53	49	-	-	49	-	-	1	-	3	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	94	91	-	-	91	-	-	-	-	3	-	-	-
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/	TC	G	-	-	-	-	-	-	-	-	-	-	-	3	91
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	660**	513	13	-	513	89	-	31	-	14	-	147	513

REMARKS:

1/ This is a memorandum (non-add) column.

2/ Show estimated expenditures in column i.

\* Includes \$207 of SA funds

\*\* Includes closed projects : L/C charged to \$ Account : \$15  
DG : \$83

<b>E-1b</b>	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	3. Funding 1960 1968	BEG. FY 1959	END FY 1968	4. PROJECT NO.	5. TITLE Goal: Foreign Private Investment in India
	6. PRIOR REFERENCES:						
	7. OBLIGATED AND DISBURSED						

I CUMULATIVE THRU ACTUAL YEAR	A. FA ACT	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
		TYPE	SOURCE	LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
					(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
TOTAL ACTUAL FY 1964	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/			G		52		250						68
	(ii) TRUST FUND	Govt. Rev.		G	19	18		95	90					95
	(iii) OTHER LC	Sec. 402		G	169	94		811	454			198		326
	B. P.L. 480 LC	Sec. 104(e)		**	74,936	40,303		358,762	192,955					256
II OPERATIONAL YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/			G										
	(ii) TRUST FUND	Govt. Rev.		G	5	5		22	22					22
	(iii) OTHER LC	Sec. 402		G		36			170			129		41
FY 1965	B. P.L. 480 LC	Sec. 104(e)		**	54,172	37,661		259,370	180,310					
III BUDGET YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/			G										
	(ii) TRUST FUND	Govt. Rev.		G	7	7		32	32					32
	(iii) OTHER LC	Sec. 402		G		18			88			71		17
FY 1966	B. P.L. 480 LC	Sec. 104(e) Cooley		L		38,645			185,028					
IV PLANNING YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/			G										
	(ii) TRUST FUND	Govt. Rev.		G	3	4		14	19					14
	(iii) OTHER LC	Sec. 402		G		21			99			87		12
FY 1967	B. P.L. 480 LC	Sec. 104(e) Cooley		L		10,910			52,234					
V ALL SUBSEQUENT FYs (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/			G										
	(ii) TRUST FUND	Govt. Rev.		G										
	(iii) OTHER LC	Sec. 402		G										
	B. P.L. 480 LC	Sec. 104(e) Cooley		L		1,589			7,605					
VI TOTAL ALL YEARS (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/			G		52*			250					68
	(ii) TRUST FUND	Govt. Rev.		G	34	34		163	163					163
	(iii) OTHER LC	Sec. 402		G	169*	169		811	811			485		326
	B. P.L. 480 LC	Sec. 104(e)		**	129,108*	129,108		618,132	618,132					

REMARKS: 1/ Exchange Rate: \$1 = Rs. 4.7876  
 2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a  
 a/ Includes for closed projects \$835 Sec. 402 : \$ 29  
 \*Includes for closed projects: Cooley Loans 27,621  
 L/C charged to \$ Account : \$ 15 \*\*Includes PL 480 Grant & Cooley Loans.

<b>E-1c</b>	<b>PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS</b>		1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING CTRY. INDIA	3. PERSONNEL SERVICES PARTICIPANT TRAINING	BEG. FY 1961	END FY 1967	4. PROJECT NO. Goal: Foreign Private Investment in India							
	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		a. CUM. THRU ACTUAL FY	b. ACTUAL FY 64	c. OPERATIONAL FY 65	d. BUDGET FY 66	e. PLANNING FY 67	f. ALL SUBSEQUENT FYs	g. TOTAL ALL YEARS						
	I PROJECT PERSONNEL	A. MAN YEARS	U.S.	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
Non U.S.			0.5*		11.6			4.6		3.6			1.6		0.5
B. ON BOARD		U.S.					5		6			4		2	
		Non U.S.													
II. PARTICIPANTS PROGRAMMED	A. U.S.	42**												42	
	B. THIRD CTRY.														

REMARKS: 1/ End of Fiscal Year  
 \* Includes 0.3 for closed projects addressed to this goal.  
 \*\* Includes 32 for closed projects addressed to this goal.

AID FORM 10-112 (7-62)	DATE PREPARED	COOPERATING COUNTRY	SECURITY CLASSIFICATION	MULTI-YEAR LISTING								Goal: Foreign Private Investment in India	E-4	
	1 November 1964	INDIA	UNCLASSIFIED											
Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year FY 1964	Operational Year FY 1965	Budget FY 1966	Budget +1 FY	Budget +2 FY	Budget +3 FY	Budget +4 FY	All Subsequent Years	Total All Years		
		DL												
		DG												
		SA												
		480												
		L/C												
		Coop. C.												
		Other												
386-44-230-287	East India Hotels, Ltd., New Delhi	DL												
		DG												
		SA												
		480	1,591	-	-	-	-	-	-	-	-	1,591		
		L/C												
		Coop. C.												
		Other												
386-44-230-288	Precision Bearings India, Ltd., Bombay	DL												
		DG												
		SA												
		480	627	-	-	-	-	-	-	-	-	627		
		L/C												
		Coop. C.												
		Other												
386-44-130-289	Arbor Acres Farm India (P) Ltd., Bombay	DL												
		DG												
		SA												
		480	522	522	-	-	-	-	-	-	-	522		
		L/C												
		Coop. C.												
		Other												
386-44-230-290	Union Carbide India, Ltd., Calcutta	DL												
		DG												
		SA												
		480	4,512	4,512	-	-	-	-	-	-	-	4,512		
		L/C												
		Coop. C.												
		Other												

SECURITY CLASSIFICATION

UNCLASSIFIED

BEST AVAILABLE

AID FORM 10-112 (7-62)	DATE PREPARED 1 November 1964	COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	MULTI-YEAR LISTING	Goal: Foreign Private Investment in India	E-4
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Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year FY 1964	Operational Year FY 1965	Budget FY 1966	Budget +1 FY _____	Budget +2 FY _____	Budget +3 FY _____	Budget +4 FY _____	All Subsequent Years	Total All Years	
386-44-230-291	Mandya National Paper Mills, Ltd. Bangalore	DL											
		DG											
		SA											
		480	3,133	3,133	-	-	-	-	-	-	-	-	3,133
		L/C											
		Coop. C.											
386-44-230-292	Kirloskar Cummins Ltd., Poona	DL											
		DG											
		SA											
		480	2,611	2,611	-	-	-	-	-	-	-	-	2,611
		L/C											
		Coop. C.											
386-44-230-293	Hindustan Aluminium Corporation, Ltd. Bombay	DL											
		DG											
		SA											
		480	4,178	2,089	-	-	-	-	-	-	-	-	4,178
		L/C											
		Coop. C.											
386-44-230-294	Gabriel India Ltd., Bombay	DL											
		DG											
		SA											
		480	396	292	-	-	-	-	-	-	-	-	396
		L/C											
		Coop. C.											
386-44-230-295	Frick India Ltd., New Delhi	DL											
		DG											
		SA											
		480	522	522	-	-	-	-	-	-	-	-	522
		L/C											
		Coop. C.											

SECURITY CLASSIFICATION

UNCLASSIFIED

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BEST AVAILABLE

AID FORM 10-112 (7-62)	DATE PREPARED	COOPERATING COUNTRY	SECURITY CLASSIFICATION	MULTI-YEAR LISTING				Goal: Foreign Private Investment in India				E-4	
	1 November 1964	INDIA	UNCLASSIFIED										
Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year	Operational Year	Budget	Budget +1	Budget +2	Budget +3	Budget +4	All Subsequent Years	Total All Years	
				FY 1964	FY 1965	FY 1966	FY	FY	FY	FY			
386-44-230-296	Madras Rubber Factory, Ltd., Madras	DL											
		DG											
		SA											
		480	1,566	1,044	-	-	-	-	-	-	-	-	1,566
		L/C											
		Coop. C.											
		Other											
386-44-230-297	Coromandel Fertilizers, Ltd., Visakhapatnam	DL											
		DG											
		SA											
		480	22,476	22,476	-	-	-	-	-	-	-	-	22,476
		L/C											
		Coop. C.											
		Other											
386-44-230-298	I.A. & I.C. Private Ltd., Bombay	DL											
		DG											
		SA											
		480	105	105	-	-	-	-	-	-	-	-	105
		L/C											
		Coop. C.											
		Other											
386-44-230-299	Borosil Glass Works, Ltd., Bombay	DL											
		DG											
		SA											
		480	1,492	1,492	-	-	-	-	-	-	-	-	1,492
		L/C											
		Coop. C.											
		Other											
386-44-230-300	Indabrator Limited, Bombay	DL											
		DG											
		SA											
		480	-	-	298	-	-	-	-	-	-	-	298
		L/C											
		Coop. C.											
		Other											

SECURITY CLASSIFICATION

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BEST AVAILABLE

AID FORM 10-112 (7-62)	DATE PREPARED 1 November 1964	COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	MULTI-YEAR LISTING	Goal: Foreign Private Investment in India	E-4
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Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year FY 1964	Operational Year FY 1965	Budget FY 1966	Budget +1 FY _____	Budget +2 FY _____	Budget +3 FY _____	Budget +4 FY _____	All Subsequent Years	Total All Years	
386-44-220-301	Renusagar Power Company, Ltd. Bombay	DL											
		DG											
		SA											
		480	-	-	6,266	-	-	-	-	-	-	-	6,266
		L/C											
		Coop. C.											
386-44-230-302	Everest Refrigerants, Ltd., Bombay	DL											
		DG											
		SA											
		480	-	-	1,253	-	-	-	-	-	-	-	1,253
		L/C											
		Coop. C.											
386-44-230-303	Corn Products India Private Ltd., Bombay	DL											
		DG											
		SA											
		480	-	-	731	-	-	-	-	-	-	-	731
		L/C											
		Coop. C.											
386-44-230-304	Chemicals and Plastics, Ltd., Madras	DL											
		DG											
		SA											
		480	-	-	681	-	-	-	-	-	-	-	681
		L/C											
		Coop. C.											
386-44-210-305	Graphite India, Ltd., Calcutta	DL											
		DG											
		SA											
		480	-	-	1,441	-	-	-	-	-	-	-	1,441
		L/C											
		Coop. C.											

SECURITY CLASSIFICATION

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AID FORM 10-112 (7-62)	DATE PREPARED	COOPERATING COUNTRY	SECURITY CLASSIFICATION	MULTI-YEAR LISTING							Goal: Foreign Private Investment in India		E-4	
	1 November 1964	INDIA	UNCLASSIFIED											
Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year FY 1964	Operational Year FY 1965	Budget FY 1966	Budget +1 FY	Budget +2 FY	Budget +3 FY	Budget +4 FY	All Subsequent Years	Total All Years		
386-44-230-306	Bliss & Laughlin - Shama, Ltd., New Delhi	DL												
		DG												
		SA												
		480	-	-	1,003	-	-	-	-	-	-	-	1,003	
		L/C												
		Coop. C.												
386-44-230-307	Shama Forge Company, Ltd., New Delhi	DL												
		DG												
		SA												
		480	-	-	992	-	-	-	-	-	-	-	992	
		L/C												
		Coop. C.												
386-44-230-308	Bharat Steel Tubes, Ltd., New Delhi	DL												
		DG												
		SA												
		480	-	-	522	-	-	-	-	-	-	-	522	
		L/C												
		Coop. C.												
386-44-230-309	Globe Foundries, Ltd., New Delhi	DL												
		DG												
		SA												
		480	-	-	3,133	-	-	-	-	-	-	-	3,133	
		L/C												
		Coop. C.												
386-44-250-310	Semi Conductors, Ltd., Bombay	DL												
		DG												
		SA												
		480	-	-	282	-	-	-	-	-	-	-	282	
		L/C												
		Coop. C.												

SECURITY CLASSIFICATION

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BEST AVAILABLE

AID FORM 10-112 (7-62)	DATE PREPARED 1 November 1964	COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	MULTI-YEAR LISTING	Goal: Foreign Private Investment in India	E-4
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Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year FY 1964	Operational Year FY 1965	Budget FY 1966	Budget +1 FY	Budget +2 FY	Budget +3 FY	Budget +4 FY	All Subsequent Years	Total All Years	
386-44-230-311	United Carbon India, Ltd., Bombay	DL											
		DG											
		SA											
		480	-	-	2,945	-	-	-	-	-	-	-	2,945
		L/C											
		Coop. C.											
386-44-230-312	Raymon Engineering Works, Ltd., Calcutta	DL											
		DG											
		SA											
		480	-	-	4,470	-	-	-	-	-	-	-	4,470
		L/C											
		Coop. C.											
386-44-230-313	Herdillia Chemicals, Ltd., Bombay	DL											
		DG											
		SA											
		480	-	-	5,532	-	-	-	-	-	-	-	5,532
		L/C											
		Coop. C.											
386-44-230-314	Firestone Tyre & Rubber Co., of India, Ltd., Bombay	DL											
		DG											
		SA											
		480	-	-	1,044	-	-	-	-	-	-	-	1,044
		L/C											
		Coop. C.											
386-44-230-315	Synbiotics Limited, Ahmedabad	DL											
		DG											
		SA											
		480	-	-	2,807	-	-	-	-	-	-	-	2,807
		L/C											
		Coop. C.											

SECURITY CLASSIFICATION

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Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year FY 1964	Operational Year FY 1965	Budget FY 1966	Budget +1 FY _____	Budget +2 FY _____	Budget +3 FY _____	Budget +4 FY _____	All Subsequent Years	Total All Years	
386-44-230-316	Sylvania & Laxman, Ltd., New Delhi	DL											
		DG											
		SA											
		480	-	-	1,044	-	-	-	-	-	-	-	1,044
		L/C											
		Coop. C.											
386-44-230-317	Richardson Hindustan, Ltd., Bombay	DL											
		DG											
		SA											
		480	-	-	1,305	-	-	-	-	-	-	-	1,305
		L/C											
		Coop. C.											
386-44-230-318	Indofil Chemicals, Ltd., Bombay	DL											
		DG											
		SA											
		480	-	-	627	-	-	-	-	-	-	-	627
		L/C											
		Coop. C.											
386-44-230-319	Rockwell India, Ltd., Surat	DL											
		DG											
		SA											
		480	-	-	353	-	-	-	-	-	-	-	353
		L/C											
		Coop. C.											
386-44-230-320	American Universal Electric Company (India) Ltd., New Delhi	DL											
		DG											
		SA											
		480	-	-	439	-	-	-	-	-	-	-	439
		L/C											
		Coop. C.											

SECURITY CLASSIFICATION

UNCLASSIFIED

AID FORM 10-112 (7-62)	DATE PREPARED	COOPERATING COUNTRY	SECURITY CLASSIFICATION		MULTI-YEAR LISTING		
			UNCLASSIFIED				
	1 November 1964	INDIA					
Goal Code or Activity Code	Title of Goal or Activity		\$ 1,000 Oblig- ations	Cumulative Through Actual Year	Actual Year FY 1964	Operational Year FY 1965	Budget FY 1964
386-44-230-321	Tractor Engineers, Ltd., Bombay		DL				
			DG				
			SA				
			480	-	-	1,253	-
			L/C				
			Coop. C.				
386-44-230-322	York India Ltd., New Delhi		DL				
			DG				
			SA				
			480	-	-	313	-
			L/C				
			Coop. C.				
386-44-230-323	Blue Star Worthington, Ltd., Bombay		DL				
			DG				
			SA				
			480	-	-	418	-
			L/C				
			Coop. C.				
386-44-230-324	Mysore Cements, Ltd., Bangalore		DL				
			DG				
			SA				
			480	1,149	-	1,723	-
			L/C				
			Coop. C.				
386-44-230-325	Otis Elevator Company (India) Ltd., Bombay I & II		DL				
			DG				
			SA				
			480	209	-	209	-
			L/C				
			Coop. C.				

SECURITY CLASSIFICATION

UNCLASSIFIED

BEST AVAILABLE

AID FORM 10-112 (7-62)	DATE PREPARED	COOPERATING COUNTRY	SECURITY CLASSIFICATION	MULTI-YEAR LISTING								Goal: Foreign Private Investment in India		E-4	
	1 November 1964	INDIA	UNCLASSIFIED												
Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year FY 1964	Operational Year FY 1965	Budget FY 1966	Budget +1	Budget +2	Budget +3	Budget +4	All Subsequent Years	Total All Years			
386-44-230-326	McNally-Bird Engineering Company, Ltd. Calcutta I & II	DL													
		DG													
		SA													
		480	1,044	-	1,044	-	-	-	-	-	-	-	2,088		
		L/C													
		Coop. C.													
386-44-230-327	Ex-Cell-O India, Ltd., Bombay I & II	DL													
		DG													
		SA													
		480	418	-	1,329	-	-	-	-	-	-	-	1,747		
		L/C													
		Coop. C.													
386-44-130-329	Hindustan Allied Chemicals, Ltd., Hyderabad	DL													
		DG													
		SA													
		480	-	-	9,942	-	-	-	-	-	-	-	9,942		
		L/C													
		Coop. C.													
386-15-910-164	Indian Investment Center	DL													
		DG	577	-	-	-	-	-	-	-	-	-	577		
		SA													
		480	764	-	773	-	-	-	-	-	-	-	1,537		
		L/C	140	-	-	-	-	-	-	-	-	-	140		
		Coop. C.													
Total: AID Activities, Foreign Private Investment in India		DL													
		DG	577	-	-	-	-	-	-	-	-	-	577		
		SA													
		480	47,315	38,798	54,172	-	-	-	-	-	-	-	101,487		
		L/C	140	-	-	-	-	-	-	-	-	-	140		
		Coop. C.													

SECURITY CLASSIFICATION

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AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INIDA				3. PROJECT NO. 386-15-910-164 <del>386-35-910-164</del>				4. TITLE Indian Investment Center					
	5. U.S. FUNDING:		BEGIN FY 1960		END FY 1963		6. PRIOR REFERENCES									
	PHYSICAL WORK:		1961		1967											
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT <sup>1/</sup>	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC*	G	577	513	4	-	513*	15	-	31	-	14	-		
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	-	-	-	-	-	-	-	-	-	-	-		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	350	298	4	-	298	15	-	28	-	5	-	-	37
	EXPENDITURES (ACTUAL YEAR)	TC	G	130	118	-	-	118	1	-	7	-	4	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	227	215	-	-	215	-	-	3	-	9	-		
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	-	-	-	-	-	-	-	-	-	-	-		
	B. EXPENDITURES	TC	G	80	75	-	-	75	-	-	2	-	3	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	147	140	-	-	140	-	-	1	-	6	-		
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TC	G	-	-	-	-	-	-	-	-	-	-	-		
	B. EXPENDITURES	TC	G	53	49	-	-	49	-	-	1	-	3	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	94	91	-	-	91	-	-	-	-	3	-		
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS <sup>2/</sup>	TC	G	-	-	-	-	-	-	-	-	-	-	-	3	91
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>	TC	G	577	513	4	-	513	15	-	31	-	14	-	64	513

## REMARKS:

- 1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

\* Includes \$207 of SA funds.

This activity refers to Annex. 13 of L.A.S.

AID 1020-3 (7-64)	PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES										SECURITY CLASSIFICATION UNCLASSIFIED						
	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA		3. Funding BEG. FY 1960 END FY 1965 Phys. Work 1961 1967		4. PROJECT NO. 386-15-910-164 386-35-910-164		5. TITLE Indian Investment Center								
E-1b	7. OBLIGATED AND DISBURSED			a. FUNDS				b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE		(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED		(2) DISBURSED		(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
					(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED	OBLIGATED	DISBURSED	(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED			
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO S ACCTS. 2/	G		37		177						177				
	FA ACT	(ii) TRUST FUND	Govt. Rev.	-	19	18	93	88							93	88	
		(iii) OTHER LC	Sec. 402	G	140*	65	670	313					198		185	115	
		B. P.L. 480 LC	Sec. 104(e)	G	764	764	3,660	3,660	3,660	3,660							
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO S ACCTS. 2/	G														
	FA ACT	(ii) TRUST FUND	Govt. Rev.	-	4	4	18	18							18	18	
		(iii) OTHER LC	Sec. 402	G	-	13	-	64					51		-	13	
		B. P.L. 480 LC	Sec. 104(e)	G	-	408	-	1,954					-		-	-	
II OPERATIONAL YEAR (EST.)	A.	(i) LC COSTS CHGD TO S ACCTS. 2/	G														
	FA ACT	(ii) TRUST FUND	Govt. Rev.	-	5	5	22	22							22	22	
		(iii) OTHER LC	Sec. 402	G	-	36	-	170					129		-	41	
		B. P.L. 480 LC	Sec. 104(e)	G	773	773	3,700	3,700	3,700	3,700							
III BUDGET YEAR (EST.)	A.	(i) LC COSTS CHGD TO S ACCTS. 2/	G														
	FA ACT	(ii) TRUST FUND	Govt. Rev.	-	7	7	32	32							32	32	
		(iii) OTHER LC	Sec. 402	G	-	18	-	88					71		-	17	
		B. P.L. 480 LC			-	-	-	-					-		-	-	
IV PLANNING YEAR (EST.)	A.	(i) LC COSTS CHGD TO S ACCTS. 2/	G														
	FA ACT	(ii) TRUST FUND	Govt. Rev.	-	3	4	14	19							14	19	
		(iii) OTHER LC	Sec. 402	G	-	21	-	99					87		-	12	
		B. P.L. 480 LC			-	-	-	-					-		-	-	
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO S ACCTS. 2/	G														
	FA ACT	(ii) TRUST FUND															
		(iii) OTHER LC															
		B. P.L. 480 LC															
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO S ACCTS. 2/	G		37		177						177				
	FA ACT	(ii) TRUST FUND	Govt. Rev.	-	34	34	161	161							161	161	
		(iii) OTHER LC	Sec. 402	G	140	140	670	670					485		185	185	
		B. P.L. 480 LC	Sec. 104(e)	G	1,537	1,537	7,360	7,360	7,360	7,360							

## REMARKS:

1/ Exchange Rate: \$1 = Rs.4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS										1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING CTRY. INDIA		3. PERSONNEL SERVICES PARTICIPANT TRAINING		4. PROJECT NO. 386-15-910-164						
	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			a. CUM. THRU ACTUAL FY			b. ACTUAL FY 1964			c. OPERATIONAL FY 1965			d. BUDGET FY 1964			e. PLANNING FY 1967			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
		Non U.S.	-	-	11.6	-	-	4.6	-	-	3.6	-	-	3.6	-	-	1.6	-	-	-	-	0.2	-
B. ON BOARD	U.S.					6										2							
	Non U.S.																						
II. PARTICIPANTS PROGRAMMED	A. U.S.	10																		10			
	B. THIRD CTRY.																						

## REMARKS:

\* The corresponding figure reflected in the narrative is \$141,311. The difference is because of the different rates of exchange used in the ProAgs and this table.

1/ End of Fiscal Year

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO.

AD-13

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-910-164	Indian Investment Center
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### 1. The Activity Targets

- a. To assist the GOI in establishing an Indian Investment Center, with headquarters in New Delhi and a branch office in New York, to encourage and promote the flow of foreign private investment capital and technical know-how into India.
- b. To guide and train the Indian personnel at both locations in all phases of an investment center operation by developing a competent and well qualified staff capable of carrying on the functions of the Indian Investment Center when U.S. assistance is withdrawn.
- c. To provide a clearing house for analysis and factual presentation of the inhibiting factors affecting the growth of private foreign investment in India; to influence and bring about changes in policies and procedures which will create a more favorable climate for the rapid development of private foreign investment in India in collaboration with Indian business organizations.
- d. To develop an operating investment organization that will compete in world investment markets, an organization that by its understanding, ability and knowledge stimulates interest in and finalizes joint venture agreements bringing into India the substantial amounts of foreign investment capital and technical know-how required to achieve the industrial development targets in India's Five Year Plans.

U.S. assistance under this activity comprises technical advisory services, essential office equipment and a reference library, training of participants, and grant of local currency required for the initial operation of the Center.

India's industrial development as contemplated in her Five Year Plans requires both technical know-how and foreign exchange. The Third Five Year Plan (1961-1966) target for external assistance through foreign equity investment in private sector industries was \$630,000,000 or \$126,000,000 yearly. The average yearly rate of foreign investment for the first three years of the Plan has been about \$50,000,000, representing a short fall for the three years of \$228,000,000.

Some of the factors limiting foreign investment are (1) the dearth of information available to foreign investors with respect to Indian markets, laws, policies, conditions, etc., (2) the general unfamiliarity of Indian officials and industrialists with foreign capital sources, and (3) the lack of authentic statistics and other informative publications which would induce potential foreign investors to consider investment possibilities in India without making long and costly investigations and (4) the lack of clear, well defined statement by the GOI of the policies and conditions under which the potential private investor can operate in India.

Both government and private circles realize that foreign capital investment provides technical, marketing and managerial knowledge, capital equipment and foreign exchange, and that thus it could contribute greatly to the economic development of the country.

Heretofore an interested foreign investor had to seek from several government offices the basic information on which to make a determination as to the feasibility of his proposed investment. He then had to look for an investment partner who had the resources required by the GOI, in order to enter into a joint venture. This was time-consuming and costly to the potential investor, with no assurance of results. To mitigate this situation, the GOI requested aid in establishing a Center which could be used by both the potential foreign investor and the local entrepreneur as a means of forming joint ventures and technical collaboration in India. This activity represents a major effort to find a solution to the problems.

The Indian Investment Center (IIC), therefore, will make available to industry and government these specialized technical and promotional services which have demonstrated their value to investment centers in other countries in obtaining substantial amounts of foreign investment capital.

This project will run through FY 1967, at which time it is expected that the personnel of the Center in New Delhi and New York will be properly trained to effectively carry out the functions of the Center.

### 2. The Course of Action

To establish an Indian Investment Center (IIC) with headquarters in New Delhi, India, which is to function as an independent, non-profit, registered society under the direction of an Executive Director, with adequate administrative staff and trained technical personnel, and a branch office in New York under a resident director and an assistant director with secretarial support. The overall responsibility and control of the Center is to be vested in a Governing Body (Board of Directors), nominated by the GOI with Mr. G.L. Mehta as its chairman and senior officials of the GOI and private organizations as its members.

The primary objectives of the Center are to:

1. Encourage and promote the flow of foreign private capital into India.

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2. Provide the Government of India with pertinent, factual and up to date information on the world investment market which has a bearing on the attraction of foreign capital to India and on which the Government of India can predicate policy decisions.
3. Promote a wider knowledge and a better understanding in the world capital markets of the various factors affecting investment in India, e.g. government policies and regulations, laws, taxation, equity participation, licensed capacity, production, raw materials, industrial facilities available in different parts of the country, labor conditions, power supply, construction costs, and other pertinent and relevant statistics on which investment management decisions can be made.
4. Conduct publicity programs abroad on Indian investment opportunities and general conditions by preparing, publishing and disseminating promotional information to attract foreign investment to India.
5. Make feasibility studies and surveys of specific industries providing data showing the possibilities for private foreign investment.
6. Assist Indian and foreign businessmen in the preparation of investment proposals, help locate partners for foreign and Indian entrepreneurs seeking joint venture agreements, provide credit information and perform such other services as may be requested by prospective collaborators.

To assist in accomplishing this USAID provided funds for U.S. advisory technicians, U.S. training of IIC personnel, office equipment, and library facilities for the establishment and initial operation of the Center as follows:

- a. Two AID/W investment consultants to assist the GOI in laying the groundwork for the establishment of the Center.
- b. Local currency PL-480 grant funds to the GOI, for expenditures incurred in establishment and initial operation of the Center on such items as personnel salaries, office expenses, printing and publications, travel in India and abroad, etc.

- c. Five contract technicians to advise and assist in the development of functional departments and services at the headquarters office in New Delhi; in the preparation of feasibility studies, prospectuses, business analyses, engineering and chemical industries surveys; in planning and administering national investment promotion programs; and to guide IIC personnel in their daily activities:
  - 1) Investment Center Advisor, the senior executive and policy expert, to serve as advisor to the Executive Director of the IIC - 57 man-months.
  - 2) Investment Promotion Specialist, to guide and assist in all phases of investment promotion, including preparation of promotional literature, and technical and business reports, research data for promotional media, etc. - 24 man-months.
  - 3) Chemical Industries Advisor, to furnish expert guidance and assistance to the IIC in analysing and evaluating technical and economic feasibility of proposals for new chemical industries and in compiling data and making surveys on the development of the chemical industry in India - 46 man-months.
  - 4) Light-Engineering Industries Advisor, to guide and assist the IIC in making surveys on the development of the light engineering industry in India, particularly the electronics industry, for the purpose of uncovering new areas of investment possibilities and in analysing technical feasibility and evaluating economic aspects of new proposals - 30 man-months.
  - 5) Investment Prospectus Analyst, with specialized experience in supervising and preparing prospectuses and related statements for capital transactions and transfers - 24 months.
- d. Contract services of a well-known U.S. professional publicity firm for a period of two years to develop, organize and conduct promotional and publicity activities in the U.S. - 44 man-months in two and one-half years.
- e. Contract services of an Investment Advisor with long experience in U.S. investment and business finance, to advise and assist the Resident Director of the IIC New York office and to guide and train the Indian office personnel in the techniques of promoting U.S. private business investment in India - 24 man-months.
- f. Train ten senior members of the Center's staff in the U.S. on three month assignments by providing:
  - a. Observation and study of methods and techniques in investment promotion practices, financial analysis, management accounting, business analysis, corporation taxation, licensing agreements, legal matters relating to joint-ventures, and

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b. contacts with U.S. industrial corporations, specifically those in the fertilizer and heavy chemicals fields.

g. Provide foreign exchange (\$14,000) on a reimbursement basis, for expenditures incurred on international travel to be performed, from time to time, by U.S. advisors on behalf of and in pursuit of the purposes and objectives of the Center.

The project plan originally provided for furnishing contract services of short-term consultants for 35 man-months to the IIC New Delhi office, to assist in preparing feasibility studies in potential investment fields for presentation to foreign investors. Further consideration indicated these studies could be made by competent local organizations, e.g., the National Council for Applied Economic Research. At the request of the GOI, the proposed consultant services have been cancelled and funds utilized to provide for the extension of following services:

- a. Investment Center Advisor (New Delhi) - 9 months
- b. Chemical Industries Adv. (New Delhi) - 7 months
- c. Publicity firm (New York) - 6 months

### 3. Progress to Date

AID assistance to this activity began in FY 1960 and will terminate in FY 1967.

Two short-term investment advisors from AID/W assisted the GOI for one month in January 1960 in formulating plans for the establishment of the Indian Investment Center.  
Cost: \$4,000 (DG).

The New Delhi headquarters office of IIC was opened officially on February 15, 1961 and the New York branch office was opened on October 2, 1961. The Governing Body was appointed by the GOI, with Mr. G.L. Mehta as its Chairman, to give policy guidance and general operational directives to the IIC; the Executive Director was appointed and senior and junior officers and an adequate technical and administrative staff recruited. In May 1963 the IIC acquired new office space with modern facilities and is building up a properly furnished library.

A grant of Rs.3,660,000 (equiv. of \$764,000) from PI-480 funds was made to the GOI through FY 1963, to meet local currency costs of operation of the Center, including

international travel by IIC personnel and technical advisors on IIC business. An additional grant of Rs.3,700,000 (equiv. of \$773,000) will be made in FY 1965 for the same purposes.

### Technicians:

Two of the five contract technicians provided in FY 1960 remain on the job, the Investment Center and the Chemical Industries Advisors. The Investment Promotion Specialist left India September 30, 1963, after serving a two-year assignment; the Engineering Industries Advisor's services were terminated after six months for personal reasons, and IIC desires a two-year replacement for him. The IIC has requested two years' services of an Investment Prospectus Analyst in lieu of the Business Analyst. Following is the schedule of technician man-months now provided for as of June 30, 1964:

Technician	Man-Mos.	Terminal Date
Investment Center Advisor	57	March 1966
Chemical Ind. Advisor	46	April 1966
Investment Promotion Specialist	24	Sept. 30, 1963
Engineering Ind. Advisor	30*	(Vacant)
Investment Prospectus Analyst	24	(Vacant)

(\*Includes six months already provided and 24 months of a replacement advisor.)

Cost: \$357,900 (DG) plus Sec. 402 rupees equal to \$127,311.

### New York Office Advisory Services:

- a. A two-year contract was signed in July 1962 with the New York publicity firm of Barnet & Reef Associates for promotional and publicity activities in the U.S. and to give advice and train Indian personnel in the New York field office in all aspects of investment promotion work.

A contract amendment is being issued to extend these services for an additional six months, through January 1965. During the extended term the contractor will handle all public relations work, press releases, publications and other media for the IIC New York office in addition to providing assistance in organizing publicity programs in key cities of the United States.  
Cost: \$115,100 (DG) for 2½ years.

- b. The Investment Advisor to the Resident Director of IIC New York field office was recruited in December 1962 under a 2-year personal services contract to assist and train Indian personnel of that office in the task of encouraging and promoting private U.S. investment in India. In August 1964 the contractor (Chester R. Leaber) withdrew from active service because of illness.

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This created a serious situation at the New York office, and the possibility of hiring Sidney Sherwood, former Export-Import Bank Attache in New Delhi, to fill the position on full time contract basis for the balance four months term, was explored, through CIPM. He has accepted the contract terms and filled the position in September 1964.

1 Senior Officer } for industrial  
2 Junior Officers } information.

1 Administrative Officer  
1 Librarian  
1 Receptionist  
1 Telephone Operator  
32 Administrative, clerical staff and other personnel.

Total: 53 persons.

Commodities:

Books and periodicals and office equipment worth about \$27,000 have been procured for the New Delhi head office and the New York branch office. About \$4,000 worth is in transit. Cost: \$31,000 (DG), FY 1960 obligations.

b. New York Branch Office

1 Resident Director (Counterpart to Investment Advisor)  
1 Assistant Director  
3 Secretaries

Participants:

Three-month special training in the U.S. for ten senior members of the IIC staff, including counterparts to the American advisors, was provided through FY 1963. All the participants have returned and are performing effectively at the Center. Cost: \$15,000 (DG) plus Sec. 402 rupees equiv. to \$14,000.

Inquiries - Collaboration Agreements:

As of March 31, 1964, the Indian Investment Centre had:

- a. received and handled 2300 inquiries from interested Indian parties and 350 inquiries from foreign investors interested in joint ventures in India;
- b. completely processed 38 GOI approved collaboration agreements for technical assistance and/or joint ventures covering a wide range of industrial fields:

Local Staffing:

On March 31, 1964 the offices of the Center were staffed as follows:

a. New Delhi Headquarters

1 Executive Director ) (Counterparts to Investment  
1 Secretary ) Center Advisor)

1 Finance and Accounts Officer, expert in Taxation and overall responsible for office administration.

1 Advisor Chemical Industries - (Counterpart to Chemical Industries Advisor)

1 Advisor Engineering Industries

1 Senior Officer ) responsible for project  
2 Junior Officers ) handling.

1 Senior Officer ) for legal matters.  
1 Junior Officer )

2 Senior Officers ) for economic research and  
2 Junior Officers ) publications.

U.S.A. Other Countries

Technical assistance only  
Joint ventures

4	10
17	7

- c. fully processed 7 collaboration agreements awaiting GOI approval:

U.S.A. Other Countries

Technical assistance only  
Joint ventures

1	-
6	-

- d. rendered incidental assistance to 28 GOI approved collaboration agreements:

U.S.A. Other Countries

Technical assistance only  
Joint ventures

1	8
12	7

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- e. assisted in 37 proposals for collaboration now being negotiated between Indian and foreign parties:

	<u>U.S.A.</u>	<u>Other Countries</u>
Technical assistance only	1	3
Joint venture (equity)	23	10

IIC Publications:

a. Fact Sheets:

Industrial fact sheets about priority industries were published and sent to the New York office and other representatives of the Center abroad, to be mailed with a promotional letter to the managements of companies manufacturing these items. The fact sheets on "Steel Castings", "Steel Forging" and "High Tension and Low Tension Insulators" were revised and reprinted.

1. Steel Castings
2. Ball & Roller Bearings
3. Steel Forgings
4. High Tension and Low Tension Insulators
5. Industrial Furnaces
6. Printing Machinery

Fact sheets on eleven industries are scheduled for publication during this year:

1. Cable Making Machinery
2. Automatic Moulding Machines
3. Gas Cylinders
4. Fertilizers
5. Synthetic Fibres
6. Machine Tools
7. Pig Iron
8. Alloy Steel
9. Petro-chemicals
10. Ferro-alloys
11. Equipment and Machinery for Chemical Industries.

b. "Investing in India" Booklets:

To date the following investment promotional booklets have been published for distribution:

1. Objects and Functions of the IIC
2. Exchange Control (Reprint)
3. Basic Facts of the Indian Economy
4. Taxation (Revised)
5. Company Law

c. Newsletter:

The Center is publishing a Monthly Newsletter, to keep entrepreneurs and investors in India and abroad accurately informed of the latest financial and economic developments in India. It will record all changes in policies, laws and regulations affecting the investment of foreign capital in India, and will include important statements by the Government and businessmen. Also, a joint-venture case history will be published each month.

The first issue was brought out on 15 December 1963; for mailing to approximately 2,800 firms abroad and 1,200 in India.

- d. In addition, a number of notes clarifying Indian conditions and policies were produced and sent to the New York office, as publicity material for distribution. Their subjects are:

The Socialist Pattern of Society  
Public and Private Sectors  
Technical Education in India  
Licencing Procedures for Setting up Industries  
Attitude towards Investment of Foreign Private Capital  
Equity Participation and Divertment of Investment  
Capital Issue Control  
Profitability in Indian Industries.

- e. A Special Brochure - A special brochure containing brief information on general topics e.g., Basic Facts of Indian Economy, Taxation, Company Law and Labor Conditions and data on specific industries in which there is scope for foreign private investment will be prepared and published for presentation to delegates (about 1,100) to the Conference of the International Chamber of Commerce to be held in New Delhi in February 1965.

f. Loose-leaf Binder:

A comprehensive brochure on "Starting an Industrial Enterprise in India" is being prepared, to be published in a loose-leaf book form in November 1964. The Center's officers have collected authentic data from the Department of Industries in each state on industrial facilities, e.g. electric power, water communications, transport and other services which are being analyzed and tabulated.

Publicity:

The publicity firm of Barnet & Reef, New York, prepared press releases and background statements which appeared in the general press and business and financial publications. In addition special articles on specific industries in India have appeared in American Machinist, Chemical Week, Steel, and The Metal Working Weekly.

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With the assistance of Barnet & Reef, well-prepared seminars with U.S. businessmen were conducted in Cleveland, Pittsburgh, Boston, Chicago, Detroit, San Francisco, Los Angeles and Seattle. Similar discussion seminars with company executives in various cities of the U.S. are being planned for this year.

#### U.S. Businessmen's Meeting:

In April 1964 a group of 40 U.S. businessmen representing 27 manufacturing firms, members of Business Council for International Understanding (BCIU), visited India for a week at the invitation of IIC. Arrangements were made for discussions in New Delhi with the Ministers and other top government officials and Indian businessmen, to (a) obtain a clearer understanding of the Government of India's policy on foreign private investment; (b) consider steps necessary to facilitate the flow of foreign private investment into India; and (c) examine specific proposals for foreign investment.

The Center played host for the conferences and was responsible for all details of a successful, comprehensive program, which included the production of 16 informative printed briefs.

As a result of this highly profitable and informative conference the BCIU delegates decided to form a permanent group in the U.S. which would continue to serve the interests of the U.S. investors in India. They reassembled in the U.S. on May 28, 1964 for a debriefing session, at which they gave reports of their impressions to other businessmen who were not able to visit India.

#### Visits by Foreign Businessmen:

- a. A team of Japanese businessmen interested in petro-chemical industries arrived in New Delhi for a month's visit during September-October 1964 to observe conditions in India and hold discussions with the Government and Indian businessmen, during which the team visited many important industrial and business centers in India. They returned to New Delhi early October for a second round of talks with the Government and the Center. The team members' observations and interests in investing in India were generally favorable. Specific proposals are not yet known. The team departed on October 10, 1964 for Tokyo.

The IIC assisted the team providing background information and statistical material.

- b. A group of prominent industrialists and bankers from West Germany have been invited to come to New Delhi in November 1964 for week-long discussions with government officials and Indian businessmen.
- c. In October-November 1965 a team of American industrialists, members of the Action Committee for Industrial Development (ACID) group, will arrive in New Delhi and will be invited to negotiate with Indian parties on specific joint-venture projects.

#### Studies and Surveys:

- a. A survey of the machine tool industry is being made in cooperation with the GOI National Council for Applied Economic Research; the report will be ready by November 1, 1964.
- b. A survey of process control and industrial instruments is being conducted through the National Industrial Development Corporation, to be completed on November 1, 1964.
- c. A study of the problems faced by Indian and foreign entrepreneurs in setting up the industrial enterprise and going into production, after the approval of collaboration agreements, is under way. A questionnaire is being sent to about 1,500 joint-venture companies whose collaboration agreements were approved between 1959 to 1963.
- d. Other studies of priority industries proposed to be undertaken during the year are:
  - (1) Reduction gears.
  - (2) Specialized electrical equipment, such as D.C. motors for steel mill drives and other industrial applications, flame-proof motors, control gear for steel mill drives, cranes, paper mill drives and Ward Leonard sets.

#### Field Services:

This activity is to be stepped up and intensified. The principal aim is to establish contact with medium sized enterprises with a view to stimulating their interest in new schemes with foreign collaboration in the priority industries. In addition, the need for personal visits with inquiring parties has become more and more apparent in relation to acquiring insight into the company, its technical abilities, available equipment, organization and financial situation.

The staff will be enlarged by three qualified Indian technical officers recruited for this purpose. After a training period of six to nine months in the New Delhi head office these officers will make systematic trips throughout the country. It is proposed that they ultimately establish IIC field offices in the main industrial centers - Bombay, Calcutta and Madras - to provide the Center with branch offices easily accessible to interested parties,

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Indian as well as foreign.

European Branch Office:

The Investment Center Adviser at New Delhi visited West European countries (West Germany, France and Belgium) for six weeks during September-November 1963 to determine the attitude of potential investors in these countries and also the possibilities of planning a publicity program before opening a European branch office of the Center at GOI expense in one of the countries.

It was decided that the European branch office be at Dusseldorf, West Germany, with one Resident Director and one Assistant Resident Director as initial staff with the official opening scheduled for October 29, 1964. It will be housed at Duggal-India House where office space of 2,000 sq. ft. has been booked.

The Government of the Federal Republic of Germany has been asked to provide an industrial advisor, under contract.

The activities of this office will include the following:

- a. Transmitting Indian project proposals to suitable German and other industrial companies, with a view to awakening their interest.
- b. Establishing personal contacts with the major industrial and financial organizations in Germany, France, the Low Countries, Switzerland and Italy.
- c. Compiling of mailing lists for the monthly Newsletter and other IIC publications.
- d. Printing and distribution of German and French versions of the Newsletter.
- e. Translating Fact Sheets into the German and French languages, and mailing them with adequate covering letter to the management of European countries.
- f. Maintaining regular contacts with the Press.
- g. Arranging periodic visits to managements of important European manufacturing companies. Initially this will be done once every month; from July 1, 1965, the number of these visits will be increased.

h. Organizing seminars to be held between January and June 1965 with groups of industrialists in major industrial centers of Europe.

New York Branch Office:

The New York office is operating satisfactorily. A senior Indian officer will be added to the staff to assist the Resident Director.

Appraisal:

All of the primary project objectives have been achieved, with varying degrees of success. The Indian Investment Center, an investment organization dedicated to the objective of bringing private foreign investment and technical know-how into India, has been established. The offices in New Delhi and New York have a nucleus of competent and capable personnel who are well trained and who know their job.

While it is true that since the beginning of the project a full complement of American advisors never was available and that several of the senior Indian personnel originally assigned to the Center had to return to their former GOI old positions, the fact remains that a viable organization is operating and is producing results. Its position and accomplishments are recognized by the GOI, official commercial offices of other nations and by potential investment groups from many countries. The IIC has grown in stature and is respected for what it can do; an increasingly more businessmen, both Indian and foreign, are coming to its offices for help.

In 1960 no publications giving detailed, accurate, up-to-date information on India's economic development, investment opportunities, laws, regulations and procedures concerning industrial operations, taxation, foreign exchange control, infra-structure facilities, etc. and other data concerning the industrial situation in the country were readily available to foreign business firms interested in investing in India. Costly feasibility studies were a necessity before management could make a decision.

These difficulties have been eliminated to a large extent by the books, brochures, and pamphlets published by IIC. Further, reliable information on credit standing, background and capabilities of Indian industrial companies is now quickly available on a confidential basis to foreign investors.

A reasonably good job of public relations has been done and investment opportunities in India favorably presented to foreign business firms, particularly in the United States. As a result, business groups and individual businessmen are aware of the investment potential in India and are beginning to investigate the possibility of working out joint venture agreements. Much more needs to be done by IIC in this area not only in the U.S. but in West Germany, France, England, other European countries and in Japan.

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The building of an investment organization takes time. The Mission and the GOI recognize that only a beginning has been made and that the Center's activities should be expanded on a long-term basis. Achievement of Third and Fourth Plan targets for foreign private investment in India will require careful planning and continued assistance from the U.S. Interest of potential investors in India has been stimulated and the IIC has initiated, processed and obtained GOI approval of 74 collaboration agreements for both equity capital and technical know-how. Ten more are awaiting approval and 43 are being negotiated. Progress has been made, but volume to date is low when compared to India's needs and total project objectives.

A long-term development plan for the Center is being discussed with the GOI; if approved by the Mission, a new project will be drawn up for further U.S. assistance in FY 1965.

#### 4. Funding Requirements

##### Total Requirements:

<u>FY of Funding</u>	<u>Project Elements</u>	<u>A.I.D. Cost</u>		
		<u>DG \$</u>	<u>Sec. 402 \$ Equivalent</u>	<u>PL-480 Grant Rupees</u>
1960	U.S. Technicians (D-H):	4,000	-	-
	Contract Technicians (New Delhi Office):			
	Inv. Cent. Adv.	124,974	29,718	-
	Chem. Ind. Adv.	88,700	28,770	-
	Inv. Prom. Adv.	44,059	8,698	-
	Engg. Ind. Adv.	58,167	36,125	-
	Inv. Pros. Analyst	42,000	24,000	-
	Contract Technicians (New York Office):			
	Publicity Firm	115,100	-	-
	Investment Adv.	40,000	-	-
	Commodities:	31,000	-	-
	Other Costs (Foreign Exchange):	14,000	-	-
	PL-480 Rupee Grant:	-	-	2,200,000

<u>FY of Funding</u>	<u>Project Elements</u>	<u>A.I.D. Cost</u>		
		<u>DG \$</u>	<u>Sec. 402 \$ Equip.</u>	<u>PL-480 Grant Rupees</u>
1961	Participant Training:	3,000	3,000	-
1962	Participant Training:	5,000	5,000	-
1963	Participant Training:	7,000	6,000	-
	PL-480 Rupee Grant:	-	-	1,460,000
1965	PL-480 Rupee Grant: (Proposed)	-	-	3,700,000
<b>TOTAL: \$</b>		<b>577,000</b>	<b>141,311</b>	<b>7,360,000</b> <b>( \$ 1,537,000 )</b>

AID 1020-3 (7-64)	PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES										SECURITY CLASSIFICATION UNCLASSIFIED			
E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		END FY		4. PROJECT NO.		5. TITLE			
	November 1, 1964		India		Funding 1962		1962		386-44-950-287		East India Hotels Ltd., New Delhi			
7. OBLIGATED AND DISBURSED	e. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
	(1) TYPE		(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1)	(2)	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
					(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED	OBLIGATED	DISBURSED	(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC	104(e) Cooley I*			1,591	679	7,619	3,250	7,619	3,250	-	-	-	-
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC	104(e) Cooley I*			-	679	-	3,250	-	3,250	-	-	-	-
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC	104(e) Cooley I*			-	912	-	4,369	-	4,369	-	-	-	-
III BUDGET YEAR (EST.) FY	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC													
IV PLANNING YEAR (EST.) FY	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC													
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC													
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC	104(e) Cooley I*			1,591	1,591	7,619	7,619	7,619	7,619	-	-	-	-

## REMARKS:

1/ Exchange Rate: \$1 =

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES PARTICIPANT TRAINING			BEG. FY			END FY			4. PROJECT NO.						
	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
I PROJECT PERSONNEL	A. MAN YEARS	U.S.		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
		Non U.S.																							
B. ON BOARD	U.S.																								
	Non U.S.																								
II. PARTICIPANTS PROGRAMMED	A. U.S.																								
	B. THIRD CTRY.																								

## REMARKS:

1/ End of Fiscal Year

\* Loan # C-86-14

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-950-287	East India Hotels Ltd., New Delhi
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1. Activity Target

This is a joint venture between M.S. Oberoi and Associates, New Delhi, and Inter-Continental Hotels Corporation, a wholly owned subsidiary of Pan American World Airways, Inc. to construct a 350-room luxury hotel in New Delhi to be completed in the early part of 1965.

The company also proposes to construct hotels of a similar type in major cities of India like Bombay, Agra, etc., after the New Delhi hotel has been completed.

Development of tourism has been given top priority by the Indian Government, in view of its potential foreign exchange earnings. One of the main hurdles to such development is the lack of suitable hotel facilities to accommodate the steadily increasing number of foreigners visiting India.

2. Progress To Date

Construction of this Inter-Continental hotel was started as far back as 1957, but because of various financial difficulties work was at a virtual standstill by 1962. In February 1962 two Loan Agreements were signed, providing a Cooley Amendment loan of Rs. 7,619,000 for local costs and an Eximbank loan of \$717,000 to finance the purchase in the United States of machinery and equipment for the project. The company also obtained a Rs. 4,762,000 loan from the Industrial Finance Corporation, New Delhi for this project. Construction now is under way again, and it is expected that the hotel will be completed within six to nine months and that the entire amount of the Cooley Amendment loan will be utilized by February 1965.



AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-288	Precision Bearings India, Ltd., Bombay
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### 1. Activity Target

Norma-Hoffmann Bearings Company, a division of Universal American Corporation of New York, holds 30 percent of the equity in this joint venture with the International Finance Corporation, the East Asiatic Co., Kamlashan P. Joshi and Co. and the Indian public. A Cooley Amendment loan was made on May 17, 1963, to provide Rs. 3 million for construction of a plant in Baroda, Gujarat, with an annual production capacity of about 800,000 precision anti-friction roller bearings and annular ball bearings and all their components, including balls and rollers.

The output of the company will help meet the rising demand for bearings in India occasioned by the growth of the manufacturing industry in recent years, and will be a positive element in India's international balance of payments by saving foreign exchange that otherwise would have to be spent on imports of bearings.

### 2. Progress To Date

The company also has received a dollar loan for \$210,000 from the Industrial Credit and Investment Corporation of India (ICICI). As of August 31, 1964 Rs. 2 million have been disbursed and it is expected that the loan will have been totally disbursed in FY 1965. The project is nearing physical completion.

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

E-1b

1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	3.	BEG. FY	END FY	4. PROJECT NO. 386-44-130-289	5. TITLE Arbor Acres Farms India (Private) Ltd., Bombay
		Funding	1964	1964		
		Phys. Work	1964	1965	6. PRIOR REFERENCES:	

7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/ (ii) TRUST FUND (iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley L*	522	183	2,500	875	2,500	875	-	-	-	-	
TOTAL ACTUAL FY 1964	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/ (ii) TRUST FUND (iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley L*	522	183	2,500	875	2,500	875	-	-	-	-	
II OPERATIONAL YEAR (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/ (ii) TRUST FUND (iii) OTHER LC											
FY 1965	B. P.L. 480 LC	104(e)Cooley L*	-	339	-	1,625	-	1,625	-	-	-	-	
III BUDGET YEAR (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/ (ii) TRUST FUND (iii) OTHER LC											
FY _____	B. P.L. 480 LC												
IV PLANNING YEAR (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/ (ii) TRUST FUND (iii) OTHER LC											
FY _____	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/ (ii) TRUST FUND (iii) OTHER LC											
FY _____	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/ (ii) TRUST FUND (iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley L*	522	522	2,500	2,500	2,500	2,500	-	-	-	-	

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c

PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS

1. DATA CURRENT AS OF:	2. COOPERATING CTRY.	3. PERSONNEL SERVICES PARTICIPANT TRAINING	BEG. FY	END FY	4. PROJECT NO.

5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY	b. ACTUAL FY _____			c. OPERATIONAL FY _____			d. BUDGET FY _____			e. PLANNING FY _____			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																		
	Non U.S.																			
B. ON BOARD	U.S.																			
	Non U.S.																			
II. PARTICIPANTS PROGRAMMED	A. U.S.																			
	B. THIRD CTRY.																			

REMARKS:

\* Loan # 386-E-085. Refers to Annex 13 of LAS.

1/ End of Fiscal Year

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-130-289	Arbor Acres Farms India (P) Ltd., Bombay
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### 1. Activity Target

The company was formed in 1961 and is 50 percent owned by Indian interests, 27.5 percent by Arbor Acres Farm Inc., Glastonbury, Connecticut, and 22.5 percent by International Basic Economy Corporation, New York. The purpose is to establish and operate poultry breeding farms.

A study of the market indicates a great demand for poultry and eggs; it is estimated that in the Bombay and Calcutta areas alone a ready market for 10,000,000 meat chickens per year exists. The company estimates annual production of 1,600,000 day old chicks, 3,480,000 table-eggs and 58,000 lbs. of live meat-chicken. A special feature of the production is that Arbor Acres chickens will be fast-growing, weighing up to three and three-quarters pounds in nine weeks against present average weight in India of two to three pounds in 16 to 20 weeks.

The company anticipates exporting 10 percent of its annual production to Asian and African countries, beginning in the third year of its operations, and raising it to at least 15 percent by the sixth year.

### 2. Progress To Date

In August 1963 a Cooley Amendment loan of Rs.2.5 million was made to the company to assist in financing the preparation and construction of poultry breeding farms in Bombay and Calcutta.

The first at Telegoa, Poona is in operation. Out of the Rs.1,340,000 available for the first phase, a sum of Rs.943,750 had been utilized as of August 31, 1964; and the balance of Rs.396,250 is expected to be used during FY 65. The second phase at Calcutta, for which Rs.1,160,000 has been earmarked, will be undertaken at a later date, and the entire project is expected to be completed by 1965.

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

7. OBLIGATED AND DISBURSED	a. FUNDS		3. LOAN OR GRANT	b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1)	(2)		(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1)	(2)	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
	TYPE	SOURCE		(a)	(b)	(a)	(b)	OBLIGATED	DISBURSED	(a)	(b)	(a)	(b)
				OBLIGATED	DISBURSED	OBLIGATED	DISBURSED			U.S. PERS.	NON-U.S. PERS.	OBLIGATED	DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley I*	4,512	240	21,600	1,150	21,600	1,150					
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley I*	4,512	240	21,600	1,150	21,600	1,150					
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley I*	-	3,133	-	15,000	-	15,000					
III BUDGET YEAR (EST.) FY 1966	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley I*	-	7,139	-	5,450	-	5,450					
IV PLANNING YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley I*	4,512	4,512	21,600	21,600	21,600	21,600					

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4,7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E - 1a

E - 1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES PARTICIPANT TRAINING			BEG. FY	END FY	4. PROJECT NO.									
	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																						
		Non U.S.																						
B. ON BOARD	U.S.																							
	Non U.S.																							
II. PARTICIPANTS PROGRAMMED	A. U.S.																							
	B. THIRD CTRY.																							

REMARKS:

\*Loan # 386-E-083 Refers to Annex 13 of IAS

1/ End of Fiscal Year

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-290	Union Carbide India Ltd., Calcutta
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### 1. Activity Target

The company was incorporated in 1934 between Indian interests and Union Carbide Corporation, New York, which owns 60 percent of the equity capital. The company has expanded its production from the original flashlight batteries to include special use batteries, a zinc strip rolling mill, chemicals and plastics, with plants located in Bombay, Calcutta and Madras. Union Carbide has applied for loan assistance, both dollar and rupees, to Export Import Bank and A.I.D. to assist the company in expanding its polyethylene and chemical facilities at Bombay, including the addition of the olefins unit. Full production under the expansion is expected by 1966.

This is a significant industry in the Indian private sector. The company has expanded into a number of fields, raising its sales from \$293,000 in 1956 to \$23 million in 1964 and to an expected \$36 million by 1966. The successful implementation of the proposed expansion would result in the establishment of a new facility with a capacity to produce annually approximately 65 million pounds of olefins from the cracking unit and an additional 14 million pounds of polyethylene capacity and an additional 15 million pounds of chemical capacity. Thus, the polyethylene and chemicals capacities alone would be expanded to 20 million and 24 million pounds per annum respectively. Furthermore, the project will meet an important need for polyethylene and other chemicals which now are being imported, and will meet the demands for raw materials of about 49 Indian manufacturers of drugs, plastics, electrical products, films and resins. At the same time, the employment of an additional 250 skilled operators and supervisory personnel in the plants will be a positive benefit to India.

### 2. Progress to Date

A Cooley Amendment loan of Rs.21,600,000 was made in August 1963, which is expected to be fully utilized by the end of FY 1966. The Cooley loan will assist the company in acquiring fixed assets of Indian origin in connection with the project. In addition, Export Import Bank also has made a loan of \$7,650,000 to cover part of the foreign exchange costs.

7. OBLIGATED AND DISBURSED	g. FUNDS		b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
	(1)	(2)	(3) LOAN GRANT	(1)		(2)		(1)	(2)	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
	TYPE	SOURCE		DOLLAR EQUIVALENTS (000) 1/	LOCAL CURRENCY UNITS (000)	OBLIGATED	DISBURSED	OBLIGATED	DISBURSED	(a)	(b)	(a)	(b)
				(a)	(b)	(a)	(b)	OBLIGATED	DISBURSED	U.S. PERS.	NON-U.S. PERS.	OBLIGATED	DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley L*		3,133	2,444	15,000	11,700	15,000	11,700	-	-	-	-
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley L*		3,133	2,444	15,000	11,700	15,000	11,700	-	-	-	-
II OPERATIONAL YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley L*		-	209	-	1,000	-	1,000	-	-	-	-
III BUDGET YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley L		-	480	-	2,300	-	2,300	-	-	-	-
IV PLANNING YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley L		3,133	3,133	15,000	15,000	15,000	15,000				

REMARKS:  
 1/ Exchange Rate: \$1 =  
 2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:	2. COOPERATING CTRY.	3. PERSONNEL SERVICES PARTICIPANT TRAINING	BEG. FY	END FY	4. PROJECT NO.														
	g. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS				
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																					
		Non U.S.																					
B. ON BOARD	U.S.																						
	Non U.S.																						
II. PARTICIPANTS PROGRAMMED	A. U.S.																						
	B. THIRD CTRY.																						

REMARKS:  
 1/ End of Fiscal Year  
 \* Loan # 386-E-088. Refers to Annex 13 of LAS

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-291	Mandya National Paper Mills Ltd., Bangalore
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1. Activity Target

Incorporated in 1959, this company is owned by Parsons & Whittemore, New York (45 percent); Bedi and Company Private Ltd., Bangalore, (20 percent); some 1,200 public shareholders in India own the remaining 35 percent. The company, already manufacturing paper and board, proposes to expand its existing production capacity from 35 tons to 60 tons per day by late 1965.

The paper manufacturing industry has made great strides during the last decade. India's total production of paper in 1952 was scarcely 160,000 tons; in 1962-63 the total production of board and papers exceeded 400,000 tons. Even with the commencement of production after 1962-63 of three new paper mills, providing an additional 45,000 to 50,000 tons, the demand for paper in India still is largely unsatisfied. In order to achieve the Indian Planning Commission's target of 820,000 tons of paper production by 1965-66, the Government of India has issued licenses for the establishment of 15 new paper mills and approved expansion plans of the 15 now in operation. The increase in paper consumption is due not only to India's growing industrialization, but, more importantly, to the general growth of literacy. The growth of paper industry is restricted further by lack of raw material. Consequently, the bulk of India's paper and paper products demands is met by imports, which, according to Government of India figures, amounted to Rs. 133.5 million in 1962-63 and Rs. 115.5 million in 1963-64.

Parsons & Whittemore has made a definite contribution to meeting the raw material shortage, by its successful development and utilization of sugarcane bagasse in this new plant as a prime raw material. It also will use 13,500 tons yearly of indigenous bamboo for a pulp production of 15 tons per day, approximately 30 percent of the paper mill requirement after expansion.

In addition to the desirability of expanding to meet a growing market, the company's expansion program is based on the necessity of achieving an economic level of operation. The introduction in 1959 of price control has rendered a relatively small tonnage paper mill like Mandya no longer a profitable enterprise.

Construction is awaiting final approval of an Industrial Finance Corporation loan now under negotiation. However, it is planned that the complete expansion program can be finished within a year.

2. Progress To Date

A Cooley Amendment Loan agreement was signed in August 1963, providing Rs. 15 million to refinance short-term debts and finance expansion of the project. As of August 31, 1964 Rs. 11.7 million have been disbursed, leaving a balance of Rs. 3.3 million available for expansion costs. In addition, the Industrial Finance Corporation has approved, in principle, a loan of Rs. 21.7 million, a portion of which would be to finance foreign exchange costs of the company's expansion program. Loan agreements with the IFC are under negotiation.

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

SECURITY CLASSIFICATION  
UNCLASSIFIED

E-1b

1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	3.	BEG. FY	END FY	4. PROJECT NO. 386-44-230-292	5. TITLE Kirloskar-Cummins, Limited, Poona
		Funding Phys. Work	1964 1963	1964 1965		

6. PRIOR REFERENCES:

7. OBLIGATED AND DISBURSED	c. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley	I*	2,611	1,963	12,500	9,400	12,500	9,400	-	-	-	-
	TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/										
		FA ACT	(ii) TRUST FUND										
		(iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley	I*	2,611	1,963	12,500	9,400	12,500	9,400	-	-	-	-
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley	I*	-	648	-	3,100	-	3,100	-	-	-	-
III BUDGET YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
IV PLANNING YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley	I*	2,611	2,611	12,500	12,500	12,500	12,500	-	-	-	-

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c

PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS

5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY	b. ACTUAL FY _____			c. OPERATIONAL FY _____			d. BUDGET FY _____			e. PLANNING FY _____			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																	
		Non U.S.																	
B. ON I/BOARD	U.S.																		
	Non U.S.																		
II. PARTICIPANTS PROGRAMMED	A. U.S.																		
	B. THIRD CTRY.																		

REMARKS:

\* Loan #386-E-089 Refers to Annex 13 of LAS

1/ End of Fiscal Year

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-292	Kirloskar-Dummins, Limited, Poona
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1. Activity Target

Incorporated in February 1962, the company was promoted by Cummins Engine Co., Columbus, Indiana, which owns 50 percent of the company's stock, and the Kirloskar Oil Engines Ltd., Poona, to establish a diesel engine manufacturing plant in India with a capacity of 2,500 units per annum; its initial production is expected by the end of 1964.

The engines to be produced are general purpose heavy duty type, from 150 to 800 horse-power, to be used in construction equipment of all kinds (e.g., power shovels, crawlers, tractors, motorized scrapers and dumpers) and in large trucks. At present there is a strong demand for such engines in India, most of which have to be imported. In addition to filling new engines needs, the plant will also help in providing replacement and spare parts to Cummins engines which are presently idle for want of spare parts. Over the next five years 10 to 15 percent of production will be exported to south-east and southwest Asia and East Africa.

2. Progress To Date

A Cooley Amendment Loan agreement was signed in August 1963 to provide Rs.12.5 million for part of the rupee costs of the project. Rs. 9.4 million of the loan had been disbursed by June 30, 1964, and it is expected that the balance will be utilized before June 30, 1965.

Construction of the plant is almost complete, and production is expected to begin before the end of 1964.

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO.

AD-33

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

E-1b

1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	3. Funding 1960 Phys. Work 1960	BEG. FY 1960	END FY 1965	4. PROJECT NO. 386-44-230-293	5. TITLE Hindustan Aluminium Corporation Ltd., Bombay II
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7. OBLIGATED AND DISBURSED	a. FUNDS		3. LOAN OR GRANT	b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE		(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I. CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC		104(e) Cooley L*	4,178	2,716	20,000	13,000	20,000	13,000	-	-	-	-
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC		104(e) Cooley L**	2,089	627	10,000	3,000	10,000	3,000	-	-	-	-
II. OPERATIONAL YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC		104(e) Cooley L	-	1,462	-	7,000	-	7,000	-	-	-	-
III. BUDGET YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
IV. PLANNING YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
V. ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
VI. TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC		104(e) Cooley L	4,178	4,178	20,000	20,000	20,000	20,000	-	-	-	-

REMARKS:  
1/ Exchange Rate: \$1 = Rs. 4,7876  
2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c

PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS

1. DATA CURRENT AS OF:	2. COOPERATING CTRY.	3. PERSONNEL SERVICES PARTICIPANT TRAINING	BEG. FY	END FY	4. PROJECT NO.
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		a. CUM. THRU ACTUAL FY	b. ACTUAL FY		c. OPERATIONAL FY
		Direct PASA Contract	Direct PASA Contract	Direct PASA Contract	d. BUDGET FY
		Direct PASA Contract	Direct PASA Contract	Direct PASA Contract	e. PLANNING FY
		Direct PASA Contract	Direct PASA Contract	Direct PASA Contract	f. ALL SUBSEQUENT FYs
		Direct PASA Contract	Direct PASA Contract	Direct PASA Contract	g. TOTAL ALL YEARS
		Direct PASA Contract	Direct PASA Contract	Direct PASA Contract	Direct PASA Contract
I. PROJECT PERSONNEL	A. MAN YEARS	U.S.			
		Non U.S.			
B. ON BOARD	U.S.				
	Non U.S.				
II. PARTICIPANTS PROGRAMMED	A. U.S.				
	B. THIRD CTRY.				

REMARKS:  
1/ End of Fiscal Year  
\*Loan C-86-4 & 386-E-093 Refers to Annex 13 of IAS  
\*\*Loan # 386-E-093

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-293	Hindustan Aluminium Corporation Ltd., Bombay II
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### 1. Activity Target

Incorporated in 1958, this is a joint venture between Birla interests, which control and manage a series of Indian companies in a wide variety of industries, and Kaiser Aluminium and Chemical Corporation, Oakland, California, which own 26.72 percent and 26.66 percent respectively of Hindalco's common stock; 46.62 percent is held by the Indian public.

In 1960, Export Import Bank extended a dollar loan of \$13,650,000 and a Cooley loan of Rs.10,000,000 to assist Hindalco to establish an aluminium reduction facility to produce 20,000 metric tons of ingots per annum. The company commenced production in May 1962, reaching its rated capacity in November 1962. Since then it has continuously exceeded its targeted capacity.

After Hindalco started production, it was found that Indian capacity to absorb aluminium production was limited by its capacity to fabricate the ingot into finished or semi-finished products. Consequently, substantial stocks of ingots remained unutilized while, according to Hindalco, in 1962 Indian imports of fabricated aluminium products amounted to 21,700 tons.

In order to find a wider market, Hindalco approached A.I.D. for a second Cooley loan of Rs.10 million and Export Import Bank for a second loan of \$5 million to set up a plant to produce 15,000 metric tons per year of re-draw rods, extrusions and flat and coiled products; both loans were granted.

According to a market study prepared by the Kaiser engineers, Indian consumption of aluminium products is expected to increase from 47,149 tons in 1960 to 106,500 tons in 1965. Therefore, the company is considering a further expansion in 1967 of its reduction plant from 20,000 to 60,000 metric tons per year, which the Government of India has approved. To the extent Hindalco satisfies this growing demand, it will save considerable foreign exchange and affect in India's economic development.

### 2. Progress to Date

As of August 31, 1964, Rs.15 million were disbursed out of the two Cooley loans of Rs.20 million. The company now hopes to have its fabrication plant operating at full capacity by 1965. In addition, a third loan of \$11 million has also been approved recently by the Export Import Bank to cover foreign exchange costs in connection with Hindalco's expansion program.

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

SECURITY CLASSIFICATION  
UNCLASSIFIED

E-1b

7. OBLIGATED AND DISBURSED	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY	3. Funding	BEG. FY	END FY	4. PROJECT NO.	5. TITLE				6. PRIOR REFERENCES:			
	1 November 1964		INDIA	Phys. Work	1961	1964	386-44-230-294	Gabriel India, Limited, Bombay I & II							
	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)					
	(1) TYPE	(2) SOURCE	(3) LOAN GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER			
(a) OBLIGATED				(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED	(a) U.S. PERS.			(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED			
I CUMULATIVE THRU ACTUAL YEAR															
A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/														
	(ii) TRUST FUND														
	(iii) OTHER LC														
B. P.L. 480 LC	104 (e) Cooley	IA*	396	104	1,900	500	1,900	500	-	-	-	-			
TOTAL ACTUAL FY 1964															
A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/														
	(ii) TRUST FUND														
	(iii) OTHER LC														
B. P.L. 480 LC	104 (e) Cooley	IA*	292	-	1,400	-	1,400	-	-	-	-	-			
II OPERATIONAL YEAR (EST.) FY 1965															
A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/														
	(ii) TRUST FUND														
	(iii) OTHER LC														
B. P.L. 480 LC	104 (e) Cooley	IA*	-	292	-	1,400	-	1,400	-	-	-	-			
III BUDGET YEAR (EST.) FY _____															
A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/														
	(ii) TRUST FUND														
	(iii) OTHER LC														
B. P.L. 480 LC															
IV PLANNING YEAR (EST.) FY _____															
A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/														
	(ii) TRUST FUND														
	(iii) OTHER LC														
B. P.L. 480 LC															
V ALL SUBSEQUENT FYs (EST.)															
A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/														
	(ii) TRUST FUND														
	(iii) OTHER LC														
B. P.L. 480 LC															
VI TOTAL ALL YEARS (EST.)															
A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/														
	(ii) TRUST FUND														
	(iii) OTHER LC														
B. P.L. 480 LC	104 (e) Cooley	IA*	396	396	1,900	1,900	1,900	1,900							

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c

PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS

5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY			b. ACTUAL FY _____			c. OPERATIONAL FY _____			d. BUDGET FY _____			e. PLANNING FY _____			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
	I PROJECT PERSONNEL																				
A. MAN YEARS	U.S.																				
	Non U.S.																				
B. ON BOARD	U.S.																				
	Non U.S.																				
II. PARTICIPANTS PROGRAMMED																					
A. U.S.																					
B. THIRD CTRY.																					

REMARKS:

1/ End of Fiscal Year

\*Loans C-86-11 and 386-E-094 Refers to Annex 13 of LAS

SECURITY CLASSIFICATION UNCLASSIFIED

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-294	Gabriel India, Limited, Bombay I & II
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1. Activity Target

This company, 50 percent owned by the Gabriel Company of Cleveland, Ohio and 50 percent by D.C. Anand and associates, was formed in February 1961. A Cooley Amendment loan of Rs.500,000 was extended in 1961, to assist the company in the establishment of a plant at Mulund, Bombay, to manufacture shock absorbers for the automobile industry.

In March 1963 the company approached the A.I.D. for further assistance in order to expand its shock absorber manufacturing facilities from 120,000 to 600,000 per annum and to increase its capacity to manufacture the component parts of such shock absorbers.

Expansion of this project will contribute considerably toward the ever expanding automotive industry in India. At the same time, while increasing indigenous content in the manufacture of shock absorbers and thereby reducing its reliance on imported components by 85 percent, the company estimates an annual foreign exchange saving for India of over \$2 million.

2. Progress To Date

The Agreement for the Rs.1,400,000, second loan, was signed in November 1963 and disbursements under the loan are expected to be completed by December 1964.

**PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES**

**E-1b**

1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	3.	BEG. FY 1964	END FY 1964	4. PROJECT NO. 386-44-230-295	5. TITLE Frick India Limited, New Delhi
		Funding	1964	1965		
		Phys. Work	1964	1965		

6. PRIOR REFERENCES:

7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT U	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR  TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	104 (e) Cooley	I*	522	-	2,500	-	2,500	-	-	-	-	-
	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
	(iii) OTHER LC												
B. P.L. 480 LC	104 (e) Cooley	I*	522	-	2,500	-	2,500	-	-	-	-	-	
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
B. P.L. 480 LC	104 (e) Cooley	I*	-	522	-	2,500	-	2,500	-	-	-	-	
III BUDGET YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
B. P.L. 480 LC													
IV PLANNING YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
B. P.L. 480 LC													
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
B. P.L. 480 LC													
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
B. P.L. 480 LC	104 (e) Cooley	I*	522	522	2,500	2,500	2,500	2,500	-	-	-	-	

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

**E-1c**

**PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS**

1. DATA CURRENT AS OF:	2. COOPERATING CTRY.	3. PERSONNEL SERVICES PARTICIPANT TRAINING	BEG. FY	END FY	4. PROJECT NO.

5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY	b. ACTUAL FY _____			c. OPERATIONAL FY _____			d. BUDGET FY _____			e. PLANNING FY _____			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																	
		Non U.S.																	
B. ON BOARD	U.S.																		
	Non U.S.																		
II. PARTICIPANTS PROGRAMMED	A. U.S.																		
	B. THIRD CTRY.																		

REMARKS:

1/ End of Fiscal Year

\*Loan #386-E-096 Refers to Annex 13 of LAS

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-295	Frick India Limited, New Delhi
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1. Activity Target

Indian interests own 49 percent and Frick Company, Waynesboro, Penn., owns 51 percent of this company, which was incorporated in 1962 principally to manufacture and install refrigeration and ice-making equipment, air conditioning for industrial and, to a smaller extent, domestic, use.

The Frick Company has been selling its products, some manufactured in India by its local distributor and some imported, in India for nearly fifty years. Recently, Frick imports have been sharply reduced, yet the demand for them has increased steadily.

According to the company, India's Third Five Year Plan projects a tremendous demand for ice-making and refrigeration equipment in a broad range of industrial fields including fish and meat processing, preservation of dairy products and vegetables, pharmaceutical manufacture, petrochemical production and cooling the aggregates in concrete dams. At the same time, Indian refrigeration production has been restricted by the inability of local firms to manufacture and the scarcity of foreign exchange to import compressor units. Consequently, the establishment of this plant not only will meet the demands of a vital sector of Indian economy but, more important, will result in exports to the neighboring countries where similar demands exist.

Of this amount, Rs. 600,000 had already been used by the company as of August 31, 1964, and it is anticipated that the balance will be disbursed by March 31, 1965. The factory located in Gurgaon District, Punjab, is nearly complete and initial operations are expected to start before the end of 1964.

2. Progress to Date

A Cooley Amendment Loan agreement was signed on February 4, 1964, providing 2.5 million to assist the company in meeting local costs of the project.

**PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES**

7. OBLIGATED AND DISBURSED	e. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED	OBLIGATED	DISBURSED	(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC	104(e) Cooley L*		1,566	522	7,500	2,500	7,500	2,500	-	-	-	-
TOTAL ACTUAL FY 1964	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC	104(e) Cooley L*		1,044	-	5,000	-	5,000	-	-	-	-	-
II OPERATIONAL YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC	104(e) Cooley L*		-	1,044	-	5,000	-	5,000	-	-	-	-
III BUDGET YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
IV PLANNING YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC	104(e) Cooley L*		1,566	1,566	7,500	7,500	7,500	7,500	-	-	-	-

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. f of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES PARTICIPANT TRAINING		4. PROJECT NO.											
	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS	
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract		
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																					
		Non U.S.																					
	B. ON BOARD	U.S.																					
		Non U.S.																					
II. PARTICIPANTS PROGRAMMED	A. U.S.																						
	B. THIRD CTRY.																						

REMARKS:

1/ End of Fiscal Year \* Loans C-86-16 and 386-E-097 Refers to Annex 13 of LAS

1 November

## 1. Activity Target

The company, founded associates, originally we rubber soles, gloves and a collaboration was arrar and Rubber Company, Mansi plant at Madras to produc "Mansfield" trade mark tire. U.S. firm has contributed equity. A Cooley loan of to Madras Rubber in 1962 of the new plant.

In March 1963 the Cooley Amendment loan, Rs financing the rupee costs tube manufacturing facility to 360,000 units<sup>each</sup> per year costs of import duties are higher than originally planned expansion. Full production expansion is expected by

There is a wide gap of tires and tubes in India. Two tire manufacturing companies and Firestone in Bombay; will be licensed to manufacture

The present expansion will contribute not only public and military needs percent of its annual production, approximately \$2 million, to New earning foreign exchange

## 2. Progress To Date

On June 29, 1964, an agreement for Rs. 5,000,000, Factory, and disbursement to be completed in FY 65.

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

SECURITY CLASSIFICATION  
UNCLASSIFIED

E-1b

1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	3. Funding 1964 Phys. Work 1964	END FY 1964 1968	4. PROJECT NO. 386-44-230-297	5. TITLE Coromandel Fertilizers Ltd., Vishakapatnam	6. PRIOR REFERENCES:
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7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	B. P.L. 480 LC	104(e)Cooley L*		22,476	-	107,605	-	107,605	-	-	-	-	-
TOTAL ACTUAL FY 1964	B. P.L. 480 LC	104(e)Cooley L*		22,476	-	107,605	-	107,605	-	-	-	-	-
II OPERATIONAL YEAR (EST.)	B. P.L. 480 LC	104(e)Cooley L*		-	12,532	-	60,000	-	60,000	-	-	-	-
III BUDGET YEAR (EST.)	B. P.L. 480 LC	104(e)Cooley L*		-	6,266	-	30,000	-	30,000	-	-	-	-
IV PLANNING YEAR (EST.)	B. P.L. 480 LC	104(e)Cooley L*		-	2,089	-	10,000	-	10,000	-	-	-	-
V ALL SUBSEQUENT FYs (EST.)	B. P.L. 480 LC	104(e)Cooley L*		-	1,589	-	7,605	-	7,605	-	-	-	-
VI TOTAL ALL YEARS (EST.)	B. P.L. 480 LC	PL480Cooley L*		22,476	22,476	107,605	107,605	107,605	107,605	-	-	-	-

REMARKS:

1/ Exchange Rate: \$1 = Rs .4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c

PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS

1. DATA CURRENT AS OF:	2. COOPERATING CTRY.	3. PERSONNEL SERVICES PARTICIPANT TRAINING	BEG. FY	END FY	4. PROJECT NO.
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5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY	b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																		
	Non U.S.																			
B. ON BOARD	U.S.																			
	Non U.S.																			
II. PARTICIPANTS PROGRAMMED	A. U.S.																			
	B. THIRD CTRY.																			

REMARKS:

1/ End of Fiscal Year

\*Loan #386-E-098 Refers to Annex 13 of LAS

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO. AD-42

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-297	Coromandel Fertilizer Limited, Vishakapatnam
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1. Activity Target

The Coromandel Company was incorporated in October 1961 between E.I.D. Parry, Madras; California Chemical Company, San Francisco, California; and International Minerals and Chemicals Corporation, Skokis, Illinois. The two U.S. companies own 47 percent of the company's stock of Coromandel, E.I.D. Parry owns 5.8 percent and the Indian public the balance. Coromandel will establish a plant at Vishakapatnam, Andhra Pradesh, for the manufacture of 365,000 metric tons of ammonium phosphate and 165,000 tons of urea per annum. The company estimates savings of \$35 million foreign exchange yearly after it attains production at full capacity, and employment of 700 persons. The entire project is expected to be completed within three years, with production to start in early 1967.

Average per acre fertilizer consumption in India is among the lowest in the world. Utilization of fertilizers is hindered by a variety of factors, including lack of indigenous production, scarcity of foreign exchange resources and inadequate knowledge among farmers as to the benefits of fertilizers.

In order to increase its agricultural production, India is seeking to increase materially its present consumption and production of fertilizers. Based on GOI statistics, from 1951 to 1960 consumption of nitrogenous fertilizers and phosphatic fertilizers increased 17.2 percent and 24.1 percent per year respectively. Yet present consumption is barely 5 percent of that in the United States. Even then, India's productive facilities are not sufficient to meet the country's demand for fertilizers.

The company is currently negotiating with the Government of India for the rental wharf facilities and conducting a "seeding program" designed to develop a market for their product.

2. Progress to Date

The largest Cooley Amendment loan ever made, Rs.107,604,654, was authorized for the Company in October 1963; the loan agreement was signed in April 1964. The loan is to provide for capital costs of the project such as civil and construction works and the procurement of indigenously manufactured machinery. It is expected to be fully disbursed by December 1967. In addition, an Export Import Bank loan of \$27 million was made to the company to provide foreign exchange for the project.

**PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES**

SECURITY CLASSIFICATION  
UNCLASSIFIED

E-1b

1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	3.	BEG. FY	END FY	4. PROJECT NO. 386-44-230-298	5. TITLE I. A. and I. C. Private Limited, Bombay
		Funding	1964	1964		
		Phys. Work	1964	1965	6. PRIOR REFERENCES:	

7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	ACT (iii) OTHER LC												
	B. P.L. 480 LC	104 (e) Cooley I*		105	80	500	385	500	385	-	-	-	-
TOTAL ACTUAL FY 1964	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	ACT (iii) OTHER LC												
	B. P.L. 480 LC	104 (e) Cooley I*		105	80	500	385	500	385	-	-	-	-
II OPERATIONAL YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	ACT (iii) OTHER LC												
	B. P.L. 480 LC	104 (e) Cooley I*		-	25	-	115	-	115	-	-	-	-
III BUDGET YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	ACT (iii) OTHER LC												
	B. P.L. 480 LC												
IV PLANNING YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	ACT (iii) OTHER LC												
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	ACT (iii) OTHER LC												
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	ACT (iii) OTHER LC												
	B. P.L. 480 LC	104 (e) Cooley I*		105	105	500	500	500	500	-	-	-	-

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c

**PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS**

1. DATA CURRENT AS OF:	2. COOPERATING CTRY.	3. PERSONNEL SERVICES PARTICIPANT TRAINING	BEG. FY	END FY	4. PROJECT NO.

5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	e. CUM. THRU ACTUAL FY	b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																	
		Non U.S.																	
B. ON BOARD	U.S.																		
	Non U.S.																		
II. PARTICIPANTS PROGRAMMED	A. U.S.																		
	B. THIRD CTRY.																		

REMARKS:

1/ End of Fiscal Year

\*Loan #386E-102 Refers to Annex 13 of LAS

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO.

AD-44

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-298	I.A. and I.C. Private Limited, Bombay
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1. Activity Target

Incorporated in 1962 this company is owned 51 percent by Messrs. Shah and Pratap of Bombay and 49 percent by Lopic Inc. of Delaware, U.S.A. Its purpose is to establish a sulphur grinding plant to process imported raw sulphur for industrial and agricultural uses in India, the first of its kind in the country. All of India's ground sulphur requirements now are met by imports. Although operation of this plant will still depend upon imports of raw sulphur, the processing here into end products will result in foreign exchange savings for India. The borrower estimates that about 75 percent of its sale during the first five years of operation will be of sulphur compounds used in the eradication of pests and insecticides which attack agricultural crops. Moreover the anticipated increase in Indian tire production in the near future will increase the demand for ground sulphur. The project will also supply the match and pharmaceutical industry and explosive manufacturers.

2. Progress to Date

A Cooley Amendment Loan agreement was signed in May 1964 to provide Rs.500,000 to assist the company in the acquisition of land, construction of building and purchase of indigenously manufactured machinery. The equipment and machinery from U.S. has arrived and the project is almost complete. As of August 1964, Rs.385,000 has been disbursed and the balance is expected to be utilized before May 1965.

**E-1b**  
 1. DATA CURRENT AS OF: 1 November 1964  
 2. COOPERATING COUNTRY: India  
 3. Funding: 1964, Phys. Work: 1964  
 4. PROJECT NO.: 386-44-230-299  
 5. TITLE: Borosil Glass Works, Limited, Bombay  
 6. PRIOR REFERENCES:

7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC	104(e)Cooley I*		1,492	-	7,143	-	7,143	-	-	-	-	-
TOTAL ACTUAL FY 1964	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC	104(e)Cooley I*		1,492	-	7,143	-	7,143	-	-	-	-	-
II OPERATIONAL YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC	104(e)Cooley I*		-	1,492	-	7,143	-	7,143	-	-	-	-
III BUDGET YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
IV PLANNING YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC	104(e)Cooley I*		1,492	1,492	7,143	7,143	7,143	7,143	-	-	-	-

REMARKS:  
 1/ Exchange Rate: \$1 = Rs. 4.7876  
 2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E - 1a

**E-1c** **PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS**

5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS U.S.																					
	Non U.S.																					
B. ON BOARD	U.S.																					
	Non U.S.																					
II. PARTICIPANTS PROGRAMMED	A. U.S.																					
	B. THIRD CTRY.																					

REMARKS: \* Loan #386-E-105 Refers to Annex 13 of LAS  
 1/ End of Fiscal Year

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-299	Borosil Glass Works, Limited, Bombay
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### 1. Activity Target

Borosil Glass Works Ltd. was incorporated in 1962 to succeed Industrial & Engineering Apparatus Company, Bombay, a manufacturer since 1940 of scientific and laboratory glassware with a 1500 tons per year production capacity at Andheri, Bombay. A collaboration was arranged with Corning Glass Works, New York, which holds 49 percent of the common stock, to expand the company's production by 5,400 tons per annum, including production of certain new and more modern apparatus, by 1966.

The Indian Planning Commission estimates that by 1965-66 India will require 21,000 tons of scientific and laboratory glassware annually. There are a number of Indian factories engaged in this type of manufacture, but their outmoded production systems prevent their meeting the expected India 1965-66 demand. With its modern, updated and superior quality products, the borrower expects to find a ready market.

Borosil reports that in 1960 and 1961 Indian imports of glassware totalled \$2,731,092, mostly of scientific and laboratory glassware. Borosil estimates that its expanded production will result in a net \$1,000,000 annual foreign exchange saving to India. In addition, it plans to export 10 percent of its production to Pakistan, Ceylon and other nearby countries.

Originally most of the company's products were manufactured by hand and by semi-automatic machines. The new plant, completely furnished with automatic equipment, is being constructed at Marole, one mile from the old plant.

### 2. Progress To Date

A Cooley Amendment Loan of Rs. 7,143,000 was extended to Borosil in January 1964 and the loan agreement signed in May 1964. The entire loan amount is expected to be disbursed by December 31, 1964.

Construction should be completed by the end of 1964 and initial production started shortly thereafter. Full production is expected by 1966.

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

E-1b

1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	3.	BEG. FY 1965	END FY 1965	4. PROJECT NO. 386-44-230-300	5. TITLE Indabrator Limited, Bombay
		Funding	1965	1965		
		Phys. Work	1965	1965	6. PRIOR REFERENCES:	

7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	TYPE	SOURCE	LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
TOTAL ACTUAL FY	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley I*		298	298	1,428	1,428	1,428	1,428	-	-	-	-
III BUDGET YEAR (EST.) FY	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
IV PLANNING YEAR (EST.) FY	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley I*		298	298	1,428	1,428	1,428	1,428	-	-	-	-

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c

PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS

1. DATA CURRENT AS OF:	2. COOPERATING CTRY.	3.	BEG. FY	END FY	4. PROJECT NO.
		PERSONNEL SERVICES			
		PARTICIPANT TRAINING			

5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																				
		Non U.S.																				
B. ON BOARD	U.S.																					
	Non U.S.																					
II. PARTICIPANTS PROGRAMMED	A. U.S.																					
	B. THIRD CTRY.																					

REMARKS:

1/ End of Fiscal Year

\* Loan #386-E-112 Refers to Annex 13 of IAS

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-300	Indabrator Limited, Bombay
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### 1. Activity Target

Incorporated in December 1963, this company is 24.5 percent owned by Wheelabrator Corporation in Mishwaka, Indiana, 24.5 percent by Tilghmans Limited of Great Britain, 26 percent by the New Standard Engineering Company, Limited, Bombay, and the balance of 25 percent by the Indian public. The applicant proposes to establish a plant at Goregaon, near Bombay, for the manufacture of shot and air blast cleaning equipment and dust collectors and subsidiary air pollution control items. Indabrator's licensed capacity in the above principal product lines will be equal to Rs. 6 million sales value.

This would be the first company in India to undertake manufacture of such specialized machines, used primarily in foundries and other engineering establishments to clean castings before machining and in the cloth, plastic and rubber industries.

With the increasing growth and modernization of industry in India, the demands for the products the company proposes to manufacture will also increase. Since the project was announced Indabrator has received numerous requests from potential customers for information regarding its products; however, no firm orders have been accepted. The company forecasts the volume of sales of its products in the first year of operation at Rs.4.5 million, rising to Rs.5.5 million and Rs. 6 million in the second and third year respectively.

During the first three years of its operation it estimates to save Rs.13.5 million in foreign exchange, since all such machines now are imported. Apart from indirect savings, the establishment of this project will give India a potential export item as neighboring African and Asian countries develop their metal-working industries.

### 2. Progress to Date

A Cooley Amendment Loan of Rs. 1,428,000 was extended in May 1964 to assist the company in meeting local costs of the project. The loan agreement is under negotiation.

Work on the project has started, and all construction is expected to be completed before the end of 1964, when operation is expected to begin.

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

SECURITY CLASSIFICATION  
UNCLASSIFIED

7. OBLIGATED AND DISBURSED	e. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED	OBLIGATED	DISBURSED	(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
TOTAL ACTUAL FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley L*		6,266	-	30,000	-	30,000	-	-	-	-	-
III BUDGET YEAR (EST.) FY 1966	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley L*		-	5,222	-	25,000	-	25,000	-	-	-	-
IV PLANNING YEAR (EST.) FY 1967	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley L*		-	1,044	-	5,000	-	5,000	-	-	-	-
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley L*		6,266	6,266	30,000	30,000	30,000	30,000	-	-	-	-

REMARKS:

1/ Exchange Rate: \$1 = Rs.4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E - 1a

E - 1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES PARTICIPANT TRAINING			BEG. FY	END FY	4. PROJECT NO.								
	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS	
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract		
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																					
		Non U.S.																					
	B. ON BOARD	U.S.																					
		Non U.S.																					
II. PARTICIPANTS PROGRAMMED	A. U.S.																						
	B. THIRD CTRY.																						

REMARKS:

1/ End of Fiscal Year

\* No loan number assigned as yet. Refers to Annex 13 of LAS.

UNCLASSIFIED

SECURITY CLASSIFICATION

PAGE NO.

AD-50

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-220-301	Renusagar Power Company Ltd., Bombay
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### 1. Activity Target

Renusagar is a wholly owned subsidiary of Hindustan Aluminum Co., Ltd. (Hindalco), a major Indian producer of aluminum and aluminum products, of which Kaiser Aluminum and Chemical Corp., USA owns 26.7 percent. Both AID and Export Import Bank have advanced substantial credits to Hindalco to enable it to commence operations and to expand its existing facilities. The purpose of the loan discussed herein is to assist in financing the local rupee costs of establishing a thermal power plant in Uttar Pradesh.

Hindalco now is using power from a nearby State hydroelectric facility. Recently the State Power Authority notified Hindalco that the power shortage in India makes it impossible to supply any additional power from its grid to the company. Thus, Hindalco decided to build a captive power facility, in order to carry out its immediate expansion plans and to provide for future expansion.

The Indian market for primary aluminum has almost tripled since 1958, a rate of growth expected to continue at least for the next decade. Hindalco's proposed expansion would meet part of these needs.

### 2. Progress To Date

The Rs. 30 million Cooley loan is now under negotiation and Hindalco has applied to the Export Import Bank for a loan of \$11 million to enable it to expand its existing plant. No Eximbank financing for the power plant has been requested.

Hindalco signed a contract with International General Electric on June 26, 1964, for supply of thermal power generating equipment; the plant site has not been chosen although a prime location is under study by Kaiser and Hindalco officials.

**PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES**

**E-1b**

1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	3.	BEG. FY	END FY	4. PROJECT NO. 386-44-230-302	5. TITLE Everest Refrigerants, Ltd., Bombay
		Funding	1965	1965		
		Phys. Work	1964	1965	6. PRIOR REFERENCES:	

7. OBLIGATED AND DISBURSED	g. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1)		(2)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				DOLLAR EQUIVALENTS (000) 1/		LOCAL CURRENCY UNITS (000)				(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED						
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA	(ii) TRUST FUND											
	ACT	(iii) OTHER LC											
	B. P.L. 480 LC												
TOTAL ACTUAL FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA	(ii) TRUST FUND											
	ACT	(iii) OTHER LC											
	B. P.L. 480 LC												
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA	(ii) TRUST FUND											
	ACT	(iii) OTHER LC											
	B. P.L. 480 LC		104(e) Cooley	L*	1,253	1,253	6,000	6,000	6,000	6,000	-	-	-
III BUDGET YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA	(ii) TRUST FUND											
	ACT	(iii) OTHER LC											
	B. P.L. 480 LC												
IV PLANNING YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA	(ii) TRUST FUND											
	ACT	(iii) OTHER LC											
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA	(ii) TRUST FUND											
	ACT	(iii) OTHER LC											
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA	(ii) TRUST FUND											
	ACT	(iii) OTHER LC											
	B. P.L. 480 LC		104(e) Cooley	L*	1,253	1,253	6,000	6,000	6,000	6,000	-	-	-

REMARKS:

- 1/ Exchange Rate: \$1 = Rs. 4.7876
- 2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

**E-1c**

**PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS**

1. DATA CURRENT AS OF:	2. COOPERATING CTRY.	3. PERSONNEL SERVICES		BEG. FY	END FY	4. PROJECT NO.													
		PARTICIPANT TRAINING																	
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS																			
a. CUM. THRU ACTUAL FY		b. ACTUAL FY _____			c. OPERATIONAL FY _____			d. BUDGET FY _____			e. PLANNING FY _____			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
Direct PASA Contract		Direct PASA Contract			Direct PASA Contract			Direct PASA Contract			Direct PASA Contract			Direct PASA Contract			Direct PASA Contract		
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																	
		Non U.S.																	
B. ON BOARD	U.S.																		
	Non U.S.																		
II. PARTICIPANTS PROGRAMMED	A. U.S.																		
	B. THIRD CTRY.																		

REMARKS:

\*Loan # 386-E-100 Refers to Annex 13 of IAS

1/ End of Fiscal Year

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-302	Everest Refrigerants, Ltd., Bombay
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1. Activity Target

The company was incorporated in 1962 as a joint venture between Indian interests and Technical Enterprises of New York, which owns 20 percent of the company's common stock. The company intends to use the loan proceeds to establish a plant in Bombay designed to produce 1,200 tons of fluorochloride methane gases (FCM) used in refrigeration and air-conditioning units and four million aerosol dispensers per year. Production is expected before the end of 1965.

In addition to introducing a new technology, Everest will help meet the requirements of Indian manufacturers of air-conditioning and refrigeration equipment for refrigerant gases which currently must be imported, at a cost, according to Everest, of \$190,000 per year. Construction of the plant will take about two years and Everest expects to reach full capacity by the third year after production starts.

2. Progress to Date

A Cooley Amendment loan of Rs.6 million was extended to the company in October 1963, for which the loan agreement was signed in August 1964, to finance the acquisition of fixed assets such as land, construction of buildings and the procurement of indigenously manufactured machinery. It is expected that the loan will be fully disbursed by April 30, 1965.

The company has acquired a site in Bombay for the factory.

AID 1020-3 (7-64)		PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES								SECURITY CLASSIFICATION UNCLASSIFIED									
E-1b		1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. Funding		BEG. FY		END FY		4. PROJECT NO.		5. TITLE					
		1 November 1964		India		Phys. Work		1964		1965		1966		386-44-230-303		Corn Products India Private Limited, Bombay			
7. OBLIGATED AND DISBURSED		a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)				d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)						
		(1) TYPE		(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED		(2) DISBURSED		(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER			
						(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED	OBLIGATED	DISBURSED	(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED				
I CUMULATIVE THRU ACTUAL YEAR	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/																	
		(ii) TRUST FUND																	
		(iii) OTHER LC																	
	B. P.L. 480 LC																		
	TOTAL ACTUAL FY _____	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/																
			(ii) TRUST FUND																
(iii) OTHER LC																			
B. P.L. 480 LC																			
II OPERATIONAL YEAR (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/																	
		(ii) TRUST FUND																	
		(iii) OTHER LC																	
B. P.L. 480 LC		104(e) Dooley	I*		731	209		3,500	1,000	3,500	1,000	-	-	-	-				
III BUDGET YEAR (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/																	
		(ii) TRUST FUND																	
		(iii) OTHER LC																	
B. P.L. 480 LC		104(e) Dooley	I*		-	522		-	2,500	-	2,500	-	-	-	-				
IV PLANNING YEAR (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/																	
		(ii) TRUST FUND																	
		(iii) OTHER LC																	
B. P.L. 480 LC																			
V ALL SUBSEQUENT FYs (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/																	
		(ii) TRUST FUND																	
		(iii) OTHER LC																	
B. P.L. 480 LC																			
VI TOTAL ALL YEARS (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/																	
		(ii) TRUST FUND																	
		(iii) OTHER LC																	
B. P.L. 480 LC		104(e) Dooley	I*		731	731		3,500	3,500	3,500	3,500	-	-	-	-				

## REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c		PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS					1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES PARTICIPANT TRAINING		BEG. FY		END FY		4. PROJECT NO.				
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																					
		Non U.S.																					
B. ON BOARD	U.S.																						
	Non U.S.																						
II. PARTICIPANTS PROGRAMMED	A. U.S.																						
	B. THIRD CTRY.																						

## REMARKS:

\* No loan number assigned as yet.

1/ End of Fiscal Year

Refers to Annex 13 of LAS

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO.

AD-54

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-303	Corn Products India Private Limited, Bombay
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1. Activity Target

Corn Products Co. (Private) Limited, a wholly owned Indian affiliate of Corn Products Company, New York, is engaged in producing high quality food products, medicinal items, and industrial starches, adhesives and gums. The purpose of the loan is to finance the relocation of existing manufacturing facilities in the Kalwa Industrial Area, Bombay, by March 31, 1965.

Corn Products is a well established concern; its sales in 1963 amounted to 12,068,000 rupees, a level at which the company believes sales will remain during construction of the new plant. When the transfer to the new plant is made in 1965 it is expected that volume of sales will rise progressively to Rs.19,397,000 by 1968.

2. Progress To Date

The Cooley Amendment loan of Rs.3.5 million is being negotiated.

The company has acquired a plant site, to which the Government of Maharashtra have already laid water pipelines. Power lines run through the area, and only laying of cables remains to be done.

AID 1020-3 (7-64)		PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES										SECURITY CLASSIFICATION UNCLASSIFIED					
E-1b		1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. Funding		BEG. FY		END FY		4. PROJECT NO.		5. TITLE			
		1 November 1964		India		Phys. Work		1965		1965		386-44-230-304		Chemicals & Plastics Ltd., Madras			
7. OBLIGATED AND DISBURSED		a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)				d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
		(1)	(2)	(3)	(1)		(2)		(1)		(2)		(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
		TYPE	SOURCE	LOAN OR GRANT	DOLLAR EQUIVALENTS (000) 1/		LOCAL CURRENCY UNITS (000)		OBLIGATED		DISBURSED		(a) U.S. PERS.		(b) NON-U.S. PERS.		
					(a)	(b)	(a)	(b)	OBLIGATED	DISBURSED	OBLIGATED	DISBURSED			OBLIGATED	DISBURSED	
I CUMULATIVE THRU ACTUAL YEAR		A. (i) LC COSTS CHGD TO \$ ACCTS. 2/															
		FA (ii) TRUST FUND															
		ACT (iii) OTHER LC															
		B. P.L. 480 LC															
TOTAL ACTUAL FY		A. (i) LC COSTS CHGD TO \$ ACCTS. 2/															
		FA (ii) TRUST FUND															
		ACT (iii) OTHER LC															
		B. P.L. 480 LC															
II OPERATIONAL YEAR (EST.)		A. (i) LC COSTS CHGD TO \$ ACCTS. 2/															
		FA (ii) TRUST FUND															
		ACT (iii) OTHER LC															
FY 1965		B. P.L. 480 LC	104(e) Cooby	I*	681		418		3,262		2,000		3,262		2,000		
III BUDGET YEAR (EST.)		A. (i) LC COSTS CHGD TO \$ ACCTS. 2/															
		FA (ii) TRUST FUND															
		ACT (iii) OTHER LC															
FY 1966		B. P.L. 480 LC	104(e) Cooby	I*	-		263		-		1,262		-		1,262		
IV PLANNING YEAR (EST.)		A. (i) LC COSTS CHGD TO \$ ACCTS. 2/															
		FA (ii) TRUST FUND															
		ACT (iii) OTHER LC															
FY		B. P.L. 480 LC															
V ALL SUBSEQUENT FYs (EST.)		A. (i) LC COSTS CHGD TO \$ ACCTS. 2/															
		FA (ii) TRUST FUND															
		ACT (iii) OTHER LC															
		B. P.L. 480 LC															
VI TOTAL ALL YEARS (EST.)		A. (i) LC COSTS CHGD TO \$ ACCTS. 2/															
		FA (ii) TRUST FUND															
		ACT (iii) OTHER LC															
		B. P.L. 480 LC	104(e) Cooby	I*	681		681		3,262		3,262		3,262		3,262		

## REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c		PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS										1. DATA CURRENT AS OF:		2. COOPERATING CTRY.		3. PERSONNEL SERVICES PARTICIPANT TRAINING		BEG. FY		END FY		4. PROJECT NO.	
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL		A. MAN YEARS	U.S.																				
			Non U.S.																				
		B. ON BOARD	U.S.																				
			Non U.S.																				
II. PARTICIPANTS PROGRAMMED		A. U.S.																					
		B. THIRD CTRY.																					

## REMARKS:

\* Loan # 386-E-106 Refers to Annex 13 of LAS

1/ End of Fiscal Year

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-304	Chemicals & Plastics Ltd., Madras
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### 1. Activity Target

B.F. Goodrich Chemical Company, Cleveland, Ohio, owns 23 percent, India Cements Ltd., nine percent, and Indplast (Pvt) Ltd., 11 percent of this 1962-incorporated firm. The balance is held by the Indian public.

The company proposes to manufacture polyvinyl chloride plastic (PVC) resins and compounds at its full capacity of 14,000 tons annually by 1970. For this purpose, it is planned to establish a chemical complex in Mettur Dam, Madras, to manufacture the basic chemical components of PVC, and to set up a PVC products fabricating plant in Bombay.

The company estimates that it can begin operation within eighteen months after receipt of the loan, and reach full production of 14,000 tons by 1970.

PVC plastic resins are a basic chemical ingredient of vinyl plastic materials. Major uses for PVC end products are plastic impregnated fabrics (raincoats, paper cups, food containers, etc.) and rigid plastic forms (piping, vinyl floor tile and other building products, containers and electrical conduits). PVC plastic exhibits unique qualities of heat and corrosion resistance which makes it superior in many respects to metals and other plastics.

The Indian demand for PVC resins far outruns local supply and exceeds their import quota. The Indian Government projects a demand for PVC of 31,000 tons per annum (including chemicals and plastics production capacity) by 1966. Only 3,000 tons of PVC resins are produced locally and 4,500 tons are imported chiefly from Japan and Italy, at a value equivalent to \$2,000,000.

The implementation of this project should result in a foreign exchange saving of approximately \$1,600,000 annually. The company also plans to export PVC resins to South Asian and African countries, resulting in a foreign exchange earning of about \$500,000 annually.

Above all, the project is of considerable benefit to the Indian economy since it will stimulate development of the chemical industry.

### 2. Progress to Date

An Export Import Bank loan of \$3,150,000 to the company, to cover foreign exchange cost of the project, has been approved. In addition, a Cooley Amendment Loan of Rs.3,261,900 was authorized in February 1964 to assist the company in meeting local costs concerning the project; the loan agreement is under negotiation.

AID 1020-3 (7-64)		PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES										SECURITY CLASSIFICATION UNCLASSIFIED						
E-1b		1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY India		3. BEG. FY Funding 1965 Phys. Work 1964		END FY 1965 1966		4. PROJECT NO. 386-44-210-305		5. TITLE Graphite India Ltd., Calcutta						
7. OBLIGATED AND DISBURSED		a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)							
		(1) TYPE		(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED		(2) DISBURSED		(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
						(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED	OBLIGATED	DISBURSED	(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED			
I CUMULATIVE THRU ACTUAL YEAR		A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/															
		FA	(ii) TRUST FUND															
		ACT	(iii) OTHER LC															
			B. P.L. 480 LC															
TOTAL ACTUAL FY		A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/															
		FA	(ii) TRUST FUND															
		ACT	(iii) OTHER LC															
			B. P.L. 480 LC															
II OPERATIONAL YEAR (EST.) FY 1965		A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/															
		FA	(ii) TRUST FUND															
		ACT	(iii) OTHER LC															
			B. P.L. 480 LC			104(e) Cooley I*	1,441	418	6,900	2,000	6,900	2,000	-	-	-	-	-	-
III BUDGET YEAR (EST.) FY 1966		A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/															
		FA	(ii) TRUST FUND															
		ACT	(iii) OTHER LC															
			B. P.L. 480 LC			104(e) Cooley I*	-	1,023	-	4,900	-	4,900	-	-	-	-	-	-
IV PLANNING YEAR (EST.) FY		A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/															
		FA	(ii) TRUST FUND															
		ACT	(iii) OTHER LC															
			B. P.L. 480 LC															
V ALL SUBSEQUENT FYs (EST.)		A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/															
		FA	(ii) TRUST FUND															
		ACT	(iii) OTHER LC															
			B. P.L. 480 LC															
VI TOTAL ALL YEARS (EST.)		A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/															
		FA	(ii) TRUST FUND															
		ACT	(iii) OTHER LC															
			B. P.L. 480 LC			104(e) Cooley I*	1,441	1,441	6,900	6,900	6,900	6,900	-	-	-	-	-	-

REMARKS:  
 1/ Exchange Rate: \$1 = Rs. 4.7876  
 2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c		PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES PARTICIPANT TRAINING			BEG. FY		END FY		4. PROJECT NO.				
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																				
		Non U.S.																				
B. ON BOARD	U.S.																					
	Non U.S.																					
II. PARTICIPANTS PROGRAMMED	A. U.S.																					
	B. THIRD CTRY.																					

REMARKS: \* Loan # 386-E-107 Refers to Annex 13 of IAS  
 1/ End of Fiscal Year

AID 10204 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-210-305	Graphite India, Ltd., Calcutta
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### 1. Activity Target

This is a joint venture, incorporated in 1962, between Bangur Brothers Ltd., Calcutta, and the Great Lakes Carbon Corporation of Delaware, which owns 20 percent of the common stock. The company plans to establish by 1966 a fully integrated plant near Durgapur for the manufacture of 5,500 tons annually of graphite electrodes, anodes and other graphite products including nuclear graphite. In the process the company will provide employment for about 200 persons, exclusive of technicians and supervisory personnel.

This is the only company licensed in India to manufacture graphite electrodes, anodes and carbon products; India's entire needs for these products are met through imports. It is estimated that when the plant goes into full production in 1966, an actual annual foreign exchange saving of about Rs.14 million will result.

The project is of particular significance to India, since it will be the first indigenous source of components essential to the expansion and upgrading of the steel industry; in addition it will make India self-sufficient in the supply of high grade nuclear graphite to be used in nuclear reactor cores. Since the plant is being designed to permit tripling its present capacity with little additional expense, it can grow as India's heavy industrial base expands.

### 2. Progress to Date

In March 1964 a Cooley Amendment loan of Rs.6.9 million was authorized, to assist the company in meeting local currency expenditures; the loan agreement is under negotiation. The Industrial Credit and Investment Corporation of India has extended a loan of \$2,440,000 to the company for foreign exchange costs of procurement of machinery and equipment for the project.

The plant site has not yet been contracted for although an option for the land has been taken. As soon as negotiations with the State power authority for power are complete, the company will begin plant construction, which is expected to take about two years.

**PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES**

<b>E-1b</b>	<b>1. DATA CURRENT AS OF:</b> 1 November 1964		<b>2. COOPERATING COUNTRY:</b> India		<b>3. BEG. FY</b> Funding 1965 Phys. Work 1964		<b>END FY</b> 1965		<b>4. PROJECT NO.</b> 386-44-230-308		<b>5. TITLE</b> Bharat Steel Tubes Ltd., New Delhi					
	<b>6. PRIOR REFERENCES:</b>															
<b>7. OBLIGATED AND DISBURSED</b>	<b>a. FUNDS</b>			<b>b. TOTALS</b>				<b>c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)</b>				<b>d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)</b>				
	(1) TYPE		(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED		(2) DISBURSED		(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
					(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED		
<b>I CUMULATIVE THRU ACTUAL YEAR</b>																
A. (i) LC COSTS CHGD TO \$ ACCTS. 2/																
FA ACT (ii) TRUST FUND																
ACT (iii) OTHER LC																
B. P.L. 480 LC																
A. (i) LC COSTS CHGD TO \$ ACCTS. 2/																
FA ACT (ii) TRUST FUND																
ACT (iii) OTHER LC																
B. P.L. 480 LC																
<b>II OPERATIONAL YEAR (EST.)</b>																
FY 1965																
A. (i) LC COSTS CHGD TO \$ ACCTS. 2/																
FA ACT (ii) TRUST FUND																
ACT (iii) OTHER LC																
B. P.L. 480 LC																
104(e) Cooley I*																
522																
522																
2,500																
2,500																
2,500																
2,500																
-																
-																
-																
-																
<b>III BUDGET YEAR (EST.)</b>																
FY _____																
A. (i) LC COSTS CHGD TO \$ ACCTS. 2/																
FA ACT (ii) TRUST FUND																
ACT (iii) OTHER LC																
B. P.L. 480 LC																
<b>IV PLANNING YEAR (EST.)</b>																
FY _____																
A. (i) LC COSTS CHGD TO \$ ACCTS. 2/																
FA ACT (ii) TRUST FUND																
ACT (iii) OTHER LC																
B. P.L. 480 LC																
<b>V ALL SUBSEQUENT FYs (EST.)</b>																
FY _____																
A. (i) LC COSTS CHGD TO \$ ACCTS. 2/																
FA ACT (ii) TRUST FUND																
ACT (iii) OTHER LC																
B. P.L. 480 LC																
<b>VI TOTAL ALL YEARS (EST.)</b>																
FY _____																
A. (i) LC COSTS CHGD TO \$ ACCTS. 2/																
FA ACT (ii) TRUST FUND																
ACT (iii) OTHER LC																
B. P.L. 480 LC																
104(e) Cooley I*																
522																
522																
2,500																
2,500																
2,500																
2,500																
-																
-																
-																
-																

REMARKS:  
1/ Exchange Rate: \$1 = Rs. 4.7876  
2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

<b>E-1c</b>	<b>PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS</b>			<b>1. DATA CURRENT AS OF:</b>			<b>2. COOPERATING CTRY.:</b>			<b>3. PERSONNEL SERVICES PARTICIPANT TRAINING</b>			<b>BEG. FY</b>		<b>END FY</b>		<b>4. PROJECT NO.</b>						
	<b>5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS</b>			<b>a. CUM. THRU ACTUAL FY</b>			<b>b. ACTUAL FY</b>			<b>c. OPERATIONAL FY</b>			<b>d. BUDGET FY</b>			<b>e. PLANNING FY</b>			<b>f. ALL SUBSEQUENT FYs</b>			<b>g. TOTAL ALL YEARS</b>	
<b>I PROJECT PERSONNEL</b>	A. MAN YEARS	U.S.	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
		Non U.S.																					
<b>B. ON BOARD</b>	U.S.																						
	Non U.S.																						
<b>II. PARTICIPANTS PROGRAMMED</b>	A. U.S.																						
	B. THIRD CTRY.																						

REMARKS:  
1/ End of Fiscal Year  
\* Loan # 386-E-099 Refers to Annex 13 of LAS

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-308	Bharat Steel Tubes Ltd., New Delhi
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### 1. Activity Target

This company, incorporated in 1962, is a joint collaboration between Raunaq Singh and associates of New Delhi and Abey Etna Machine Company, Ferrysburg, Ohio, which owns 31% of the common stock. The purpose of the loan is to construct a plant at Ganaur, Punjab, for the manufacture of iron and steel tubes and pipes to be used for the flow of gas, water, steam and petroleum. Initial production is anticipated in early 1965, with expansion to a full three-shift capacity of 108,000 tons per year by late 1966.

The Indian Planning Commission has fixed a yearly target of 500,000 to 600,000 tons of steel tubes by 1965-66. The only three indigenous tube plants, none in Northern India, are the Indian Tubes Co. (30,000 tons), Kalinga Steel Tubes Co. Ltd. (20,000), and Zenith Steel Pipes Ltd. (12,000 tons) representing a total annual capacity of 62,000 tons; their output, according to Bharat Steel, is booked through 1970. Bharat Steel further reports that only 200,000 tons per year are available, through imports and indigenous production, against an estimated demand of 500,000, thereby resulting in a steel tube crisis in India. Existing steel tube production is hopelessly inadequate to meet the growing industrialization of India.

It is planned that the building works of the new Bharat Steel plant will be completed by early 1965, and, that all machinery will be received and installed. Production will start on a single shift basis, reaching 36,000 tons of capacity within six months, and increasing to two shifts in late 1965 and three in 1966, when production of 108,000 tons per year of steel tubes is expected.

### 2. Progress to Date

A Cooley Amendment Loan of Rs.2.5 million to the company was authorized in October 1963 to finance local expenses in connection with the project. In addition, the Industrial Finance Corporation also authorized loans of \$1,971,000 and Rs.3,610,000 to Bharat Steel. These loan agreements are currently under negotiation. The company has acquired a 129-acre tract of land, and over 90 percent of the construction is complete.

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
		B. P.L. 480 LC											
TOTAL ACTUAL FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
		B. P.L. 480 LC											
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
		B. P.L. 480 LC		104(e)Cooley L*	1,003	-	4,800	-	4,800	-	-	-	-
III BUDGET YEAR (EST.) FY 1966	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
		B. P.L. 480 LC		104(e)Cooley L*	-	1,003	-	4,800	-	4,800	-	-	-
IV PLANNING YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
		B. P.L. 480 LC											
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
		B. P.L. 480 LC											
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
		B. P.L. 480 LC		104(e)Cooley L*	1,003	1,003	4,800	4,800	4,800	4,800	-	-	-

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4,7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E - 1a

E - 1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:	2. COOPERATING CTRY.	3. PERSONNEL SERVICES PARTICIPANT TRAINING	BEG. FY	END FY	4. PROJECT NO.								
	a. CUM. THRU ACTUAL FY			b. ACTUAL FY	c. OPERATIONAL FY	d. BUDGET FY	e. PLANNING FY		f. ALL SUBSEQUENT FYs	g. TOTAL ALL YEARS							
PERSONNEL AND PARTICIPANTS			Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
I PROJECT PERSONNEL	A. MAN YEARS	U.S.															
		Non U.S.															
B. ON BOARD	U.S.																
	Non U.S.																
II. PARTICIPANTS PROGRAMMED	A. U.S.																
	B. THIRD CTRY.																

REMARKS:

1/ End of Fiscal Year

\* No loan number assigned as yet

Refers to Annex 13 of LAS

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-306	Bliss Laughlin-Shama Limited, New Delhi
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1. Activity Target

The company was formed between C.C. Desai and Associates of New Delhi, and Bliss & Laughlin, Harvey, Illinois, who own 51 percent and 49 percent respectively of the common stock.

The company plans to establish a plant in Bombay for the manufacture of special steel sections and alloy and carbon steel bars, with initial operations expected by early 1965 and full annual production of 12,000 tons by 1970.

Since indigenous production of mild and alloy steel forgings is completely inadequate to meet the demand from India's growing engineering industries the company's products will find a ready market.

2. Progress To Date

The company's application for a Cooley Amendment loan of Rs. 4,800,000 is receiving A.I.D. consideration.

Since the company has not as yet obtained Government of India approval for its foreign collaboration agreement or the industrial license for its project, the company may not be able to start operations as originally planned.

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

SECURITY CLASSIFICATION  
UNCLASSIFIED

E-1b

1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	3. Funding	BEG. FY 1965	END FY 1965	4. PROJECT NO. 386-44-230-307	5. TITLE Shama Forge Company, Ltd., New Delhi
		Phys. Work	1964	1966		

6. PRIOR REFERENCES:

7. OBLIGATED AND DISBURSED	e. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A.												
	FA ACT												
	B. P.L. 480 LC												
TOTAL ACTUAL FY	A.												
	FA ACT												
	B. P.L. 480 LC												
II OPERATIONAL YEAR (EST.)	A.												
	FA ACT												
	B. P.L. 480 LC	104(e) Cooley I*		992	627	4,750	3,000	4,750	3,000	-	-	-	-
III BUDGET YEAR (EST.)	A.												
	FA ACT												
	B. P.L. 480 LC	104(e) Cooley I*		-	365	-	1,750	-	1,750	-	-	-	-
IV PLANNING YEAR (EST.)	A.												
	FA ACT												
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A.												
	FA ACT												
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A.												
	FA ACT												
	B. P.L. 480 LC	104(e) Cooley I*		992	992	4,750	4,750	4,750	4,750	-	-	-	-

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c

PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS

1. DATA CURRENT AS OF:	2. COOPERATING CTRY.	3. PERSONNEL SERVICES		BEG. FY	END FY	4. PROJECT NO.
		PARTICIPANT TRAINING				

5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS																					
	U.S.																					
	Non U.S.																					
B. ON BOARD	U.S.																					
	Non U.S.																					
II. PARTICIPANTS PROGRAMMED	A. U.S.																					
	B. THIRD CTRY.																					

REMARKS:

\* Loan # 386-E-116 Refers to Annex 13 of IAS

1/ End of Fiscal Year

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-307	Shama Forge Company, Ltd., New Delhi
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### 1. Activity Target

Incorporated in August, 1963, the company is jointly owned by B.K. Khanna, Limited, New Delhi and the Kropp Forge Company, Inc. Chicago, Illinois (28 percent). The project is to finance establishment by the end of 1965 of a steel forging manufacturing plant with a proposed capacity of 5,000 tons per year, at Bhopal, Madhya Pradesh.

There is a very great demand for quality steel forgings for the automobile, agricultural and railway equipment industries. Government of India figures show that more than 100,000 tons of steel forgings were imported in 1962-63. Estimates from the same source are that the demand for steel forgings is expected to be 200,000 tons by 1965, against the 1963 existing installed capacity of 57,000 tons. Concurrent with the growth of indigenous transportation and agricultural equipment, manufacturing capacity, the demand for steel forgings will increase still further. With the completion of its project, the company will provide a badly needed local source for steel forgings, resulting in annual foreign exchange savings of roughly Rs.19 million. It is estimated that the plant will be in operation approximately one year after signature of the loan, expectedly the end of this year.

### 2. Progress to Date

A Cooley Amendment Loan of Rs.4,750,000 was authorized on June 12, 1964.

In addition to the Cooley loan, two loans to the company from Industrial Finance Corporation for Rs.306,000 for local costs and \$490,000 for financing foreign exchange costs of equipment in connection with the project have been sanctioned in principle.

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

SECURITY CLASSIFICATION  
UNCLASSIFIED

7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED	
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC													
TOTAL ACTUAL FY	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC													
II OPERATIONAL YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC	104(e)Cooley L*			3,133	-	15,000	-	15,000	-	-	-	-	-
III BUDGET YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC	104(e)Cooley L*			-	2,089	-	10,000	-	10,000	-	-	-	-
IV PLANNING YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC	104(e)Cooley L*			-	1,044	-	5,000	-	5,000	-	-	-	-
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC													
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC	104(e)Cooley L*			3,133	3,133	15,000	15,000	15,000	15,000	-	-	-	-

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E - 1a

E - 1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES PARTICIPANT TRAINING			4. PROJECT NO.											
	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
	I PROJECT PERSONNEL	A. MAN YEARS	U.S.	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
				Non U.S.																				
	B. ON BOARD	U.S.																						
		Non U.S.																						
II. PARTICIPANTS PROGRAMMED	A. U.S.																							
	B. THIRD CTRY.																							

REMARKS:

1/ End of Fiscal Year

\* No Loan number assigned as yet

Refers to Annex 13 of IAS

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-309	Globe Foundries Ltd., New Delhi
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1. Activity Target

This is a joint venture between Globe Steel Foundries, Ltd., and the United Engineering and Foundry Company, Pittsburg, Pennsylvania, which will control 29% of the voting shares. The company has requested a Cooley Amendment loan of approximately Rs. 15 million to establish an industrial undertaking to produce yearly 10,000 tons of cast steel rolls, cast iron rolls, and other castings.

Based on 1963 steel production figures the company estimates that there is an estimated steel roll potential of 4,170 tons per year and an iron roll potential of 6,640 tons per year.

2. Progress To Date

The Cooley loan application has been submitted, and the Indian promoters are currently seeking approval of the collaboration terms from the Foreign Agreements Committee.

**PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES**

SECURITY CLASSIFICATION  
UNCLASSIFIED

E-1b

1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY India	3. Funding	BEG. FY 1965	END FY 1965	4. PROJECT NO. 386-44-250-310	5. TITLE Semiconductors Limited, Bombay
		Phys. Work	1965	1966		

7. OBLIGATED AND DISBURSED	g. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a)	(b)	(a)	(b)			(a)	(b)	(a)	(b)
				OBLIGATED	DISBURSED	OBLIGATED	DISBURSED			OBLIGATED	DISBURSED	U.S. PERS.	NON-U.S. PERS.
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
		B. P.L. 480 LC											
TOTAL ACTUAL FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
		B. P.L. 480 LC											
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
		B. P.L. 480 LC	104(e)Cooler I*		282	-	1,350	-	1,350	-	-	-	-
III BUDGET YEAR (EST.) FY 1966	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
		B. P.L. 480 LC	104(e)Cooler I*		-	282	-	1,350	-	1,350	-	-	-
IV PLANNING YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
		B. P.L. 480 LC											
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
		B. P.L. 480 LC											
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
		B. P.L. 480 LC	104(e)Cooler I*		282	282	1,350	1,350	1,350	1,350	-	-	-

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c

**PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS**

1. DATA CURRENT AS OF:	2. COOPERATING CTRY.	3. PERSONNEL SERVICES		BEG. FY	END FY	4. PROJECT NO.
		PARTICIPANT TRAINING				

5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY			b. ACTUAL FY _____			c. OPERATIONAL FY _____			d. BUDGET FY _____			e. PLANNING FY _____			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																				
		Non U.S.																				
B. ON BOARD	U.S.																					
	Non U.S.																					
II. PARTICIPANTS PROGRAMMED	A. U.S.																					
	B. THIRD CTRY.																					

REMARKS:

\* No loan number assigned as yet.

1/ End of Fiscal Year

Refers to Annex 13 of LAS

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO.

AD-68

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-250-310	Semiconductors Limited, Bombay
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1. Activity Target

This joint venture between Indian interests and Raytheon Company, Lexington, Mass., was incorporated in April 1961. The U.S. affiliate has contributed 33½ percent of the equity capital of the project. The company proposes to expand its plant at Bombay, now manufacturing 30,000 transistors, 20,000 diodes and 6,000 thermistors per month, to permit production of 130,000 transistors, 120,000 diodes and 66,000 thermistors monthly. In order to accomplish this by the middle of 1965, Semiconductors has applied for a Cooley Amendment loan of Rs. 1,350,000. Construction will commence within three months of the receipt of the loan.

The company is a pioneer in the field of electronic products, a field in which presently there is a substantial demand with little competition. The electronic industry in India is yet to be fully developed, whereas the demand for electronic products will increase substantially concurrent with the expanding industrial activity. According to Semiconductors, demand for transistors is expected to rise from 600,000 in 1964-65 to 3,000,000 in 1968-69. The company also plans to export about 10 percent of its production to neighboring countries.

2. Progress To Date

The loan application is being reviewed by A.I.D.

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

SECURITY CLASSIFICATION  
UNCLASSIFIED

E-1b

1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY India	3. Funding 1965 Phys. Work 1965	BEG. FY 1965	END FY 1966	4. PROJECT NO. 386-44-230-311	5. TITLE United Carbon India, Ltd., Bombay	6. PRIOR REFERENCES:
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7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a)	(b)	(a)	(b)			(a)	(b)	(a)	(b)
				OBLIGATED	DISBURSED	OBLIGATED	DISBURSED			U.S. PERS.	NON-U.S. PERS.	OBLIGATED	DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
TOTAL ACTUAL FY	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
II OPERATIONAL YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC	104(a)Cooley I*		2,945	-	14,101	-	14,101	-	-	-	-	-
III BUDGET YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC	104(a)Cooley I*		2,945	-	14,101	-	14,101	-	-	-	-	-
IV PLANNING YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC	104(a)Cooley I*		2,945	2,945	14,101	14,101	14,101	14,101	-	-	-	-

REMARKS:  
1/ Exchange Rate: \$1 = Rs. 4.7876  
2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:	2. COOPERATING CTRY.	3. PERSONNEL SERVICES	BEG. FY	END FY	4. PROJECT NO.										
						PARTICIPANT TRAINING													
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY	b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																	
		Non U.S.																	
B. ON BOARD	U.S.																		
	Non U.S.																		
II. PARTICIPANTS PROGRAMMED	A. U.S.																		
	B. THIRD CTRY.																		

REMARKS:  
1/ End of Fiscal Year \* No loan number assigned as yet. Refers to Annex 13 of IAS

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-311	United Carbon India, Ltd., Bombay
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1. Activity Target

Incorporated in October 1964 as a joint venture between Indian interests and United Carbon Company, Division of Ashland Oil and Refining Company, Inc., Ashland, Kentucky, which owns 40 percent of the common stock, the company proposes to establish a plant at Thana, near Bombay designed to produce 30 million pounds per year of furnace-type carbon black, and expected to go into production by mid-1966.

According to the company, approximately 95 percent of all carbon black produced today is used as a reinforcing agent in rubber products. The rest is used primarily as a coloring agent in inks, paints and plastics. Of the 95 percent consumed in the world's rubber industries, about three-quarters are used in the manufacture of tires.

Ashland's United Carbon Division has been exporting carbon black to India for the last 36 years; in the years 1960-62, the U.S. company met nearly 45 percent of the Indian market demand. During 1962-63 and 1963-64 India imported 39.35 million pounds and 33.47 million pounds of carbon black respectively; imports from United Carbon, USA, in 1963 totalled 10.7 million pounds. During the last decade, Indian consumption of carbon black has been rising steadily, from 10 million pounds in 1953 to 41 million in 1963. It is anticipated that at a growth rate of 15 percent this demand would reach 104 million pounds by 1968.

At present, the only indigenous capacity is the 10 million pound factory set up at Durgapur by Phillips, which has been authorized to increase its production to 40 million pounds per annum.

In view of the limited supply against the ever-increasing demand in the rubber industries and the greatly expanding tire and tube manufacturing facilities, the project will prove of significant benefit to Indian economy. Furthermore, the plant will be so designed as to permit expansion to 60 million tons of carbon black at little additional cost.

2. Progress To Date

The company's application for a Cooley Amendment loan of Rs. 14,101,000 is under consideration by A.I.D.

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO.

AD-71

**PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES**

7. OBLIGATED AND DISBURSED	a. FUNDS		b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	B. P.L. 480 LC												
TOTAL ACTUAL FY	B. P.L. 480 LC												
II OPERATIONAL YEAR (EST.)	B. P.L. 480 LC		104(e)Cooley L*	4,470	-	21,400	-	21,400	-	-	-	-	-
III BUDGET YEAR (EST.)	B. P.L. 480 LC		104(e)Cooley L*	-	1,044	-	5,000	-	5,000	-	-	-	-
IV PLANNING YEAR (EST.)	B. P.L. 480 LC		104(e)Cooley L*	-	3,426	-	16,400	-	16,400	-	-	-	-
V ALL SUBSEQUENT Fys (EST.)	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	B. P.L. 480 LC		104(e)Cooley L*	4,470	4,470	21,400	21,400	21,400	21,400	-	-	-	-

REMARKS:  
1/ Exchange Rate: \$1 = Rs. 4.7876  
2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E - 1a

E - 1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES PARTICIPANT TRAINING		BEG. FY	END FY	4. PROJECT NO.										
	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT Fys			g. TOTAL ALL YEARS		
	PROJECT PERSONNEL	A. MAN YEARS	U.S. Non U.S.	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
B. ON BOARD																								
II. PARTICIPANTS PROGRAMMED	A. U.S.																							
	B. THIRD CTRY.																							

REMARKS:  
1/ End of Fiscal Year \* No loan number has been assigned as yet

Refers to Annex 13 of LAS

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-312	Raymon Engineering Works Ltd., Calcutta
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### 1. Activity Target

Incorporated in 1958, this Calcutta company presently manufactures steel freight cars, steel forgings and metal stampings of various types; its U.S. affiliate, World Investments Inc., Wichita, Kansas, owns 34 percent of the equity capital. The company now proposes to expand its facilities to include the manufacture of heavy industrial cranes, steel structurals and spiral welded steel pipe, and to increase production capacity on the products it now makes. The expansion program is expected to be completed by 1968.

The most promising of the proposed new products is the spiral weld pipe which enjoys certain technical advantages over its chief competitor, regular seamless pipe. There now is no local facility to manufacture it. Already the company's tentative orders for this product to a volume exceeding the proposed annual capacity of 20,000 tons. With the growth of the chemical, gas and oil industries, the demand is expected to increase further.

The applicant reports a backlog of 18 months of orders for freight cars actually on hand from the Government of India Railway Board. With the country's rapid industrialization, the demand for freight cars is expected to grow substantially. The company plans to manufacture 3,700 wagons in 1966-67, as against its 1963-64 production of 591.

Sales of steel forgings and stampings are expected to continue to increase, reflecting a heavier demand for replacement parts for imported transportation and agricultural machinery. It is estimated that indigenous licensed capacity to produce steel forgings will not exceed 170,000 tons per annum in 1965-66, a year for which the Indian Planning Commission projects a demand of 200,000 tons. The company plans to increase its steel forgings production from 2,400 tons to 12,000 tons per year.

The local supply of specialized steel structurals is far too small to meet the needs engendered by India's ambitious road and factory building programs. In 1963, India imported approximately Rs. 30 million worth of structurals; Raymon expects to obtain approximately 50 percent of the business now being met through such imports, by raising its capacity of steel structurals from 1,800 tons to 12,000 tons annually.

The firm will manufacture 120 units yearly of industrial cranes, and the annual production of heavy pressed steel plate will be stepped up from 2,400 to 8,000 tons.

This project will yield significant benefits to India's economic development by bringing in highly sophisticated and competent foreign technical assistance. Not only will it add badly needed capacity for industrial products now in short supply, thus effecting foreign exchange savings, but will provide India with opportunity to export spiral pipes not now produced in South Asia or in the Near East.

### 2. Progress To Date

A Cooley loan of Rs. 21.4 million has been approved, to defray the local costs of certain fixed and miscellaneous assets as well as construction contracts; the loan agreement is under negotiation.

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

E-1b

1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	3. Funding	BEG. FY 1965	END FY 1965	4. PROJECT NO. 386-44-230-313	5. TITLE Herdillia Chemicals, Ltd., Bombay
		Phys. Work	1965	1967		

6. PRIOR REFERENCES:

7. OBLIGATED AND DISBURSED	g. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A. FA ACT												
	B. P.L. 480 LC												
TOTAL ACTUAL FY	A. FA ACT												
	B. P.L. 480 LC												
II OPERATIONAL YEAR (EST.)	A. FA ACT												
FY 1965	B. P.L. 480 LC	104(e)Cooley I*		5,532	-	26,484	-	26,484	-	-	-	-	-
III BUDGET YEAR (EST.)	A. FA ACT												
FY 1966	B. P.L. 480 LC	104(e)Cooley I*		4,178	-	20,000	-	20,000	-	-	-	-	-
IV PLANNING YEAR (EST.)	A. FA ACT												
FY 1967	B. P.L. 480 LC	104(e)Cooley I*		1,354	-	6,484	-	6,484	-	-	-	-	-
V ALL SUBSEQUENT FYs (EST.)	A. FA ACT												
VI TOTAL ALL YEARS (EST.)	A. FA ACT												
	B. P.L. 480 LC	104(e)Cooley I*		5,532	5,532	26,484	26,484	26,484	26,484	-	-	-	-

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4,7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c

PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS

1. DATA CURRENT AS OF:	2. COOPERATING CTRY.	3. PERSONNEL SERVICES	BEG. FY	END FY	4. PROJECT NO.
		PARTICIPANT TRAINING			

5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY	b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																	
	Non U.S.																		
B. ON BOARD	U.S.																		
	Non U.S.																		
II. PARTICIPANTS PROGRAMMED	A. U.S.																		
	B. THIRD CTRY.																		

REMARKS:

1/ End of Fiscal Year

\* No loan number assigned as yet. Refers to Annex 13 of LAS.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-313	Herdillia Chemicals, Ltd., Bombay
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### 1. Activity Target

Incorporated in July 1963, this is a joint venture between E.I.D. Parry, an Indian industrial group; Distillers Company, Ltd. a British corporation; and Hercules Powder Company of Wilmington, Delaware. The U.S. affiliate will own 16 percent of the company's common stock. The company proposes to construct a plant at Thana, near Bombay, to manufacture 41,500 tons per annum of heavy organic chemicals like phenol, acetone diacetone alcohol, phthalic anhydride and phthalates with production expected by 1966.

Most of the chemicals to be manufactured are not available locally. Herdillia reports that approximately 8,600 tons of these chemicals are imported annually and that in 1963 their value amounted to at least \$2 million. Not only will the project result in foreign exchange savings, but it will foster the establishment and expansion of other industries such as the manufacture of plasticizers, plastics, PVC, caprolactum used in the production of nylon, solvents and other petrochemical industries. Furthermore, it may very well become an important source of foreign exchange by exporting its products to Asian and African countries.

The company has scheduled initial production to be only 29 percent of capacity, with sales rising by 1970 to 45 percent. The plant has been designed with excess capacity, so that as the demand for its products rises it may expand production at comparatively low costs.

### 2. Progress To Date

An Export Import Bank loan providing \$3,340,000 to finance the purchase of machinery and equipment from the United States and a Cooley Amendment loan for Rs.26,484,000 for local costs in connection with the project have been authorized. Loan agreements for these are under negotiation.

The company has paid Rs.1,875,000 for a sixty-acre piece land, but all of the contracts for construction etc. will be executed upon receipt of these loans.

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		END FY		4. PROJECT NO.		5. TITLE				6. PRIOR REFERENCES:				
	1 November 1964		India		Funding 1965		1965		386-44-230-314		Firestone Tyre & Rubber Co. of India, Limited, Bombay								
7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)				d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)							
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED		(2) DISBURSED		(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER					
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED	OBLIGATED	DISBURSED	(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED						
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/																	
	FA ACT	(ii) TRUST FUND																	
		(iii) OTHER LC																	
	B. P.L. 480 LC																		
TOTAL ACTUAL FY	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/																	
	FA ACT	(ii) TRUST FUND																	
		(iii) OTHER LC																	
	B. P.L. 480 LC																		
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/																	
	FA ACT	(ii) TRUST FUND																	
		(iii) OTHER LC																	
	B. P.L. 480 LC	104 (e) Cooley	I*	1,044	-	5,000	-	5,000	-	-	-	-	-	-	-	-	-	-	-
III BUDGET YEAR (EST.) FY 1966	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/																	
	FA ACT	(ii) TRUST FUND																	
		(iii) OTHER LC																	
	B. P.L. 480 LC	104 (e) Cooley	I*	-	1,044	-	5,000	-	5,000	-	-	-	-	-	-	-	-	-	-
IV PLANNING YEAR (EST.) FY	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/																	
	FA ACT	(ii) TRUST FUND																	
		(iii) OTHER LC																	
	B. P.L. 480 LC																		
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/																	
	FA ACT	(ii) TRUST FUND																	
		(iii) OTHER LC																	
	B. P.L. 480 LC																		
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/																	
	FA ACT	(ii) TRUST FUND																	
		(iii) OTHER LC																	
	B. P.L. 480 LC	104 (e) Cooley	I*	1,044	1,044	5,000	5,000	5,000	5,000	-	-	-	-	-	-	-	-	-	-

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES PARTICIPANT TRAINING			BEG. FY		END FY		4. PROJECT NO.								
	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
I PROJECT PERSONNEL	A. MAN YEARS	U.S.		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
		Non U.S.	U.S.																						Non U.S.
B. ON BOARD	U.S.																								
	Non U.S.																								
II. PARTICIPANTS PROGRAMMED	A. U.S.																								
	B. THIRD CTRY.																								

REMARKS:

\* NO loan number assigned as yet.

1/ End of Fiscal Year

Refers to Annex 13 of LAS

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-314	Firestone Tyre & Rubber Co. of India, Limited, Bombay.
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1. Activity Target

Incorporated in 1930, Firestone India is a wholly owned subsidiary of Firestone Tire & Rubber Company of Akron, Ohio. The company has requested a loan of Rs. 5 million to finance construction of buildings for expansion of its tire manufacturing facilities.

The company is engaged in the manufacture and sale of tires and tubes, tire repair and retreading materials, etc. In 1939, the company established a plant at Bombay to manufacture most of its tires and tubes presently sold in India. In 1963, the Bombay plant produced 611,852 tires and tubes against its licensed capacity of 672,000 per annum. The company estimates to complete its expansion program of about 60,000 tires and tubes per annum in approximately 18 months by which time the Indian market for its products will have improved further to justify the contemplated expansion. In view of the expanding road transportation, it is believed that substantial market exists for automobile tires and tubes in India.

2. Progress To Date

The Cooley Loan application is currently under active consideration by A.I.D.

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO.

AD-77

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

E-1b

1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	3. Funding	BEG. FY 1965	END FY 1965	4. PROJECT NO. 386-44-230-315	5. TITLE Synbiotics Limited, Ahmedabad
		Phys. Work	1964	1965		

6. PRIOR REFERENCES:

7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	TYPE	SOURCE	LOAN OR GRANT	DOLLAR EQUIVALENTS (000) 1/		LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a)	(b)	(a)	(b)			(a)	(b)	(a)	(b)
				OBLIGATED	DISBURSED	OBLIGATED	DISBURSED			U.S. PERS.	NON-U.S. PERS.	OBLIGATED	DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
TOTAL ACTUAL FY	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
II OPERATIONAL YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
FY 1965	B. P.L. 480 LC	104(e) Cooley I*		2,807	2,807	13,440	13,440	13,440	13,440	-	-	-	-
III BUDGET YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
FY	B. P.L. 480 LC												
IV PLANNING YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
FY	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC	104(e) Cooley I*		2,807	2,807	13,440	13,440	13,440	13,440	-	-	-	-

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c

PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS

5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY	b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																	
		Non U.S.																	
B. ON BOARD	U.S.																		
	Non U.S.																		
II PARTICIPANTS PROGRAMMED	A. U.S.																		
	B. THIRD CTRY.																		

REMARKS:

\*Loan #386-E-108 Refers to Annex 13 of IAS

1/ End of Fiscal Year

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-315	Synbiotics Limited, Ahmedabad
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### 1. Activity Target

Incorporated in October 1960 and owned 52 percent by Karamchand Premchand Private Ltd., Ahmedabad, and 48 percent by Olin Mathieson Chemical Corporation, New York, the company proposes to construct a plant at Baroda to manufacture antibiotics, with an annual capacity of 33,000 pounds of streptomycin, 6,600 pounds of tetrocycline, 4,600 pounds of amphotericin, and 163 tons of certain other fine chemicals. Production is anticipated by 1965.

Drugs have been scarce in India since 1947. Even though a large number of Indian and foreign firms are processing drugs locally, the lack of certain raw materials has made it impossible to satisfy the demand. In India, as elsewhere, the trend towards the marketing of pharmaceutical specialities under brand names and in dosage form is gaining ground against the compounding of medicinal chemicals by pharmacists into physician-prescribed formulas. The company states that in 1962, Indian per capita consumption of pharmaceuticals in dosage form has a value of approximately 44¢ against \$5 to \$10 in Western European countries and \$2 to \$3 in the lesser developed Latin American countries.

The drugs produced by Synbiotics will be distributed exclusively by Sarabhai Chemicals, the pharmaceutical division of the Indian affiliate which since 1950, has obtained its bulk requirements from Olin (Squibb). Sarabhai's net sales of Squibb products in package form increased from \$280,000 in 1959 to \$15.9 million in 1962 and an estimated \$17 million in 1963. Gradually, due to the foreign exchange position, the Government of India restricted the import of raw materials to the point where Sarabhai found it necessary to establish Synbiotics as a domestic source of pharmaceuticals. Successful implementation of this project will contribute significantly to the Indian pharmaceutical industry.

### 2. Progress to Date

On July 2, 1964, a Cooley Loan Agreement was signed, to provide Rs.13,440,000 to assist in refinancing short-term debts and in acquiring fixed assets in connection with its project. The entire proceeds of the loan are expected to be disbursed by March 31, 1965.

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN FOR OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/ (ii) TRUST FUND (iii) OTHER LC											
	B. P.L. 480 LC												
TOTAL ACTUAL FY _____	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/ (ii) TRUST FUND (iii) OTHER LC											
	B. P.L. 480 LC												
II OPERATIONAL YEAR (EST.) FY 1965	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/ (ii) TRUST FUND (iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley I*	1,044	626	5,000	3,000	5,000	3,000	-	-	-	-	
III BUDGET YEAR (EST.) FY 1966	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/ (ii) TRUST FUND (iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley I*	-	418	-	2,000	-	2,000	-	-	-	-	
IV PLANNING YEAR (EST.) FY _____	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/ (ii) TRUST FUND (iii) OTHER LC											
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/ (ii) TRUST FUND (iii) OTHER LC											
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/ (ii) TRUST FUND (iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley I*	1,044	1,044	5,000	5,000	5,000	5,000	-	-	-	-	

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E - 1a

E - 1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES PARTICIPANT TRAINING			BEG. FY		END FY		4. PROJECT NO.							
	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			a. CUM. THRU ACTUAL FY			b. ACTUAL FY _____			c. OPERATIONAL FY _____			d. BUDGET FY _____			e. PLANNING FY _____			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
				Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																						
		Non U.S.																						
B. ON BOARD	U.S.																							
	Non U.S.																							
II. PARTICIPANTS PROGRAMMED	A. U.S.																							
	B. THIRD CTRY.																							

REMARKS:

\* Loan #386-E-117 Refers to Annex 13 of LAS

1/ End of Fiscal Year

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-316	Sylvania and Laxman, Limited, New Delhi
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1. Activity Target

Incorporated in 1963, the company is owned 45 percent by Sylvania International New York, a subsidiary of General Telephone and Electronics, Inc. of U.S.A., 25 percent by L. S. Agarwal and associates, and 30 percent by Indian public shareholders. The company plans to establish a facility at Delhi to manufacture annually 1,200,000 fluorescent tubes; 60,000 mercury vapor lamps for commercial and industrial uses; 15,000,000 glass shells to be used as components for various types of lamps, and 3,000,000 glass tubes.

The Government of India places the demand for fluorescent tubes at 8 million by 1966. Presently there are three manufacturing units with a total installed capacity of 3.3 million lamps of all types. Eight additional licenses, including that to Sylvania and Laxman, for the manufacture of a total 7.3 million lamps have been issued. However, the Industrial Credit and Investment Corporation of India believes that the total production of the existing and the proposed plants will not exceed 7 million by 1966.

In 1962 the demand for mercury vapor lamps totalled 90,000 against local production of 60,000; the balance was imported. With the higher level of industrial activity and intensified electrification of both rural and urban areas, the Government of India estimates that 300,000 mercury vapor lamps will be required by 1966. Similarly the existing production of 60 million units per annum of glass shells, and the additional 29 million units contemplated by the new licenses is far short of the 150 million-unit demand estimated for 1966 by the Government of India. In view of the foregoing, not only will the products of this company find a ready market but will result in a net annual foreign exchange saving of \$1.7 million.

The construction of the plant is expected to begin before the end of 1964, with initial production estimated to begin by June 1966, reaching full capacity in late 1967. About 225 persons will be employed.

2. Progress To Date

A Cooley Amendment Loan of Rs.5 million to the company has been authorized; the loan agreement was signed in August 1964. The entire loan will be disbursed by February 1966. The ICICI has sanctioned a \$420,000 loan to the company to cover a portion of the foreign exchange costs of the project.

A choice 5.3 acre factory site, on Najafgarh Road, Delhi, has been obtained.

AID 1020-3 (7-64)	PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES								SECURITY CLASSIFICATION UNCLASSIFIED				
E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. Funding		4. PROJECT NO.		5. TITLE				
	1 November 1964		India		1965 1967		386-44-230-317		Richardson Hindusthan Limited, Bombay				
7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
		B. P.L. 480 LC											
TOTAL ACTUAL FY	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
		B. P.L. 480 LC											
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
		B. P.L. 480 LC			104(e)Cooley I*	1,305	-	6,250	-	6,250	-	-	-
III BUDGET YEAR (EST.) FY 1966	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
		B. P.L. 480 LC			104(e)Cooley I*	-	1,044	-	5,000	-	5,000	-	-
IV PLANNING YEAR (EST.) FY 1967	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
		B. P.L. 480 LC			104(e)Cooley I*	-	261	-	1,250	-	1,250	-	-
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
		B. P.L. 480 LC											
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
		B. P.L. 480 LC			104(e)Cooley I*	1,305	1,305	6,250	6,250	6,250	6,250		

REMARKS:  
 1/ Exchange Rate: \$1 = Rs. 4.7876  
 2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS		1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES PARTICIPANT TRAINING		BEG. FY		END FY		4. PROJECT NO.								
	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																					
		Non U.S.																					
	B. ON BOARD	U.S.																					
		Non U.S.																					
II. PARTICIPANTS PROGRAMMED		A. U.S.																					
		B. THIRD CTRY.																					

REMARKS:  
 1/ End of Fiscal Year \* No loan number has been assigned as yet.

Refers to Annex 13 of LAS

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO.

AD-82

AID 1020-1 (7-64)	1. DATA CURRENT AS OF:	2. COOPERATING COUNTRY	SECURITY CLASSIFICATION		
	1 November 1964	India	UNCLASSIFIED	386-44-230-317	Richardson Hindusthan, Limited, Bombay'

1. Activity Target

Richardson Hindusthan is a public company, representing collaboration between Richardson-Merril Inc., the American collaborator, which hold 55 percent of the shares, and the Indian public. The applicant will construct a factory in the Kalwa area north of Bombay, for the production of methonal, dementholized peppermint oil, and pharmaceutical products, expected to go into operation by July 1, 1966.

Methonal, not produced commercially in India, sells in the local market far above world prices. Even at the relatively high cost of methonal in its early manufacture by the proposed factory, the Applicant expects to meet the current Indian price in 1966-67 and better it later.

By the second year of operations the company plans to export at least half of its produce to countries other than the United States, estimating that this will result in total foreign exchange savings and earnings of \$77,000 in 1966-67 and \$442,000 by 1968-69.

2. Progress To Date

The application for Cooley Amendment loan of Rs.6.25 million is under consideration. The engineering design of the factory has been completed, and site of 64,827 square meters has been leased for 95 years; an experimental farm is being established to demonstrate to farmers the proper method of growing Mentha Arvensis.

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

SECURITY CLASSIFICATION  
UNCLASSIFIED

E-1b

1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY India	3. BEG. FY 1965	END FY 1965	4. PROJECT NO. 386-44-230-318	5. TITLE Indofil Chemicals, Ltd., Bombay
		Funding 1965	1965		
		Phys. Work	1965		

7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
TOTAL ACTUAL FY	B. P.L. 480 LC												
	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
II OPERATIONAL YEAR (EST.) FY 1965		(iii) OTHER LC											
	B. P.L. 480 LC	104(e) Cooley L*	627	627	3,000	3,000	3,000	3,000	-	-	-	-	
	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
III BUDGET YEAR (EST.) FY	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
IV PLANNING YEAR (EST.) FY	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
V ALL SUBSEQUENT FYs (EST.) FY	B. P.L. 480 LC												
	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
VI TOTAL ALL YEARS (EST.) FY		(iii) OTHER LC											
	B. P.L. 480 LC	104(e) Cooley L*	627	627	3,000	3,000	3,000	3,000	-	-	-	-	
	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c

PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS

8. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																				
		Non U.S.																				
B. ON BOARD	U.S.																					
	Non U.S.																					
II. PARTICIPANTS PROGRAMMED	A. U.S.																					
	B. THIRD CTRY.																					

REMARKS:

1/ End of Fiscal Year

\* No loan number assigned as yet

Refers to Annex 13 of LAS

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO.

AD-84

JD 1020-1 (7-64)	1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-318	Indofil Chemicals Ltd., Bombay
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1. Activity Target

Incorporated in 1962, the company is a collaboration between Amrit Lal & Company Private Ltd., Bombay, and Rohm & Haas Company, Philadelphia, which own 57.5 percent of the common stock. The company proposes to establish a plant to produce paraplex (a plasticizer) and dithane (a fungicide) at Thana near Bombay. Initial operation is expected by the end of 1964, with increases in production by 1969 of dithane from 600 metric tons in 1965 to 1800 in 1969 and a paraplex from 280 metric tons to 700.

Dithane, an agricultural fungicide, has been found efficacious in controlling diseases on a great variety of plants, such as fruit trees, potatoes, grapes, rice, rubber, etc. In view of the great need for improvement in a predominantly agricultural country like India, there is a strong demand for agricultural fungicides.

The present annual demand of fungicides in India is estimated at 400 to 500 metric tons, against the supply of 200 to 250 metric tons all imported, and is expected to increase to 1,500 metric tons within the next four or five years.

Paraplex is used in the manufacture of PVC resins. Large quantities of plasticizers now are imported to meet the needs of PVC manufacturers at considerable foreign exchange costs. Production of plasticizers, therefore, would not only save foreign exchange but would result in increased production of this important group of plastics.

The industry has a considerable scope for further expansion.

The company was initially authorized to manufacture 2,500 tons of fungicides and 800 tons of plasticizers per annum. The company will export 25 percent of its production of dithane to neighboring countries like Pakistan, Nepal, Malayasia, etc.

2. Progress To Date

The company has applied for a Cooley Amendment loan of Rs. 3 million to finance a portion of rupee capital costs of land, buildings, and indigenously manufactured machinery; the application is under intensive review by A.I.D.

Construction of the plant is under way and is expected to be completed before the end of 1964.



AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-319	Rockwell India, Ltd., Surat
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### 1. Activity Target

Rockwell International SA, Geneva, Switzerland, a wholly owned subsidiary of Rockwell Manufacturing Company, Pittsburgh, owns 50 percent of this company, incorporated in December 1963. Bhogilal Leherchand Private Ltd., Bombay owns 25.5 percent and some 7,350 Indian shareholders own 24.5 percent. The company proposes to manufacture 6,000 wood and metal cutting power tools per year, with initial production to begin by the end of 1964 and full production achieved by 1968.

With rapid industrial growth and increased mechanization, the demand for wood working and metal working machinery is expected to increase greatly. According to Rockwell India, in 1960-61 the imports, over and above indigenous production, for such machines amounted to Rs.8.2 million, against a demand of nearly Rs.10 million. Rockwell further reports that only two other firms have been licensed to manufacture wood working machinery, but it will take three to four years for them to reach full production; whereas Rockwell anticipates full production, valued at Rs.5.8 million, by 1966, when the demand for wood working machinery would be about Rs.20 million. Also, the superior technical knowledge and business reputation of the American collaborators coupled with the expert marketing facilities to be provided by the Indian partner will give the company certain advantages in marketing its products. The company will export 20 percent of its annual production, thus providing the double benefits to the Indian economy of saving and earning foreign exchange.

The construction of the plant at Udhna, in Gujarat State, is almost complete and initial production is anticipated before the end of 1964. The company intends to operate at 27 percent of its installed capacity in the first year; 68 percent in the second year and 93 percent in the third year. The plant will be in full production in the fourth year.

### 2. Progress to Date

A Cooley Amendment loan of Rs. 1,690,000 was authorized to this company in August 1964 and the loan agreement is being negotiated. The loan will assist in financing the local costs concerning the project.



AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-320	American Universal Electric (India) Ltd., New Delhi
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1. Activity Target

The company was incorporated on July 1964; 50 percent of its stock is owned by a group of Indian investors headed by Lt. Col. Raghvendra Singh of New Delhi and 50 percent by Universal Electric Company of Owosso, Michigan. The company is setting up a plant at Faridabad, Punjab, for the manufacture of 600,000 fractional horse power electric motors per annum; production should begin by the end of 1964.

Fractional horse power electric motors are used in small pumps, fans, air-conditioners, sewing machines, household appliances, tape recorders, projectors and numerous other products. At present, over one million units are used in India and 100,000 exported to neighboring countries. Indian consumption is expected to triple in the next five years. There are 14 manufacturers of fractional horse power motor in India. However, American Universal expects that by large scale manufacture using the American collaborator's modern techniques, it will be able to compete successfully by supplying quality motors at a low cost. About 400 persons will be employed on a single-shift basis.

2. Progress To Date

A Cooley Loan Agreement was signed in August 1964 to provide Rs.2.1 million to assist the company in financing local costs of the project. The entire loan is expected to be disbursed by December 31, 1965.

All of the machinery from the U.S. is at the plant site and production is expected to start before the end of 1964 and reach 6,100,000 motors by 1969, the fifth year of production.

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN FOR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/ (ii) TRUST FUND (iii) OTHER LC											
	B. P.L. 480 LC												
TOTAL ACTUAL FY	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/ (ii) TRUST FUND (iii) OTHER LC											
	B. P.L. 480 LC												
II OPERATIONAL YEAR (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/ (ii) TRUST FUND (iii) OTHER LC											
FY 1965	B. P.L. 480 LC	104(e)Cooley I*	1,253	418	6,000	2,000	6,000	2,000	-	-	-	-	
III BUDGET YEAR (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/ (ii) TRUST FUND (iii) OTHER LC											
FY 1966	B. P.L. 480 LC	104(e)Cooley I*	-	835	-	4,000	-	4,000	-	-	-	-	
IV PLANNING YEAR (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/ (ii) TRUST FUND (iii) OTHER LC											
FY	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/ (ii) TRUST FUND (iii) OTHER LC											
FY	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/ (ii) TRUST FUND (iii) OTHER LC											
	B. P.L. 480 LC	104(e)Cooley I*	1,253	1,253	6,000	6,000	6,000	6,000	-	-	-	-	

REMARKS:

1/ Exchange Rate: \$1 = Rs.4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES PARTICIPANT TRAINING			4. PROJECT NO.											
	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
	I PROJECT PERSONNEL	A. MAN YEARS	U.S. Non U.S.	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
B. ON BOARD																								
II. PARTICIPANTS PROGRAMMED	A. U.S.																							
	B. THIRD CTRY.																							

REMARKS:

1/ End of Fiscal Year

\* No loan number assigned as yet.

Refers to Annex 13 of IAS

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-321	Tractor Engineers Limited, Bombay
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### 1. Activity Target

Incorporated in September 1963, this is a joint venture between Larson and Tubro, Bombay, and Caterpillar Overseas S.A., Geneva, Switzerland, a wholly-owned subsidiary of Caterpillar Tractor Company, Peoria, Illinois; the latter owns 50 percent of the common stock. The company has requested a Cooley loan of Rs. 6 million to assist in expanding the present manufacture at Sion of replacement parts and assemblies for caterpillar equipment in India, by shifting the existing plant to Powai, Bombay. The expansion program, which is expected to increase the company's potential share of the Indian market from 25 percent to 75 percent will be completed by the end of 1965.

The company reports that there are approximately 6,000 tractors of all kinds in India; their value is over Rs.720 million. Of these, 1,000 are immobilized for want of essential spare parts and another 1,000 are under repair at any one time. Because of limited foreign exchange, the Government of India has imposed a very restricted import quota on replacement parts.

It is estimated that the foreign exchange required for purchase of spare parts would amount to Rs.70.2 million on the basis of 10 percent of the gross value of the tractors. Thus, the parts this company will manufacture not only will keep the India's tractors fleet on job, but will assist in commissioning the many tractors (worth about Rs.240 million) now idle. At the same time, the local supply of these parts would cut down the idle time and improve the operating efficiency of the entire fleet. The company also estimates that the local manufacture of spare parts will result in an annual foreign exchange savings of Rs.10 million.

### 2. Progress To Date

The company's Cooley loan application is being reviewed by A.I.D.

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		END FY		4. PROJECT NO.		5. TITLE			
	1 November 1964		India		Funding 1965		1966		386-44-230-322		York India, Ltd., New Delhi			
7. OBLIGATED AND DISBURSED	6. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED	
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
		B. P.L. 480 LC												
TOTAL ACTUAL FY	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
		B. P.L. 480 LC												
II OPERATIONAL YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	FY 1965	B. P.L. 480 LC	104(e)Cooley	L*	313	104	1,500	500	1,500	500				
III BUDGET YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	FY 1966	B. P.L. 480 LC	104(e)Cooley	L*	-	209	-	1,000	-	1,000				
IV PLANNING YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	FY	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
		B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
		B. P.L. 480 LC	104(e)Cooley	L*	313	313	1,500	1,500	1,500	1,500				

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4,7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E - 1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES PARTICIPANT TRAINING			BEG. FY			END FY			4. PROJECT NO.			
	8. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			b. CUM. THRU ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
I PROJECT PERSONNEL	A. MAN YEARS	U.S.		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
		Non U.S.	Non U.S.																			
B. ON BOARD	U.S.																					
	Non U.S.																					
II. PARTICIPANTS PROGRAMMED	A. U.S.																					
	B. THIRD CTRY.																					

REMARKS:

\* No loan number assigned as yet.

1/ End of Fiscal Year

Refers to Annex 13 of IAS

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-322	York India, Ltd., New Delhi
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### 1. Activity Target

Incorporated in January 1962, this is a joint venture between Airconditioning Corporation Limited, a Birla enterprise, and York Corporation, a division of Borg-Warner Corporation, Chicago; latter owns 50 percent equity capital in the project. The company proposes to establish a plant at Faridabad, Punjab for the manufacture of air conditioning and refrigeration equipment. Construction of the plant has started and production is expected by the latter half of 1965 calendar year.

For over thirty years, Airconditioning Corporation Ltd. has been the sole distributor in India of York equipment. Because of the extensive use of York equipment in this country, the new company was formed to manufacture locally some products basic to the air-conditioning and refrigeration industry, which, to a large extent, now are imported. These include refrigeration compressors, heat transfer surfaces, auxiliaries and accessories, etc. Accordingly, the project will play a vital role — indigenously providing equipment so essentially required by various types of industries, including food processing and storage, and the manufacture of pharmaceuticals, chemicals and petrochemicals.

York India states that evidence of the great future demand for air conditioning and refrigeration equipment is illustrated by the Government of India's licensing a production capacity worth Rs.1 billion during the next four to five years. The company expects to get about 30 percent of this market. It also anticipates exporting a portion of its production to neighboring countries at a later stage.

### 2. Progress to Date

The company's Cooley Amendment loan application for Rs.1.5 million is under review by A.I.D.

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO.

AD-93

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

SECURITY CLASSIFICATION  
UNCLASSIFIED

E-1b

1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	3. Funding 1965	BEG. FY 1965	END FY 1965	4. PROJECT NO. 386-44-230-323	5. TITLE Blue Star Worthington Ltd., Bombay
		Phys. Work 1965	1967	6. PRIOR REFERENCES:		

7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	FA ACT (iii) OTHER LC												
	B. P.L. 480 LC												
TOTAL ACTUAL FY	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	FA ACT (iii) OTHER LC												
	B. P.L. 480 LC												
II OPERATIONAL YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
FY 1965	FA ACT (ii) TRUST FUND												
	FA ACT (iii) OTHER LC												
	B. P.L. 480 LC	104(e)Cooley L*		418	-	2,000	-	2,000	-	-	-	-	-
III BUDGET YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
FY 1966	FA ACT (ii) TRUST FUND												
	FA ACT (iii) OTHER LC												
	B. P.L. 480 LC	104(e)Cooley		-	313	-	1,500	-	1,500	-	-	-	-
IV PLANNING YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
FY 1967	FA ACT (ii) TRUST FUND												
	FA ACT (iii) OTHER LC												
	B. P.L. 480 LC	104(e)Cooley L*		-	105	-	500	-	500	-	-	-	-
V ALL SUBSEQUENT FYs (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	FA ACT (iii) OTHER LC												
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	FA ACT (iii) OTHER LC												
	B. P.L. 480 LC	104(e)Cooley L*		418	418	2,000	2,000	2,000	2,000	-	-	-	-

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c

PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS

1. DATA CURRENT AS OF:	2. COOPERATING CTRY.	3. PERSONNEL SERVICES PARTICIPANT TRAINING	BEG. FY	END FY	4. PROJECT NO.
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5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
I PROJECT PERSONNEL	A. MAN YEARS		U.S.																		
			Non U.S.																		
	B. ON BOARD		U.S.																		
			Non U.S.																		
II. PARTICIPANTS PROGRAMMED	A. U.S.																				
	B. THIRD CTRY.																				

REMARKS:

1/ End of Fiscal Year

\* No loan number assigned as yet. Refers to Annex 13 of LAS

AID 10204 (7-84)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-323	Blue Star Worthington Ltd., Bombay
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1. Activity Target

This is a joint venture between the Blue Star Engineering Company of Bombay and the Worthington Corporation of Harrison, New Jersey, who own 49% and 51% of the company respectively. The purpose of the company, whose plant will be located in the Pimpri-Poona region of Maharashtra, is to manufacture and sell Worthington designed compressors, air-conditioning apparatus and allied products. The company expects to be in production by early 1966.

There is a ready market for the equipment to be manufactured by this company, most of which heretofore have been imported. It is planned that Blue Star Worthington products will have approximately 75 percent indigenous content, to be increased to 90 percent in the fifth year of operation. Also the company expects to export part of its production to South East Asia, Indonesia and Middle East.

Pursuant to the collaboration agreement, Blue Star will receive the continuous benefit of expert engineering and manufacturing training facilities from the U.S. collaborator, and the benefits of its programs.

2. Progress To Date

The company's 1962 application for a Cooley Amendment loan of Rs. 2 million was not acted upon because the Government of India advised the applicant to explore other possible sources of financing. The company has not been successful in arranging loan financing on terms and conditions similar to those of a Cooley loan, and has requested A.I.D. to reactivate its 1962 request.

A.I.D. expects a revised application soon.

**PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES**

E-1b

1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	3. BEG. FY Funding 1960	END FY 1965	4. PROJECT NO. 386-44-230-324	5. TITLE Mysore Cements Ltd., Bangalore I & II
		Phya. Work 1960	1966		

7. OBLIGATED AND DISBURSED	g. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED	
	I CUMULATIVE THRU ACTUAL YEAR													
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC	104(e)Cooley	I*		1,149	1,149	5,500	5,500	5,500	5,500	-	-	-	-
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC	104(e)Cooley	I**		1,723	1,044	8,250	5,000	8,250	5,000	-	-	-	-
III BUDGET YEAR (EST.) FY 1966	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC	104(e)Cooley	I		-	679	-	3,250	-	3,250	-	-	-	-
IV PLANNING YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC													
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC													
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC	104(e)Cooley	I		2,872	2,872	13,750	13,750	13,750	13,750	-	-	-	-

REMARKS:

1/ Exchange Rate: \$1 = RS. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c

**PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS**

I PROJECT PERSONNEL	A. MAN YEARS	U.S. Non U.S.	1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES PARTICIPANT TRAINING			BEG. FY	END FY	4. PROJECT NO.
			Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract			
B. ON BOARD	U.S.													
	Non U.S.													
II. PARTICIPANTS PROGRAMMED	A. U.S.													
	B. THIRD CTRY.													

REMARKS:

\* Loan # C-86-4 Refers to Annex 13 of LAS

\*\* Loan # 386-E-079

1/ End of Fiscal Year

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-324	Mysore Cements Ltd., Bangalore I & II
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### 1. Activity Target

This is a joint venture between Sarangapany Mudaliar and associates of Bangalore and Kaiser Industries Corporation, Oakland, California. The latter owns 48.5% of the equity capital of the company, which was incorporated in 1958.

In 1960 the company received a Cooley Amendment loan of Rs.5.5 million to establish a plant at Amasandra, Mysore, for the manufacture of 100,000 metric tons of cement annually. Because of the actual short supply of cement in the area and the country, the company has requested further financing, in order to increase its capacity to 200,000 metric tons a year.

Successful implementation of the company's expansion program will contribute to Indian industrialization and construction programs envisaged under India's Five Year Plans. As a matter of fact, the plan for expansion grew out of a request by the State and Central Governments that Mysore expand its facilities to meet anticipated needs for cement in the applicant's area.

Although the plant was ready for operation in December 1961, want of power in the State of Mysore made it necessary for the company to install two diesel power generators, delaying production until October 1962.

### 2. Progress to Date

A second Cooley loan of Rs.4.5 million and a third loan of Rs.3,750,000 were authorized in November 1962 and April 1964, respectively. Signature of the agreement for the second loan was delayed by difficulties in obtaining bank guarantees and by other management problems. However, the borrower has taken corrective action satisfactory to A.I.D. and a consolidated agreement covering both the second and third loans was signed on September 1964. It is expected that the entire loan amount will be disbursed during FY 1966.

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO.

AD-97

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AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-325	Otis Elevator Company (India) Ltd., Bombay I & II
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### 1. Activity Target

The company was formed in 1953 between Mahindra and Mahindra and Associates, Bombay, and Otis Elevator Company of New Jersey, each of whom owns respectively 26.6 percent and 73.4 percent of the common stock.

The first Cooley Amendment loan in India was authorized for the company in 1959, to provide Rs.1,000,000 for working capital in connection with the company's project at Kaju Tekdi, Bombay, to manufacture and repair elevators and escalators; all these funds have been disbursed. In April 1964 the company applied for its second Cooley loan, in the amount of Rs.1 million to assist in the expansion of its installed capacity from 120 to 240 elevators per year.

The proposed expansion of Otis (India) will provide more badly needed elevators for India, saving foreign exchange that otherwise would be spent for their import. In addition the export of approximately 10 percent of the company's production to other countries except United States will earn foreign exchange for India.

### 2. Progress to Date

The second loan of Rs.1,000,000 was authorized in May 1964 and the Loan Agreement is being negotiated.

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

E-1b

1. DATA CURRENT AS OF: 1 November '64	2. COOPERATING COUNTRY India	3. Funding 1962 Phys. Work 1962	BEG. FY 1962	END FY 1965	4. PROJECT NO. 386-44-230-326	5. TITLE McNally-Bird Engineering Company Ltd., Calcutta	6. PRIOR REFERENCES: I & II
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7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		J. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	(ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC	104(e)Cooley I*		1,044	1,044	5,000	5,000	5,000	5,000	-	-	-	-
TOTAL ACTUAL FY 64	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	(ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC	104(e)Cooley I*		-	209	-	1,000	-	1,000	-	-	-	-
II OPERATIONAL YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	(ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC	104(e)Cooley I**		1,044	418	5,000	2,000	5,000	2,000	-	-	-	-
III BUDGET YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	(ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC	104(e)Cooley I*		-	626	-	3,000	-	3,000	-	-	-	-
IV PLANNING YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	(ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	(ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	(ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC	104(e)Cooley I		2,088	2,088	10,000	10,000	10,000	10,000	-	-	-	-

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c

PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS

1. DATA CURRENT AS OF:	2. COOPERATING CTRY.	3. PERSONNEL SERVICES PARTICIPANT TRAINING	BEG. FY	END FY	4. PROJECT NO.
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5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY	b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																		
		Non U.S.																		
B. ON BOARD	U.S.																			
	Non U.S.																			
II. PARTICIPANTS PROGRAMMED	A. U.S.																			
	B. THIRD CTRY.																			

REMARKS:

\* Loan # 386-E-080. Refers to Annex 13 of LAS

1/ End of Fiscal Year \*\* No loan number assigned as yet

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-326	McNally-Bird Engineering Company Ltd. Calcutta
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1. Activity Target

The company, incorporated in 1961, was organized between Bird & Company (Private) Ltd., Calcutta, and McNally-Pittsburg Manufacturing Company of Pittsburg, Kansas, who respectively own 40 percent and 60 percent of the capital stock. In 1962 a Cooley Amendment Loan of Rs. 5 million was extended to the company for its project to construct a plant at Kumardhubi, Bihar for the manufacture and sale in India of coal washeries and allied equipment.

In July 1964 the company requested a further Cooley Amendment loan of Rs. 5 million for the expansion of its operations.

This industry should have a good future, since there now is a great shortage of washed coal in India. India's coal seams are exhausted. The ash content of Indian coal has increased considerably in the last two decades and, with the introduction of mechanized mining methods, is likely to increase even more. At the same time, the demand for clean coking coal is growing, because of the expanding steel industry and the establishment of new power plants. Consequently, the project will contribute materially to the economic betterment of India by providing materials necessary for expansion of power and steel industries, and by saving foreign exchange now required for importation of such equipment.

2. Progress To Date

The second application is being reviewed by A.I.D.

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

SECURITY CLASSIFICATION  
UNCLASSIFIED

E-1b	1. DATA CURRENT AS OF: November 1, 1964		2. COOPERATING COUNTRY India		3. Funding 1960	BEG. FY 1960	END FY 1965	4. PROJECT NO. 386-44-230-327		5. TITLE Ex-Cell-O India Limited, Bombay I & II				
	7. OBLIGATED AND DISBURSED		a. FUNDS		b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		J. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
I CUMULATIVE THRU ACTUAL YEAR	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/	(2)	(3) LOAN FOR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
		(ii) TRUST FUND			(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
TOTAL ACTUAL FY	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/	104(e) Cooley I*		418	418	2,000	2,000	2,000	2,000	-	-	-	-
		(ii) TRUST FUND												
		(iii) OTHER LC												
		B. P.L. 480 LC												
		(i) LC COSTS CHGD TO \$ ACCTS. 2/												
		(ii) TRUST FUND												
		(iii) OTHER LC												
		B. P.L. 480 LC												
		(i) LC COSTS CHGD TO \$ ACCTS. 2/												
		(ii) TRUST FUND												
		(iii) OTHER LC												
		B. P.L. 480 LC												
		(i) LC COSTS CHGD TO \$ ACCTS. 2/												
		(ii) TRUST FUND												
		(iii) OTHER LC												
		B. P.L. 480 LC												
		(i) LC COSTS CHGD TO \$ ACCTS. 2/												
		(ii) TRUST FUND												
		(iii) OTHER LC												
		B. P.L. 480 LC												
		(i) LC COSTS CHGD TO \$ ACCTS. 2/												
		(ii) TRUST FUND												
		(iii) OTHER LC												
		B. P.L. 480 LC												
		(i) LC COSTS CHGD TO \$ ACCTS. 2/												
		(ii) TRUST FUND												
		(iii) OTHER LC												
		B. P.L. 480 LC												
		(i) LC COSTS CHGD TO \$ ACCTS. 2/												
		(ii) TRUST FUND												
		(iii) OTHER LC												
		B. P.L. 480 LC												
		(i) LC COSTS CHGD TO \$ ACCTS. 2/												
		(ii) TRUST FUND												
		(iii) OTHER LC												
		B. P.L. 480 LC												
		(i) LC COSTS CHGD TO \$ ACCTS. 2/												
		(ii) TRUST FUND												
		(iii) OTHER LC												
		B. P.L. 480 LC												
		(i) LC COSTS CHGD TO \$ ACCTS. 2/												
		(ii) TRUST FUND												
		(iii) OTHER LC												
		B. P.L. 480 LC												
		(i) LC COSTS CHGD TO \$ ACCTS. 2/												
		(ii) TRUST FUND												
		(iii) OTHER LC												
		B. P.L. 480 LC												
		(i) LC COSTS CHGD TO \$ ACCTS. 2/												
		(ii) TRUST FUND												
		(iii) OTHER LC												
		B. P.L. 480 LC												
		(i) LC COSTS CHGD TO \$ ACCTS. 2/												
		(ii) TRUST FUND												
		(iii) OTHER LC												
		B. P.L. 480 LC												
		(i) LC COSTS CHGD TO \$ ACCTS. 2/												
		(ii) TRUST FUND												
		(iii) OTHER LC												
		B. P.L. 480 LC												

REMARKS:  
1/ Exchange Rate: \$1 = Rs. 4.7876  
2/ The total dollar equivalent amounts are the same as in Col. I of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES PARTICIPANT TRAINING			4. PROJECT NO.											
	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
		Non U.S.																						
B. ON BOARD	U.S.																							
	Non U.S.																							
II. PARTICIPANTS PROGRAMMED	A. U.S.																							
	B. THIRD CTRY.																							

REMARKS:  
1/ End of Fiscal Year  
\* Loan # C-86-7  
\*\* No loan number assigned as yet  
Refers to Annex 13 of LAS

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-230-327	Ex-Cell-O India Limited, Bombay
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1. Activity Target

This is joint venture between Amerind Engineering Private Ltd., Bombay and Ex-Cell-O Corporation, Detroit, Michigan, was incorporated in 1958. The U.S. company owns 80 percent of the common stock.

In 1960 the company received a Cooley Amendment loan of Rs. 2 million to finance the establishment of a plant at Bombay, to manufacture machine tools and parts for automotive, tractor and other related industries. Production commenced in early 1961.

In June 1964, the company applied for a second Cooley loan in the amount of Rs. 6,365,000 to assist in financing its planned expansion which calls for increasing its capacity for production of precision machine tools and components for the automotive industry, and to establish facilities to manufacture steering gear assemblies.

Successful implementation of this project would increase Ex-Cell-O's share of the Indian market to about 70 percent for propellor shafts, 80 percent for spare parts and components and 30 percent for steering gear assemblies required by the automotive industry. The company anticipates no machine tool competition, since there are very few if any manufacturers of high precision tools. Furthermore the products of this company would save approximately Rs. 43 million per year of foreign exchange for India by import replacement. The company expects to complete its expansion program by 1965.

2. Progress To Date

This loan application is under intensive review by A.I.D.

**PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES**

E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		END FY		4. PROJECT NO.		5. TITLE				
	1 November 1964		India		Funding	1965	1965	1965	1967	386-44-130-329		Hindustan Allied Chemicals, Ltd., Hyderabad			
7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)					
	(1)	(2)	(3)	(1)		(2)		(1)	(2)	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER			
	TYPE	SOURCE	LOAN OR GRANT	DOLLAR EQUIVALENTS (000) 1/		LOCAL CURRENCY UNITS (000)		OBLIGATED	DISBURSED	OBLIGATED	DISBURSED	(a)	(b)	(a)	(b)
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC														
TOTAL ACTUAL FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC														
II OPERATIONAL YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC	104(e) Cooley L*		9,942	3,133	47,600	15,000	47,600	15,000	-	-	-	-	-	-
III BUDGET YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC	104(e) Cooley L*			5,222	-	25,000	-	25,000	-	-	-	-	-	-
IV PLANNING YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC	104(e) Cooley L*		1,587		7,600			7,600						
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC														
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
	B. P.L. 480 LC	104(e) Cooley L*		9,942	9,942	47,600	47,600	47,600	47,600	-	-	-	-	-	-

REMARKS:

1/ Exchange Rate: \$1 = 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES PARTICIPANT TRAINING			BEG. FY		END FY		4. PROJECT NO.							
	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
I PROJECT PERSONNEL	A. MAN YEARS	U.S.		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
		Non U.S.																						
B. ON BOARD	U.S.																							
		Non U.S.																						
II. PARTICIPANTS PROGRAMMED	A. U.S.																							
	B. THIRD CTRY.																							

REMARKS:

1/ End of Fiscal Year

\* Cooley Loan

Refers to Annex 13 of LAS

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-44-130-329	Hindustan Allied Chemicals, Ltd, Hyderabad
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## 1. Activity Target

The promoters in this enterprise are Andhra Sugars Ltd., Tanuku, Andhra Pradesh and Allied Chemical Corporation, New York, the latter owning 40 percent of the company's common stock. It is proposed to establish a plant at Kothagudem, 150 miles north-east of Hyderabad in Andhra Pradesh, for the manufacture and sale of ammonia and urea fertilizer. Plant construction which is to be undertaken soon will take two years and full production of 66,000 metric tons of nitrogen per annum is expected by late 1967.

India's Third Five Year Plan envisages a 32 percent increase in the production of foodgrains by 1965-66 over 1960-61. However, according to Hindustan Allied, the total area presently under cultivation in India is about 360 million acres against 420 million acres in the United States. Considering India's geographical features and the high proportion of land already under cultivation, little increase in food production can be expected through any substantial increase in the acreage under cultivation. The only alternative available for increase in food production is, therefore, more intensive cultivation of available crop land by irrigation and extensive use of chemical fertilizers and insecticides. The company further reports that the total value of imports during 1962-63 of nitrogenous fertilizers amounted to Rs. 245.6 million of which approximately Rs. 147 million and Rs. 91.3 million was for imports of ammonium sulphate and urea respectively.

The successful implementation of this project will save nearly Rs. 80 million per annum in import of fertilizer, resulting in approximately Rs. 240 million worth of additional food production. An important factor in the process employed by the company is the almost complete absence of raw material import requirements.

## 2. Progress To Date

The company is negotiating with the Andhra State Government for a 3000-acre plot of land, and its application for a Cooley loan of Rs. 47.6 million to meet local currency costs is under AID review. It also has applied for a World Bank dollar loan of the equivalent of Rs. 81.7 million for financing foreign exchange costs in connection with its project. It is expected that these loans will be authorized by the end of FY 65 and construction started early in 1966.

UNCLASSIFIED

SECURITY CLASSIFICATION

PAGE NO.

AD-105

PROJECT DATA SUMMARY — AID DOLLAR COSTS

E-1a

1. DATA CURRENT AS OF: 1 November, 1964		2. COOPERATING COUNTRY INDIA		3. PROJECT NO.		4. TITLE Goal : Health	
5. U.S. FUNDING:		BEGIN FY 1958		END FY 1969		6. PRIOR REFERENCES	
PHYSICAL WORK:		1958		1970			

7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)	a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
					(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	
					AID	PASA										
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	97,548	35	2,743	470	35	1,924	-	92,357	-	19	-		
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	506	34	184	70	34	190	-	26	-	2	-		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	97,124	1	2,725	467	1	1,708	-	92,204	-	19	-	381 <sup>a/</sup>	-
	EXPENDITURES (ACTUAL YEAR)	TC	G	559	-	167	69	-	205	-	113	-	5	-		
C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	424	34	18	3	34	216	-	153	-	-	-			
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	498	-	204	87	-	201	-	6	-	-	-		
	B. EXPENDITURES	TC	G	505	13	167	85	13	190	-	50	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	417	21	55	5	21	227	-	109	-	-	-		
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TC	G	596	-	174	166	-	256	-	-	-	-	-		
	B. EXPENDITURES	TC	G	588	8	176	162	8	209	-	33	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	425	13	53	9	13	274	-	76	-	-	-		
IV. PLANNING YR. (EST.) FY	GROSS OBLIGATIONS 2/	TC	G	546	-	108	182	-	256	-	-	-	-	-	590	5
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	271	-	26	137	-	108	-	-	-	-	-	639	8
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	99,459 <sup>a/</sup>	35	3,255	1,042	35	2,745	-	92,363	-	19	-	99,427	35

REMARKS:

- 1/ This is a memorandum (non-add) column.
- 2/ Show estimated expenditures in column i.

a/ Includes closed projects \$32,032, L/C charged to dollar account \$285.

AID 1020-3 (7-64)	PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES										SECURITY CLASSIFICATION UNCLASSIFIED		
E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY END FY			4. PROJECT NO.		5. TITLE		6. PRIOR REFERENCES:	
	1 November 1964		INDIA		Funding	1958	1969			Goal: Health			
7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1)	(2)	(3)	(1)		(2)		(1)	(2)	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
	TYPE	SOURCE	LOAN OR GRANT	DOLLAR EQUIVALENTS (000) 1/		LOCAL CURRENCY UNITS (000)		OBLIGATED	DISBURSED	(a)	(b)	(a)	(b)
			OBLIGATED	DISBURSED	OBLIGATED	DISBURSED			U.S. PERS.	NON-U.S. PERS.	OBLIGATED	DISBURSED	
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		581		2,787							
	FA ACT	(ii) TRUST FUND Govt. Rev.	-	122	585	581	-	-	1,344	-	585	1,443*	
		(iii) OTHER LC Sec. 402	G	834	3,994	3,594	-	-	1,246	-	2,645	2,348	
		B. P.L. 480 LC Sec. 104(e)	G	204,821	980,600	980,600	288,200	288,200	-	-	692,400	692,400	
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND Govt. Rev.	-	28	102	101	-	-	-	-	102	101	
		(iii) OTHER LC Sec. 402	G	137	658	1,049	-	-	287	-	297	762	
		B. P.L. 480 LC Sec. 104(e)	G	60,196	288,200	437,736	125,200	166,406	-	-	163,000	271,330	
II OPERATIONAL YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND Govt. Rev.	-	21	101	101	-	-	-	-	101	101	
		(iii) OTHER LC Sec. 402	G	199	954	904	-	-	524	-	356	380	
		B. P.L. 480 LC Sec. 104(e)	G	29,492	141,200	141,200	69,000	69,000	-	-	72,200	72,200	
III BUDGET YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND Govt. Rev.	-	29	135	135	-	-	-	-	135	135	
		(iii) OTHER LC Sec. 402	G	221	1,059	1,050	-	-	690	-	387	360	
		B. P.L. 480 LC											
IV PLANNING YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND Govt. Rev.	-	25	124	128	-	-	-	-	124	128	
		(iii) OTHER LC Sec. 402	G	192	920	945	-	-	617	-	334	328	
		B. P.L. 480 LC											
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND Govt. Rev.	-	16	77	77	-	-	-	-	77	77	
		(iii) OTHER LC Sec. 402	G	101	483	917	-	-	497	-	114	420	
		B. P.L. 480 LC											
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		581*		2,787							
	FA ACT	(ii) TRUST FUND Govt. Rev.	-	213*	1,022	1,022	-	-	-	-	1,022	1,022*	
		(iii) OTHER LC Sec. 402	G	1,547*	7,410	7,410	-	-	3,574	-	3,836	3,836*	
		B. P.L. 480 LC Sec. 104(e)	G	234,313*	1,121,800	1,121,800	357,200	357,200*	-	-	764,600	764,600	

REMARKS:  
 1/ Exchange Rate: \$1 = Rs. 4.7876  
 2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a  
 \*Includes closed projects PL 480 \$6,057 L/C charged to billar Account \$285  
 Trust Fund \$ 64  
 Sec. 402 \$ 76

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS										1. DATA CURRENT AS OF:		2. COOPERATING CTRY.		3. PERSONNEL SERVICES		BEG. FY END FY		4. PROJECT NO.				
											1 November 1964		INDIA		PARTICIPANT TRAINING		1958 1969		Goal: Health				
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY			b. ACTUAL FY 64			c. OPERATIONAL FY 65			d. BUDGET FY 66			e. PLANNING FY 67			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS				
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract		
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	87.1	58.84	-	12.0	4.1	-	9.3	4.2	1.0	9.1	8.7	1.0	5.8	10.5	.3	1.0	7.6	-	112.3	89.8	2.3
		Non U.S.																					
B. ON BOARD	U.S.				11	4			10	6	1	9	9	1	7	9	1						
	Non U.S.																						
II. PARTICIPANTS PROGRAMMED	A. U.S.		399						38			46			46			16			545		
	B. THIRD CTRY.																						

REMARKS:  
 1/ End of Fiscal Year  
 1/ Includes 16.5 for closed projects addressed to this goal.  
 2/ Includes 23.2 for closed projects addressed to this goal.  
 3/ Includes 119.0 for closed projects addressed to this goal.

DONATING COUNTRY		SECURITY CLASSIFICATION			MULTI-YEAR LISTING		Goal : Health					E-4
INDIA		UNCLASSIFIED										
Title of Goal or Activity		\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year	Operational Year	Budget	Budget +1	Budget +2	Budget +3	Budget +4	All Subsequent Years	Total All Years
				FY 1964	FY 1965	FY 1966	FY 1967	FY 1968	FY 1969	FY		
Educator Training	DL											
	DG		1,651	190	147	162	132	-	-	-	-	2,092
	SA											
	480		15,457	4,177	4,177	-	-	-	-	-	-	19,634
	L/C		369	67	62	56	44	-	-	-	-	531
	Coop. C.											
College Development	DL											
	DG		1,064	152	160	150	120	94	-	-	-	1,588
	SA											
	480											
	L/C		166	28	53	49	39	28	-	-	-	335
	Coop. C.											
Health Education	DL											
	DG		333	73	81	86	67	-	-	-	-	567
	SA											
	480											
	L/C		54	15	40	29	28	-	-	-	-	151
	Coop. C.											
Education	DL											
	DG		62,357	55	53	81	78	-	-	-	-	62,569
	SA											
	480		144,624	34,046	15,080	-	-	-	-	-	-	159,704
	L/C		89	21	20	34	34	-	-	-	-	177
	Coop. C.											
Controllable Disease Control	DL											
	DG		111	36	57	117	149	177	-	-	-	611
	SA											
	480											
	L/C		80	6	24	53	47	48	25	-	-	277
	Coop. C.											
Other												

SECURITY CLASSIFICATION

AID FORM 10-112 (7-62)	DATE PREPARED 1 November 1964	COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION		MULTI-YEAR LISTING					Goal : Health		E-4		
			UNCLASSIFIED		Actual Year	Operational Year	Budget	Budget +1	Budget +2	Budget +3	Budget +4		All Subsequent Years	Total All Years
Goal Code or Activity Code	Title of Goal or Activity		\$ 1,000 Obligations	Cumulative Through Actual Year	FY 1964	FY 1965	FY 1966	FY 1967	FY 1968	FY 1969				
386-11-550-216	Primary Health Centers		DL											
			DG											
			SA											
			480	20,428	5,806	5,493	-	-	-	-	-	-	-	25,921
			L/C											
			Coop. C.											
386-11-550-217	Smallpox Eradication		DL											
			DG											
			SA											
			480	18,255	16,167	4,742	-	-	-	-	-	-	-	22,997
			L/C											
			Coop. C.											
	TOTALS : Health Goal		DL											
			DG	65,516	506	498	596	546	271	-	-	-	67,427	
			SA											
			480	198,764	60,196	29,492	-	-	-	-	-	-	-	228,256
			L/C	758	137	199	221	192	76	25	-	-	-	1,471
			Coop. C.											
			DL											
			DG											
			SA											
			480											
			L/C											
			Coop. C.											
			DL											
			DG											
			SA											
			480											
			L/C											
			Coop. C.											

SECURITY CLASSIFICATION

PAGE AE-4

BEST AVAILABLE

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA		3. PROJECT NO. 386-11-540-123 386-31-540-123				4. TITLE Medical Educator Training							
	5. U.S. FUNDING:		BEGIN FY		END FY		6. PRIOR REFERENCES									
	PHYSICAL WORK:		1958		1967											
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a.	b.	c.	d.	e.		f.		g.		h.		i.		
		APPROPRIATION TITLE	LOAN OR GRANT	TOTAL	CONTRACT 1/	PERSONNEL SERVICES		PARTICIPANTS		COMMODITIES		OTHER COSTS		LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	1,651	34	408	-	34	968	-	233	-	8	-		
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	190	34	45	-	34	103	-	7	-	1	-		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	1,453	-	392	-	-	848	-	204	-	9	-	132	-
	EXPENDITURES (ACTUAL YEAR)	TC	G	205	-	31	-	-	142	-	29	-	3	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	198	34	16	-	34	120	-	29	-	(1)	-		
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	147	-	56	-	-	90	-	1	-	-	-		
	B. EXPENDITURES	TC	G	180	13	40	-	13	113	-	15	-	(1)	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	165	21	32	-	21	97	-	15	-	-	-		
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TC	G	162	-	37	-	-	125	-	-	-	-	-		
	B. EXPENDITURES	TC	G	174	8	39	-	8	120	-	7	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	153	13	30	-	13	102	-	8	-	-	-		
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/	TC	G	132	-	7	-	-	125	-	-	-	-	-	148	5
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G												124	8
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	2,092	34	508	-	34	1,308	-	234	-	8	-	2,058	34

## REMARKS:

Refers to LAS Annex 17

- 1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

AID 1080-0 (7-64)	PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES								SECURITY CLASSIFICATION UNCLASSIFIED					
E-1b	1. DATA CURRENT AS OF:	2. COOPERATING COUNTRY		3. BEG. FY		4. PROJECT NO.		5. TITLE						
	1 November 1964	INDIA		Funding 1958	1967	386-11-540-123		Medical Educator Training						
7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
	(1) TYPE	(2) SOURCE	(3) LOAN GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON- U.S. PERS.	(a) OBLIGATED	(b) DISBURSED	
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	TC		132		632				87			545
	FA	(ii) TRUST FUND	Govt. Rev.	-	16	16	80	77	-	-	-	-	80	77
	ACT	(iii) OTHER LC	Sec. 402	G	369	312	1,769	1,496	-	-	337	-	1,315	1,159
		B. P.L. 480 LC	Sec. 104(e)	G	15,457	15,457	74,000	74,000	74,000	74,000				
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA	(ii) TRUST FUND	Govt. Rev.	-	8	8	37	36	-	-	-	-	37	36
	ACT	(iii) OTHER LC	Sec. 402	G	67	68	321	326	-	-	56	-	175	270
		B. P.L. 480 LC	Sec. 104(e)	G	4,177	7,321	20,000	35,050	20,000	35,050				
II OPERATIONAL YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA	(ii) TRUST FUND	Govt. Rev.	-	4	4	20	20	-	-	-	-	20	20
	ACT	(iii) OTHER LC	Sec. 402	G	62	60	297	288	-	-	84	-	153	204
		B. P.L. 480 LC	Sec. 104(e)	G	4,177	4,177	20,000	20,000	20,000	20,000				
III BUDGET YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA	(ii) TRUST FUND	Govt. Rev.	-	3	3	14	14	-	-	-	-	14	14
	ACT	(iii) OTHER LC	Sec. 402	G	50	60	268	285	-	-	75	-	211	210
		B. P.L. 480 LC												
IV PLANNING YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA	(ii) TRUST FUND	Govt. Rev.	-	-	-	2	5	-	-	-	-	2	5
	ACT	(iii) OTHER LC	Sec. 402	G	44	50	211	241	-	-	60	-	182	181
		B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA	(ii) TRUST FUND												
	ACT	(iii) OTHER LC	Sec. 402	G	-	49	-	235	-	-	128	-	-	107
		B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA	(ii) TRUST FUND	Govt. Rev.	-	23	23	116	116	-	-	-	-	116	116
	ACT	(iii) OTHER LC	Sec. 402	G	531	531	2,545	2,545	-	-	684	-	1,861	1,861
		B. P.L. 480 LC	Sec 104(e)	G	19,634	19,634	94,000	94,000	94,000	94,000				

## REMARKS:

1/ Exchange Rate: \$1 = Rs.4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS										1. DATA CURRENT AS OF:		2. COOPERATING CTRY.		3. PERSONNEL SERVICES		4. PROJECT NO.					
											1 November 1964		INDIA		1958 1967		386-11-540-123					
8. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		a. CUM. THRU ACTUAL FY			b. ACTUAL FY 64			c. OPERATIONAL FY 65			d. BUDGET FY 66			e. PLANNING FY 67			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	20.4	-	-	2.4	-	-	2	-	1	1.2	-	1	.6	-	-	-	-	24.0	-	2.3
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. ON 1 BOARD	U.S.	-	-	2	-	-	2	-	1	2	-	1	-	-	1	-	-	-	-	-	-
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II. PARTICIPANTS PROGRAMMED		A. U.S.	201	-	-	18	-	-	18	-	-	25	-	-	25	-	-	-	-	269	-	-
		B. THIRD CTRY.																				

## REMARKS:

1/ End of Fiscal Year

SECURITY CLASSIFICATION UNCLASSIFIED

PAGE NO.

AE-6

AID 1020-1 (7-64)	1. DATA CURRENT AS OF:	2. COOPERATING COUNTRY	SECURITY CLASSIFICATION		
E-1	1 November 1964	INDIA	UNCLASSIFIED	386-11-540-123	Medical Educator Training

### 1. The Activity Target

To upgrade the quality of two out of the 74 medical colleges in the country so they may serve as incentives for other colleges, and to strengthen through participant training the faculties of these and other colleges so as to improve generally their teaching standards.

The ultimate objective of all activity in the field of health is the attainment of a healthier and thus more productive populace through the prevention of disease and disability, permitting the individual to realize more nearly his full potential. The planned objective of this project is assistance in the improvement of the quality of medical education and in the production of a greater number of adequately trained medical personnel, leading to better organized and more efficient personal and community health services.

### 2. The Course of Action

It is proposed to assist in the achievement of the above objectives by increasing the number of teachers in medical colleges and by demonstrating desirable U. S. teaching methods and related practices. Specific technician activity is to be centered in the medical college, Trivandrum, and Osmania Medical College, Hyderabad, to which medical educators and hospital administrators are to be assigned. Participants, generally junior faculty members from these two colleges and others, will be trained in the U.S.

There are only four U. S. technicians in this project, including project manager, and it is not planned to replace them at the conclusion of their tours of duty. (1) Professor of Preventive and Social Medicine, in a contract position for two years effective October 1964, to 1966, will be posted to the Trivandrum Medical College to assist in the upgrading of the Department of Preventive and Social Medicine, which primarily is concerned with public health and relates closely to rural health service. This follows the precedent of upgrading those Departments at the All India Institute of Medical Sciences, New Delhi, and the Osmania Medical College at Hyderabad. (2) Medical Records Advisor will be assigned to the Central Ministry of Health for one year, to service requests from six Indian States for assistance in upgrading their hospital medical records departments. This will exploit the present great interest in hospital medical records, without which hospitals cannot serve their proper functions, in patient care, in medical education teaching or in research, and will assist in the training of paramedical personnel (auxiliary health workers) in record keeping practices in the rural health network. (3) Hospital Administration Advisor, who is now in India, assigned to the Trivandrum Medical College. He will assist in the upgrading of the administration in that large teaching hospital. (4) Project Manager.

These four U. S. technicians will continue during FY 1965. One short-term consultant will be provided to set up a tissue culture laboratory at the Osmania Medical College, Hyderabad, cost \$56,000. Eighteen participants will be sent to the U. S. for training, most of them for 12 months and a few for six months, in clinical and pre-clinical subjects, all to be drawn from the Medical Colleges in Trivandrum and Hyderabad and those states assisted previously under this project. Cost \$90,000, and Section 402 Rs. equivalent of \$27,000. To pay for all Center and State rupee costs of the program during the Third Five Year Plan, the USAID will provide the equivalent of \$4,177,000. All of this sum will derive from PL 480 grants.

The principal areas of training for participants in Medical Education in FY 1966 and FY 1967 will be in public health and preventive and social medicine. There are too few medical educators with post-graduate training in these fields to be of much assistance in teaching. Unless this training can be fostered, there will continue to be a shortfall in adequately trained positions for the rural health complex.

During FY 1966 and FY 1967, the technician strength will be as follows :

<u>FY 1966</u>	<u>ETA</u>	<u>ETD</u>	<u>Man Years</u>
1. Professor of Prev. & Soc. Med.	9/64	9/66	1 - 0
2. Hosp. Administration Advisor	4/64	4/66	0 - 10
3. Medical Records Advisor	9/62	7/64	
	10/64	10/65	0 - 4
4. Project Manager	1/65	1/67	1 - 0
			<u>3 - 2</u>

### FY 1967

1. Prof. of Prev. & Soc. Med. (Contract)	9/64	9/66	0 - 3
2. Project Manager	1/65	1/67	0 - 6

Participant training will continue at the level of 25 each during FY 1966 and FY 1967.

When tours of duty of the above three technicians end, the institution building feature of this project will be completed. Until that time they will have the additional duties of helping to improve the rural health services, consistent with the LAS. According to the LAS an important element in the US AID plan to assist in the GOI population stabilization program is to assist in the training of paramedical personnel to staff the huge network of health facilities and

AID 10204 (7-64)	1. DATA CURRENT AS OF:	2. COOPERATING COUNTRY	SECURITY CLASSIFICATION		
u-1	1 November 1964	INDIA	UNCLASSIFIED	386-11-540-123	Medical Educator Training

services necessary to carry out family planning and other health activities.

### 3. Progress To Date

AID has made important contributions to improvement in the quality of medical manpower. To date this activity has provided 21 man years of technician services, including almost five man years at the AIIMS and two man years at the Lady Hardinge Medical College in Delhi. The bulk of the services (14 man years) were given to the Trivandrum and Osmania Medical Colleges.

Through meetings and seminars conducted by U. S. short-term consultants, new ideas and stimuli for change are being promoted by Indian medical organizations. Indications of the progress made in this direction are the Anatomy Seminar held in Bangalore in June 1963 and the Medical Education Seminar held in Madras in February 1964.

A total of 229 medical faculty members from approximately 40 medical colleges, including those at Trivandrum and Hyderabad, received postgraduate training in the U.S. They are back at their respective colleges and are effecting certain changes in course content and teaching methods.

The Hospital Administration Advisor stationed in New Delhi assisted the AIIMS in planning the construction and organization of the Out-Patient Department block, formally opened on October 2, 1964.

In general, progress towards the activity targets, though hard to measure quantitatively, has been very satisfactory.

### 4. Funding Requirements

It is expected that the institution building aspect of this activity will terminate in FY 1967. The total dollar cost from inception in FY 1958 until termination will be \$2,092,000 broken down by project elements as follows:

Technicians	\$ 542,000 + 88,000 for other costs
Participants	1,308,000
Commodities	234,000

During FY 1965 the four U. S. technicians will continue their services and a 3-months consultant will be provided. Total technician cost \$56,000.

Eighteen participants will be sent to the U. S. for training at a cost of \$90,000.

Commodities in support of U. S. technicians will be given, \$1,000.

Section 402 Rs. equivalent to \$62,000 will defray cost of international travel of participants (\$27,000) and technicians (30,000) and cost of a seminar (\$5,000).

During FY 1966, it is estimated that the total dollar cost of the project will be \$162,000 as follows:

Position	Location	ETA	ETD	\$ Cost
1. Prof. of Prev. & Soc. Med.	Trivandrum	9/64	9/66	Contract
2. Hosp. Admin. Advisor (R-3)	,,	4/64	4/66	15,300
3. Med. Records Advisor (R-5)	New Delhi	10/64	10/65	4,600
4. Project Manager (R-4)	,,			17,500

U. S. training for 25 participants (most of them for 12 months training and a few for six months) will be provided at a cost of \$125,000.

Section 402 Rs. equivalent to \$56,000 will defray cost of international travel of participants (\$38,000) and technicians (\$12,000). It is proposed to hold a medical education seminar during this FY supported by AID local currency (\$6,000).

In FY 1967, the Professor of Preventive and Social Medicine and the Project Manager will continue for a short period. Total Technician Cost \$7,800. U. S. training for 25 participants will be provided, at a cost of \$125,000. Section 402 Rs. equivalent to \$44,000 will defray cost of international travel of participants (\$38,000), technician (\$6,000).

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS											SECURITY CLASSIFICATION UNCLASSIFIED			
E-1a	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-11-540-124			4. TITLE Nursing College Development								
	5. U.S. FUNDING: PHYSICAL WORK:	BEGIN FY 1958		END FY 1968		6. PRIOR REFERENCES										
		1958		1969												
7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)	APPROPRIATION TITLE	a.	b.	c. TOTAL	d. CONTRACT <sup>1/</sup>	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	1,064	1	443	282	1	268	-	64	-	6	-		
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	152	-	102	9	-	36	-	4	-	1	-		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	991	1	442	280	1	210	-	52	-	6	-	107	-
	EXPENDITURES (ACTUAL YEAR)	TC	G	164	-	99	9	-	47	-	7	-	2	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	73	-	1	2	-	28	-	12	-	-	-		
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	160	-	84	9	-	65	-	2	-	-	-		
	B. EXPENDITURES	TC	G	136	-	65	11	-	55	-	5	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	97	-	20	-	-	68	-	9	-	-	-		
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TC	G	150	-	70	12	-	68	-	-	-	-	-		
	B. EXPENDITURES	TC	G	145	-	69	12	-	61	-	3	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	102	-	21	-	-	75	-	6	-	-	-		
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS <sup>2/</sup>	TC	G	120	-	41	11	-	68	-	-	-	-	-	125	-
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>	TC	G	94	-	26	-	-	68	-	-	-	-	-	191	-
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>	TC	G	1,588	1	664	314	1	537	-	66	-	6	-	1,587	1

## REMARKS:

<sup>1/</sup> This is a memorandum (non-add) column.<sup>2/</sup> Show estimated expenditures in column i.

Refers to LAS Annex 17

AID 1020-3 (7-64)	PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES										SECURITY CLASSIFICATION UNCLASSIFIED			
E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		END FY		4. PROJECT NO.		5. TITLE			
	1 November 1964		INDIA		Funding		1958 1968		386-11-540-124		Nursing College Development			
					Phys. Work		1958 1969				6. PRIOR REFERENCES:			
7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED	
I CUMULATIVE THRU ACTUAL YEAR	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/		G		107		512			254				
	FA ACT (ii) TRUST FUND	Govt. Rev.		27	27	131	131					131	131	
	(iii) OTHER LC	Sec. 402	G	166	158	797	756			349		461	407	
	B. P.L. 480 LC													
TOTAL ACTUAL FY 1964	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT (ii) TRUST FUND	Govt. Rev.		11	10	27	27					27	27	
	(iii) OTHER LC	Sec. 402	G	28	45	135	216			86		43	130	
	B. P.L. 480 LC													
II OPERATIONAL YEAR (EST.) FY 1965	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT (ii) TRUST FUND	Govt. Rev.		7	7	32	32					32	32	
	(iii) OTHER LC	Sec. 402	G	53	53	254	253			187		54	66	
	B. P.L. 480 LC													
III BUDGET YEAR (EST.) FY 1966	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT (ii) TRUST FUND	Govt. Rev.		6	6	30	30					30	30	
	(iii) OTHER LC	Sec. 402	G	49	50	235	238			177		58	61	
	B. P.L. 480 LC													
IV PLANNING YEAR (EST.) FY 1967	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT (ii) TRUST FUND	Govt. Rev.		5	5	23	23					23	23	
	(iii) OTHER LC	Sec. 402	G	39	39	187	188			129		58	59	
	B. P.L. 480 LC													
V ALL SUBSEQUENT FYs (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT (ii) TRUST FUND	Govt. Rev.		2	2	9	9					9	9	
	(iii) OTHER LC	Sec. 402	G	28	35	134	172			77		57	95	
	B. P.L. 480 LC													
VI TOTAL ALL YEARS (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT (ii) TRUST FUND	Govt. Rev.		47	47	225	225					225	225	
	(iii) OTHER LC	Sec. 402	G	335	335	1,607	1,607			919		688	688	
	B. P.L. 480 LC													

## REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS										1. DATA CURRENT AS OF:		2. COOPERATING CTRY.		3. PERSONNEL SERVICES		BEG. FY		END FY		4. PROJECT NO.					
	PERSONNEL AND PARTICIPANTS										1 November 1964		INDIA		PARTICIPANT TRAINING		1958 1968		1958 1969		386-11-540-124					
	b. ACTUAL FY 64					c. OPERATIONAL FY 65					d. BUDGET FY 66			e. PLANNING FY 67			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS						
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract			
																								Non U.S.	Non U.S.	Non U.S.
II. PARTICIPANTS PROGRAMMED	A. U.S.		36.7	23.3	-	6.8	.6	-	5.6	.6	-	5.9	.1	-	3.2	.9	-	1	-	-	52.4	24.9	-			
	B. ON BOARD	U.S.				5	2	-	6	1	-	5	1	-	5	-	-									
		Non U.S.																								
	B. THIRD CTRY.		38	-	-	6	-	-	8	-	-	8	-	-	8	-	-	8	-	-	70	-	-			

## REMARKS:

1/ End of Fiscal Year

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO.

AE-10

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		END FY		4. PROJECT NO.		5. TITLE					
	1 November 1964		INDIA		Funding	1958	1968	1968	386-11-540-124		Nursing College Development					
7. OBLIGATED AND DISBURSED	g. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)				d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
	(1) TYPE		(2) SOURCE	(3) LOAN GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED		(2) DISBURSED		(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
					(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED	OBLIGATED	DISBURSED	(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED		
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G		107	512					254		258		
	FA ACT	(ii) TRUST FUND Govt. Rev.		-	27	27	131	131	-	-	-	-	131	131		
		(iii) OTHER LC Sec. 402		G	166	158	797	756	-	-	349	-	461	407		
	B. P.L. 480 LC															
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT	(ii) TRUST FUND Govt. Rev.		-	11	10	27	27	-	-	-	-	27	27		
		(iii) OTHER LC Sec. 402		G	28	45	135	216	-	-	86	-	43	130		
	B. P.L. 480 LC															
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT	(ii) TRUST FUND Govt. Rev.		-	7	7	32	32	-	-	-	-	32	32		
		(iii) OTHER LC Sec. 402		G	53	53	254	253	-	-	187	-	54	66		
	B. P.L. 480 LC															
III BUDGET YEAR (EST.) FY 1966	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT	(ii) TRUST FUND Govt. Rev.		-	6	6	30	30	-	-	-	-	30	30		
		(iii) OTHER LC Sec. 402		G	49	50	235	238	-	-	177	-	58	61		
	B. P.L. 480 LC															
IV PLANNING YEAR (EST.) FY 1967	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT	(ii) TRUST FUND Govt. Rev.		-	5	5	23	23	-	-	-	-	23	23		
		(iii) OTHER LC Sec. 402		G	39	39	187	188	-	-	129	-	58	59		
	B. P.L. 480 LC															
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT	(ii) TRUST FUND Govt. Rev.		-	2	2	9	9	-	-	-	-	9	9		
		(iii) OTHER LC Sec. 402		G	28	35	134	172	-	-	77	-	57	95		
	B. P.L. 480 LC															
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT	(ii) TRUST FUND Govt. Rev.		-	47	47	225	225	-	-	-	-	225	225		
		(iii) OTHER LC Sec. 402		G	335	335	1,607	1,607	-	-	919	-	688	688		
	B. P.L. 480 LC															

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES		BEG. FY		END FY		4. PROJECT NO.						
	1 November 1964			INDIA			PARTICIPANT TRAINING		1958	1968	1958		1969		386-11-540-124							
I PROJECT PERSONNEL	g. CUM. THRU ACTUAL FY			b. ACTUAL FY 64			c. OPERATIONAL FY 65			d. BUDGET FY 66			e. PLANNING FY 67			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
A. MAN YEARS	U.S.	36.7	23.3	-	6.8	.6	-	5.6	.6	-	5.9	.1	-	3.2	.9	-	1	-	-	52.4	24.9	-
	Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B. ON BOARD	U.S.	-	-	-	5	2	-	6	1	-	5	1	-	5	-	-	-	-	-	-	-	-
	Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II. PARTICIPANTS PROGRAMMED	A. U.S.	38	-	-	6	-	-	8	-	-	8	-	-	8	-	-	8	-	-	70	-	-
	B. THIRD CTRY.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

REMARKS:

1/ End of Fiscal Year

AID 1020-1 (7-64) E-1	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-540-124	Nursing College Development
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### Background

In India the professional colleges of State Universities are related administratively, but not academically, to the State Ministries; universities retain academic authority. Ministries are responsible for providing services to meet health needs. To this end Health Ministry Deputy Directors design programs for assigning and supervising personnel; they administer the budget for supplies and staff of colleges for education in the health profession, for other educational and training programs and for the hospitals and health services to the population, which include the district health offices and the primary health centers.

The Directorate General of Nursing is a recent addition to Ministry administration in most states. Its essential role is to inter-relate all types of nursing personnel services into both the urban and rural health programs; this requires leadership support, knowledge of need, and experience in guidance.

State college faculties are responsible for assisting the nursing Directorate in assessing needs, solving problems and designing programs to meet needs.

#### 1. The Activity Target

The principal element in this project now is to train through university degree programs a cadre of highly educated and qualified nurses to serve as faculty members in educational institutions, directors for hospitals, and directors and supervisors for public health programs, by continuing to assist through 1968 the 4-year basic B.S. degree programs in Andhra Pradesh and through 1966 the Master of Science degree program of the University of Delhi.

#### 2. The Course of Action

This project originally was to assist in upgrading general nursing education through assignment of technicians to hospitals, to nursing colleges and State Governments; to finance training in the US of selected leaders in the profession in India; and to provide a limited amount of scientific equipment, teaching aids and books to six institutions, including four nursing colleges.

During the early period of this program US AID activities consisted largely of providing specialist services to give in-service training in the clinical fields. AID assistance later on has been in the development of colleges of nursing and in improving the efficiency of hospital services in which

nurses and physicians receive professional training, since our assistance to nursing training in India must develop academic and university facilities for teaching teachers. Besides assistance to nursing colleges at Indore and Jaipur which was withdrawn when support from State governments proved inadequate, the resources were concentrated on starting the Osmania College of Nursing at Hyderabad which has graduated its first class after four years of study. The college graduated 10 in 1964; 15 will graduate in 1965 and 20 a year thereafter.

During FY 1965 the four nurse educators assigned to the Osmania College of Nursing, Hyderabad, and the Central Supply Administrative Advisor will continue their services. The Nurse Administration Advisor assigned to the Delhi College of Nursing will enter on duty. Eight Indian participants will be sent to the US for training to equip them to become members of the college teaching staffs, supervisors in training hospitals, and rural public health nurse trainers and supervisors.

During FY 1966 and subsequent years, the following technician strength will be required:

FY 1966		ETA	ETD	Man years
1. Nurse Admn. Advisor	Hyderabad	4/65	4/67	1 - 0
2. P.H. Nurse Supervisor	"	8/63	8/67	1 - 0
3. Medical Surgical Nurse Adv.	"	4/64	4/68	1 - 0
4. M.C.H. Nurse Advisor	"	4/64	4/66	0 - 9
5. Sterile Supply Advisor	"	7/64	7/66	1 - 0
6. Nurse Admn. Advisor	New Delhi	10/64	10/66	1 - 0
				5 - 9

8 Participants (13 man years of training)

FY 1967		ETA	ETD	Man years
1. Nurse Admn. Advisor	Hyderabad	4/65	4/67	0 - 9
2. P.H. Nurse Supervisor	"	8/63	8/67	1 - 0
3. Medical Surgical Nurse Adv.	"	4/64	4/68	1 - 0
4. Sterile Supply Advisor	"	7/64	7/66	0 - 3
5. Nurse Admn. Advisor	New Delhi	10/64	10/66	0 - 3
				3 - 3

8 Participants (13 man years of training)

FY 1968		ETA	ETD	Man years
1. P.H. Nurse Supervisor	Hyderabad	8/63	8/67	0 - 3
2. Medical Surgical Nurse Adv.	"	4/64	4/68	0 - 9
				1 - 0

8 Participants (13 man years of training)

At this point it is expected that the institutional development of this college will be complete enough that U.S. assistance can be terminated through concentration on the following developmental targets:

AID 10204 (7-64) E-1	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-540-124	Nursing College Development
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1. Complete the academic development in public health, FY 65; maternal and child health, FY 67; medical surgical nursing, FY 68; education and administration, FY 68.

2. Inter-relate the faculty and the Ministry direction in nursing, FY 68.

3. Develop preceptorships for the first two years of graduate employment, particularly in rural health and para-medical education, FY 68.

4. Evaluate graduate performance; revise curriculum according to needs; define standards of performance levels for education, FY 68.

5. Develop programs of inter-college support, FY 68.

6. Promote utilization of central services administration in nursing services administration programming, FY 67.

The only other activity proposed under this project is to provide minimum essential guidance to the Delhi University School of Nursing in development of its Master's Degree course in nursing, which prepares experienced degree nurses for posts in education and administration. Two man-years have been programmed of service of an advisor to the principal and other administrative officers of the Delhi College for the development of education in administration in these. The advisor will also guide the program of that college in stimulating mutual assistance among other colleges in this professional field.

The strength of the advisory services at Osmania University and the knowledge developed of experiences in the Delhi University will ~~help~~ help the faculties of both colleges to assist other developing colleges to achieve defined minimum standards.

College of Nursing principals have established an informal group for exchange of information, mutual support and standard setting. This group has an important effect on the Indian Nursing Council, a legally constituted body for establishing and evaluating minimal educational standards of qualified (registered) nursing personnel, nurse midwives, health visitors and auxiliary nurse staff members of the colleges in Delhi and Hyderabad play a dominant role in both these organizations.

(See Note end of E-1)

### 3. Progress to Date

Since its inception in FY 58 the project has provided the services of a total of 45 man years of technician services. This included assignment to the Safdarjang Hospital, New Delhi of a Sterile Supply Advisor for four years (FY 58 through FY 61), a physio-therapist Advisor in FY 58 and FY 59, and a Nurse Advisor

(Recovery Room) in FY 58. A Public Health Nurse Advisor was assigned to the Director of Health Services (Nursing), Rajasthan State in FY 58 and such services were continued through FY 62.

During the project's first two years it financed the services of a Pediatric Nurse Advisor to the Christian Medical College, Vellore; and beginning in FY 59, a Red Cross Nurse Advisor worked with the Indian Red Cross for two years.

With a change in direction and a narrowing of objectives to provide assistance to three nursing colleges (Osmania, Hyderabad; Jaipur and Indore) in 1960 four Nurse Education Advisors were assigned to Indore and one was assigned to Hyderabad. In FYs 1961 and 1962 the Nurse Advisor team at Indore was reduced to three; at the end of FY 62 that team was withdrawn completely because of inadequate support from State health authorities, and in FY 63 assistance was transferred to the College of Nursing, Jaipur, through the services of three advisors formerly at Indore and one other. A team of three Nurse Educators was assigned in FY 61 to Osmania College of Nursing; in FY 62 the Sterile Supply Advisor was transferred to the Osmania Medical College while the three Nurse Education Advisors served at the Osmania Nursing College. In 1963 that nursing team strength increased to four, the level at which it remained in FY 64.

Assistance to Jaipur ended in mid-FY 64 when it became clear that the Rajasthan State Director of Health Services could not meet commitments.

During these six years the project financed training in the US for 38 Indian nursing leaders in programs totalling 558 months and supplied training aids, scientific equipment and books to a total value of about \$52,000 to six medical institutions.

Ten man years of advisory services have been provided at Hyderabad since 1960. Concepts have been developed and academic programming initiated; the first graduates are at work and results of the program are beginning to be seen. Future results are coming into focus and problems to be faced are apparent. The college now has 75 students and 12 Indian faculty members, six of whom have yet to complete Master's Degree in their specialty. The four graduates of the first class have completed one year of preceptorship (graduate in-service training of other students) in the college and a second class of ten will soon be available; eight are to be assigned to hospital positions, and two to a primary health center.

Assistance in college organization and curriculum planning has been provided by each college in response to requests from other existing and projected college programs; students in the Master's degree programs of the University of Delhi received from the College of Nursing, Osmania University guidance and assistance in developing their research problems.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF:	2. COOPERATING COUNTRY	SECURITY CLASSIFICATION		
a-1	1 November 1964	INDIA	UNCLASSIFIED	386-11-540-124	Nursing College Development

The number of applicants for nursing education is increasing, the quality of their background is improved, and they come from a more wide-spread area. More than 80 per cent of the applicants this year were interested in nursing education primarily; previously the largest percentage of applicants applied for nursing education as a second choice, after having been refused by medical colleges. The number of qualified applicants for the college at Hyderabad rose from 9 in 1959 to 102 in 1964. Twenty-two were selected.

During calendar year 1964 two participants returned to Delhi College; one completed her doctorate in education at Columbia University is to assist in the Master's program. The other will assist in the development of clinical education while completing her Master's degree in pediatrics nursing, a rare specialty in India. These two nurses will contribute to the multiplier effect by educating nurse educators. One participant recently returned to teach pediatrics, another two will return to Hyderabad with Master's degrees, one in maternal and child health, one in administration. One participant was deputed to the college this year and is teaching pediatrics nursing.

#### 4. Funding Requirements

It is anticipated that AID will continue support to the Osmania University College of Nursing, Hyderabad, until FY 1968 and to the Delhi College of Nursing to FY 1967, phasing out both as the tours of service of the nurse educators are completed.

Participant training will continue at the FY 1965 level of eight per year to provide training to college staff members, nursing supervisors in urban and rural health agencies and hospitals, and administrators in the Directorates General of nursing in Andhra Pradesh and Delhi states.

The total dollar requirements of this project from inception in FY 1958 until termination in FY 1968 will be \$1,588,000 broken down by project elements as follows:

Technicians	\$ 978,000
Participants	537,000
Commodities	66,000
Contract	1,000
Other Costs	6,000
	<hr/>
	\$ 1,588,000

During FY 1965 the four nurse educators assigned to the Osmania University College of Nursing and the Sterile Supply Advisor will continue their services. The Nursing Administration Advisor at the Delhi College of Nursing will be on board. Total technician cost - \$ 93,000.

U. S. training for eight participants will be given - \$65,000.

Commodities consisting of demonstration materials and audio-visual aids in support of the U. S. technicians will be provided - \$ 2,000.

Section 402 Rs. equivalent to \$ 53,000 to \$53,000 will defray cost of international travel of participants (\$12,000) and technicians (\$41,000).

During FY 1966 it is estimated that the total dollar cost of the project will be \$150,000 as follows:

Four U. S. technicians assigned to the Osmania College of Nursing, Hyderabad, one Central Service Administrative advisor assigned to the State of Andhra Pradesh, and one Nurse Administration Advisor to the Delhi College of Nursing. Total cost, \$82,000. Following is a list of the technicians showing position, ETAs and ETDs:

Position	Location	ETA	ETD	\$ Cost
1. Nurse Adm. Advisor	Hyderabad	4/65	4/67	11,700
2. P. H. Nurse Supervisor	"	8/63	8/67	11,700
3. Medical-Surgical	"	4/64	4/68	9,800
4. M. C. H.	"	4/64	4/66	8,000
5. Central Service Adm. Advisor	"	7/64	7/66	11,700
6. Nurse Adm. Advisor	New Delhi	10/64	10/66	14,100
7. Project Coordinator	"			15,000
				<hr/>
				582,000

Eight participants will be funded at cost of \$68,000, six for 18 months' training and two for two years each. They will be trained nursing education, public health nursing administration, and hospital nursing service, to enable them to take positions of leadership in nursing supervision and education in these colleges.

Section 402 Rs. equivalent to \$49,000 will defray cost of international travel of participants (\$12,000) and technicians' within-India cost of \$37,000.

During FY 1967 the total dollar cost of the project will be \$120,000. Six U. S. technicians, cost \$52,000; eight participants, cost \$68,000. Following is a list of the technicians:

1. Nurse Adm. Advisor	Hyderabad	4/65	4/67	10,000
2. P. H. Nurse Supervisor	"	8/63	8/67	10,000

PAGE NO.

SECURITY CLASSIFICATION

UNCLASSIFIED

AE-13

AID 1020-1 (7-64)	1. DATA CURRENT AS OF:	2. COOPERATING COUNTRY	SECURITY CLASSIFICATION		
B-1	1 November 1964	INDIA	UNCLASSIFIED	386-11-540-124	Nursing College Development

3. Medical Surgical	Hyderabad	4/65	4/67	\$ 10,000
4. Central Sterile Adv.	"	7/64	7/66	4,000
5. Nurse Admn. Adv.	New Delhi	10/64	10/66	4,000
6. Project Coordinator	New Delhi			14,000

work of rural health services, their assignments to the institutional development phase will terminate as indicated above.

The eight participants (six of them for 18 months training and two for two years) will be trained for the same periods in the same fields and for the same purposes as those in FY 1966.

Section 402 Rs. equivalent to \$39,000 will defray cost of international travel of participants (\$12,000) and local costs of technicians (\$27,000).

During FY 1968 the total dollar cost of the project will be \$94,000. Three U. S. technicians, cost \$76,000; eight participants, cost \$68,000.

Following is a list of the technicians :

1. P. H. Nurse Supervisor	Hyderabad	8/63	8/67	\$ 3,000
2. Medical-Surgical	"	4/64	4/68	8,000
3. Project Coordinator	New Delhi			15,000

The training period of the eight participants and their fields of training and the purpose will be the same as in previous years.

Section 402 Rs. equivalent to \$28,000 will be used for international travel of participants (\$12,000) and local costs of technicians (\$16,000).

NOTE:

Consistent with the major US AID/Health objective of assisting the GOI develop a network of health facilities and services and as the Hyderabad Nursing College is being successfully established, the U. S. personnel at the college as well as the graduates will be taking on the added function of assisting the State train and re-train its paramedical nursing services personnel for the State network of rural health facilities. The well trained and properly prepared graduates will thus be integrated into the training and supervision of paramedical personnel for State and District Health services. This paramedical training aspect of rural health development is given top priority by the GOI and one of the principal obstacles to success is the need for assistance in the area of training of all types of paramedical nursing personnel.

Even though each of the present U. S. technicians will assume some of the added job of assisting in the development of the net-

PROJECT DATA SUMMARY — AID DOLLAR COSTS

E-1a

1. DATA CURRENT AS OF:

1 November 1964

2. COOPERATING COUNTRY

INDIA

3. PROJECT NO.

386-11-540-125

4. TITLE

Public Health Education

5.

BEGIN FY

END FY

1958

1967

U.S. FUNDING:

PHYSICAL WORK:

1958

1968

6. PRIOR REFERENCES

7.	AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)	g. APPROPRIATION TITLE	h. LOAN OR GRANT	i. TOTAL	j. CONTRACT 1/	k. PERSONNEL SERVICES			l. PARTICIPANTS		m. COMMODITIES		n. OTHER COSTS		o. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS 1/		
						(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	
						AID	PASA										
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	333	-	113	75	-	88	-	57	-	-	-	-	-	
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	73	-	11	28	-	29	-	5	-	-	-	-	-	
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	292	-	111	74	-	61	-	46	-	-	-	23	-	
	EXPENDITURES (ACTUAL YEAR)	TC	G	48	-	10	26	-	2	-	10	-	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	41	-	2	1	-	27	-	11	-	-	-	-	-	
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	81	-	34	22	-	24	-	1	-	-	-	-	-	
	B. EXPENDITURES			64	-	33	21	-	4	-	6	-	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR			58	-	3	2	-	47	-	6	-	-	-	-	-	
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TC	G	86	-	28	22	-	36	-	-	-	-	-	-	-	
	B. EXPENDITURES			60	-	29	22	-	6	-	3	-	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR			84	-	2	2	-	77	-	3	-	-	-	-	-	
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/	TC	G	67	-	24	7	-	36	-	-	-	-	-	41	-	
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	-	-	-	-	-	-	-	-	-	-	-	110	-	
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	567	-	199	126	-	184	-	58	-	-	-	567	-	

REMARKS:

1/ This is a memorandum (non-add) column.

2/ Show estimated expenditures in column i.

Refers to LAS Annex 17

AID 1020-3 (7-64)	PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES										SECURITY CLASSIFICATION UNCLASSIFIED					
E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. Funding		BEG. FY		END FY		4. PROJECT NO.		5. TITLE			
	1 November 1964		INDIA		Phys. Work		1958		1967		386-11-540-125		Public Health Education			
7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)			d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)					
	(1) TYPE	(2) SOURCE		(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED		(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED					(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED	
I CUMULATIVE THRU ACTUAL YEAR	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/		G		23		111					47			64	
	FA ACT (ii) TRUST FUND	Govt. Rev.	-	7	7	34	33							34	33	
	(iii) OTHER LC	Sec. 402	G	54	48	259	228					165		94	63	
	B. P.L. 480 LC															
TOTAL ACTUAL FY 1964	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/															
	FA ACT (ii) TRUST FUND	Govt. Rev.	-	4	4	17	17							17	17	
	(iii) OTHER LC	Sec. 402	G	15	9	74	45					38		37	7	
	B. P.L. 480 LC															
II OPERATIONAL YEAR (EST.) FY 1965	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/															
	FA ACT (ii) TRUST FUND	Govt. Rev.	G	3	3	15	15							15	15	
	(iii) OTHER LC	Sec. 402		40	23	192	111					86		106	25	
	B. P.L. 480 LC															
III BUDGET YEAR (EST.) FY 1966	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/															
	FA ACT (ii) TRUST FUND	Govt. Rev.	G	4	4	18	18							18	18	
	(iii) OTHER LC	Sec. 402		29	22	139	104					72		67	32	
	B. P.L. 480 LC															
IV PLANNING YEAR (EST.) FY 1967	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/															
	FA ACT (ii) TRUST FUND	Govt. Rev.	G	2	2	11	12							11	12	
	(iii) OTHER LC	Sec. 402		28	26	134	125					91		43	34	
	B. P.L. 480 LC															
V ALL SUBSEQUENT FYs (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/															
	FA ACT (ii) TRUST FUND															
	(iii) OTHER LC	Sec. 402	G	-	32	-	156							-	156	
	B. P.L. 480 LC															
VI TOTAL ALL YEARS (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/															
	FA ACT (ii) TRUST FUND	Govt. Rev.	-	16	16	78	78							78	78	
	(iii) OTHER LC	Sec. 402	G	151	151	724	724					414		310	310	
	B. P.L. 480 LC															

## REMARKS:

1/ Exchange Rate: \$1 = Rs.4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:		2. COOPERATING CTRY.		3. PERSONNEL SERVICES PARTICIPANT TRAINING		BEG. FY		END FY		4. PROJECT NO.								
	1 November 1964			INDIA		1958		1967		1958		1968		386-11-540-125								
I PROJECT PERSONNEL	A. MAN YEARS	a. CUM. THRU ACTUAL FY			b. ACTUAL FY 1964			c. OPERATIONAL FY 65			d. BUDGET FY 66			e. PLANNING FY 67			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract			
	U.S.	6.6	4.4	-	.7	1.7	-	.7	1.0	-	1.0	1.0	-	1.0	.6	-	-	-	9.3	7.0	-	
	Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	B. ON BOARD	U.S.	-	-	2	-	-	1	1	-	1	1	-	1	-	-	-	-	-	-	-	
	Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
II. PARTICIPANTS PROGRAMMED	A. U.S.	14	-	-	4	-	-	6	-	-	6	-	-	6	-	-	-	-	32	-	-	
	B. THIRD CTRY.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

## REMARKS:

1/ End of Fiscal Year

AID 1020-4 (7-64)	1. DATA CURRENT AS OF:	2. COOPERATING COUNTRY	SECURITY CLASSIFICATION		
E-1	1 November 1964	INDIA	UNCLASSIFIED	386-11-540-125	Public Health Education

## 1. The Activity Target

(a) To assist in the full establishment and effective operation of a Health Education Bureau at the Central Government with well-qualified and capably functioning professional staff in the various phases of a national health education program, to include national program planning, development of training programs and facilities, school health education programs, health education research, production of educational media and provision of consultation to States in the operation of State Health Bureaus.

(b) To provide similar direct assistance to three State Health Bureaus (in Madras, Kerala and Andhra Pradesh) in the development of effective State programs designed to improve the educational efforts of district, block and village health workers so that the health practices of the people may be improved.

It is not proposed to discontinue the project until effective Bureaus have been developed in all States. The experience gained through development of State Bureaus in Madras and Andhra Pradesh should provide the national staff with the competence to establish Bureaus elsewhere, adapting the pattern to suit the individual needs of the other States and to accommodate their differences.

## 2. Course of Action

From the inception of the health education project the goal was the establishment of a strong health education program, at the Center, in the States and ultimately in districts and blocks. In fact, a U.S. technician assisted in setting up the Central Bureau of Health Education. A second technician assisted in developing the Scheme of Central subsidy for the establishment of State Bureaus. The technician assigned to Madras contributed much towards making the State Bureau in that State one of the very effective Bureaus in the country.

The next step in the total Indian program is the extension and strengthening of the program at the Center and in the States.

The advisor now assigned to Andhra Pradesh will be replaced by another technician, who will be assigned to Andhra Pradesh and Kerala jointly to advise their Directors of Public Health and the Assistant Directors (Health Education) on the organization, administration and direction of their respective State Bureaus.

The functions on which advice will be given are:

- (a) development of a scheme for training of teachers in health, so that education about health may be included in the school curriculum;
- (b) program planning in health education for all health service programs in the State Health Ministry;
- (c) development of a schedule for training of all health personnel, particularly State paramedical personnel, in health education methods;
- (d) the setting up and functioning of a health education media and materials unit;
- (e) decentralization of health education services to the District and Block level, and
- (f) ways of providing technical supervision in health education to personnel administratively responsible to other units.

(W.H.O. has agreed to give similar assistance in three other States).

Both advisors will spend considerable time in the development of health education curricula and methods of training of paramedical personnel.

To stimulate more rapid development of State programs, travelling State personnel will be trained in seminars at localities where outstanding programs are already under way.

To man the leadership positions in the State Health Bureaus and to supply the training staff for the indigenous preparation of health educators provided for in the Third Plan and requested in the Fourth Plan, it is necessary that six top personnel be given participant training each year until the termination of this activity in 1967. Nine of these participants will be given 14 months training each in health education and methods of curriculum building and be assigned as faculty to the three graduate training centers to be set up at Calcutta, Delhi, and some either at Madras or Hyderabad in the South. The remaining nine will be given 14 months training each in health education and work as Directors of programs or Directors of in-service training in Gujerat, Orissa, Punjab, Uttar Pradesh, Andhra Pradesh, Maharashtra, Bombay, Delhi and Calcutta.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF:	2. COOPERATING COUNTRY	SECURITY CLASSIFICATION		
E-1	1 November 1964	INDIA	UNCLASSIFIED	386-11-540-125	Public Health Education

This activity will be phased out in FY 1967 at the end of the tours of duty of the two technicians. With the concentration of future effort in a single project directed to a network of competently supported and staffed paramedical training centers, it will be necessary to recruit additional Health Educators with experience in paramedical training to assist in that project. On the basis of intimate contact with the GOI Ministry of Health in all of the areas in which AID has been collaborating during the last 12 years, it is realized that it now is time to change the emphasis of the AID program from institution building to assisting the GOI to use effectively and efficiently the products of these institutions in the development of health educators to staff the network of facilities.

### 3. Progress to Date

During the last decade the U.S. and international agencies have helped the GOI to build a solid foundation for health education of its people. The first step in GOI's long range systematic plan was establishment of the Central Health Education Bureau (CHED) in the Ministry of Health. AID assisted in the organization and development of the basic components of this Bureau through the assignment of technical advisors, grants for commodities, and participant training for some of its top professional staff. The CHEB is now ready to intensify its activities.

Its 1964 budget was increased from Rs.460,000 to Rs.843,000 making it possible to increase its professional staff from 12 to 22 and its technical support staff from 31 to 47, the additional personnel to come on duty during the next few months. Technical assistance in training these staff members in their specific roles and fitting them into a well-functioning organization will materially speed up achievement of the goal.

With this augmented budgetary support, the Bureau has scheduled in-service training courses for various State Health workers during every week of the fiscal year. Since this is the first time the Bureau has given such courses and many of its staff are new, assistance in developing the curricula and methods of training is being given. The courses as given by the center will be modified in terms of the experience, then written into teaching syllabi and manuals for use by the State Health Education Bureaus. Assistance on this phase of development is an important step in moving the training function from one of operations (finally a function of the State) to one of technical consultation (based on experience).

The budgetary increase has made it possible also to establish a Field Study and Demonstration Center in a Health Zone of Delhi where it is planned to make studies of the barriers to behavior change, to develop methods to overcome these barriers, to demonstrate that these methods will improve the public's health behavior and, finally, to train others in the whole process. Since this is a new and experimental approach to health education, U.S. technical advice in its planning is vital to its success. It will be three or four years before the Center becomes an efficient on-going part of the Bureau, but it is believed the critical problems can be overcome in two or three years.

The Central Council of Health has appointed a Committee to review the total health education progress to date and make recommendations for the future; the AID advisor, as a member, has been asked to give major attention to the laying out of a 10-year program for the future of health education. With approval by the Council, the recommendations are much more likely to be implemented than are plans that might be proposed without such overall administrative support. The review and development of recommendations are scheduled by the Government of India as a two-year undertaking.

Toward achievement of the second objective (i.e., strengthening State Health Bureaus,) AID provided a consultant for three years to Madras State where there now is a strong, well functioning Bureau. Advisory service to Andhra Pradesh has reached a stage where conditions seem propitious for a similar level to be reached in two more years.

Fourteen participants were given training in health education; eight are serving as leaders in health education, either as Directors or Assistant Directors in State Health Education Bureaus, in training centers, or in the CHEB; four are in administrative posts where they are able to provide administrative support for health education; and two are teaching social and preventive medicine in medical schools.

### 4. Funding Requirements

It is expected that this activity will terminate in FY 1967. The total dollar cost from inception in FY 1958 until termination will be \$567,000, broken down by project elements as follows:

Technicians	\$325,000
Participants	184,000
Commodities	58,000

AID 1020-1 (7-64)	1. DATA CURRENT AS OF:	2. COOPERATING COUNTRY	SECURITY CLASSIFICATION		
E-1	1 November 1964	INDIA	UNCLASSIFIED	386-11-540-125	Public Health Education

During FY 1965 the U.S. technician assigned to New Delhi will continue his services and the Health Educator assigned to Andhra Pradesh will complete his tour of duty in October, 1964 and be replaced; one project manager will be charged to this project, total technician cost, \$56,000. Six participants will be sent to the U.S. for training 8 to 10 months, at a cost of \$24,000. Commodities (\$1,000) in support of the U.S. technicians will be given. Section 402 rupees equivalent to \$40,000 will defray cost: international travel of participants (\$9,000), technicians (\$18,000) and a health education seminar. (\$13,000)

During FY 1966, it is estimated that the total dollar cost of the project will be \$86,000, as follows:

<u>Position</u>	<u>Location</u>	<u>ETA</u>	<u>ETD</u>	<u>\$ Cost</u>
1. Health Edu. Adv.	New Delhi	10/63	10/66	18,000
2. Health Edu. Adv.	Hyderabad	4/65	4/67	18,000
3. Project Manager	New Delhi			14,200

U.S. training for six participants for 14 months each will be provided, at a cost of \$36,000.

Section 402 rupees equivalent to \$29,000 will defray cost of international travel of participants (\$9,000) and technicians (\$15,000) and cost of a seminar (\$5,000). It is proposed to hold a health education seminar during this FY, supported by AID local currency.

During FY 1967, the total dollar cost of the project will be \$67,000, as follows:

1. Health Edu. Adv.	New Delhi	10/63	10/66	6,700
2. Health Edu. Adv.	Hyderabad	4/65	4/67	15,700
3. Project Manager	New Delhi			9,000

U.S. training for six participants for 14 months each will be given, at a cost of \$36,000.

Section 402 rupees equivalent to \$28,000 will defray cost of international travel of participants (\$9,000) and technicians (\$19,000).

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED					
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-11-510-135 386-31-510-135				4. TITLE Malaria Eradication							
	5. U.S. FUNDING:		BEGIN FY 1958		END FY 1967		6. PRIOR REFERENCES										
	PHYSICAL WORK:		1958		1967												
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT <sup>1/</sup>	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		TC	G	62,357	-	89	92	-	86	-	62,089	-	1	-		
	GROSS OBLIGATIONS (ACTUAL YEAR)		TC	G	55	-	26	12	-	17	-	-	-	-	-		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		TC	G	62,267	-	90	92	-	80	-	62,005	-	-	-	34	-
	EXPENDITURES (ACTUAL YEAR)		TC	G	53	-	27	13	-	14	-	(1)	-	-	-	-	-
C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC	G	90	-	(1)	-	-	6	-	84	-	1	-			
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS		TC	G	53	-	30	15	-	7	-	1	-	-	-		
	B. EXPENDITURES		TC	G	74	-	29	15	-	9	-	20	-	1	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC	G	69	-	-	-	-	4	-	65	-	-	-		
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS		TC	G	81	-	39	35	-	7	-	-	-	-	-		
	B. EXPENDITURES		TC	G	98	-	39	35	-	8	-	16	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC	G	52	-	-	-	-	3	-	49	-	-	-		
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS <sup>2/</sup>		TC	G	78	-	36	35	-	7	-	-	-	-	-	130	-
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>																
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>		TC	G	62,569	-	194	177	-	107	-	62,090	-	1	-	62,569	-

## REMARKS:

Refers to LAS Annex 17

<sup>1/</sup> This is a memorandum (non-add) column.<sup>2/</sup> Show estimated expenditures in column i.

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

E - 1b

1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	3. FUNDING Funding 1958 Phys. Work 1958	BEG. FY 1958	END FY 1967	4. PROJECT NO. 386-11-510-135 386-31-510-135	5. TITLE Malaria Eradication
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7. OBLIGATED AND DISBURSED	a. FUNDS		b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
	(1) TYPE	(2) SOURCE	(3) LOCAL CURRENCY UNIT OR OTHER	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G		34		162			60	-		102
	FA ACT	(ii) TRUST FUND		7	7	33	33	-	-	-	-	33	33
		(iii) OTHER LC		89	88	424	419	-	-	207	-	218	212
		B. P.L. 480 LC	Sec 104(e)	G	144,624	144,624	692,400	692,400	-	-	-	-	692,400
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND		4	4	17	17	-	-	-	-	17	17
		(iii) OTHER LC		21	27	101	128	-	-	87	-	35	41
		B. P.L. 480 LC	Sec 104(e)	G	34,046	56,673	163,000	271,330	-	-	-	-	163,000
II OPERATIONAL YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND		3	3	16	16	-	-	-	-	16	16
		(iii) OTHER LC		20	20	96	97	-	-	73	-	22	24
		B. P.L. 480 LC	Sec 104(e)	G	15,080	15,080	72,200	72,200	-	-	-	-	72,200
III BUDGET YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND		5	5	23	23	-	-	-	-	23	23
		(iii) OTHER LC		34	34	163	164	-	-	141	-	22	23
		B. P.L. 480 LC	Sec 104(e)	G	-	-	-	-	-	-	-	-	-
IV PLANNING YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND		5	5	25	25	-	-	-	-	25	25
		(iii) OTHER LC		34	35	163	166	-	-	141	-	22	25
		B. P.L. 480 LC											
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
		B. P.L. 480 LC											
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G		34		162			60	-		102
	FA ACT	(ii) TRUST FUND		20	20	97	97	-	-	-	-	97	97
		(iii) OTHER LC		177	177	846	846	-	-	562	-	284	284
		B. P.L. 480 LC	Sec 104(e)	G	159,704	159,704	764,600	764,600	-	-	-	-	764,600

REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E - 1a

E - 1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:	2. COOPERATING CTRY.	3. PERSONNEL SERVICES PARTICIPANT TRAINING	BEG. FY	END FY	4. PROJECT NO.																
				1 November 1964	INDIA		1958	1967	386-11-510-135																
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY			b. ACTUAL FY 64			c. OPERATIONAL FY 65			d. BUDGET FY 68			e. PLANNING FY 67			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS						
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract				
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	6.9	7.1	-	2.1	1.0	-	1.0	3	-	1	2	-	1	2	-	-	-	-	9.9	11.4	-		
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
B. ON 1 BOARD	U.S.				2	1	-	1	1	-	1	2	-	1	2	-	-	-	-	-	-	-	-		
	Non U.S.				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
II. PARTICIPANTS PROGRAMMED	A. U.S.		26	-	-	3	-	-	3	-	-	-	-	3	-	-	-	-	-	-	-	-	35	-	-
	B. THIRD CTRY.																								

REMARKS:

1/ End of Fiscal Year

AID 1020-1 (7-64)	1. DATA CURRENT AS OF:	2. COOPERATING COUNTRY	SECURITY CLASSIFICATION		
E-1	1 November 1964	INDIA	UNCLASSIFIED	386-31-510-135 386-11-510-135	Malaria Eradication

## 1. The activity Target

The United States has pledged itself to support the world-wide malaria eradication campaign. This project aims to assist India in her effort to eliminate malaria by 1973, as part of the global objective.

The National Malaria Eradication Program has been in progress since 1958. By the end of 1964 it will have gone through three phases: Attack, consolidation, and maintenance, each with its own target of accomplishment. (Note: The conventional preparatory phase was not necessary in India because five years of national control experience had served as preparation for its eradication campaign.)

The attack phase refers to the beginning years, when all human and adjoining animal dwellings are systematically sprayed with residual insecticide to interrupt mosquito transmission of the disease. With transmission broken, the parasite reservoir is reduced to a level now enough to permit withdrawal of spraying and entry into consolidation.

The consolidation phase relies on tight surveillance operations to detect and eliminate with drugs the few reservoirs of infection remaining after cessation of spraying. Surveillance is carried out for at least three years and strives to prove that during two consecutive years of that time there has been no sign of transmission. With this established, the door to maintenance is opened.

The final maintenance phase calls for takeover by the general health services of the vigilance mechanisms which prevent resumption of endemicity and maintain permanent freedom from malaria.

All units in Kerala State have entered the maintenance phase except one still in consolidation. All the other states have some units in attack and some in consolidation. Seven states hope to phase selected units into maintenance by the end of 1964. While the Indian program now shows most of the country in consolidation, it is hoped that by the end of 1965 most of the nation will have phased into maintenance.

## 2. The course of action

In recent years the NMEP shifted emphasis from the DDT-spraying attack phase to the surveillance-demanding consolidation phase. In FY 1965 the focus changed to preparations for entry into the maintenance phase. If all goes according to plan, qualified malaria eradication units will be dissolved and their declining anti-malaria activities will be turned over

to regular health agencies. In FY 1966 it is estimated that the turnover will be accelerated.

The immediate preoccupation, therefore, is initial phasing into maintenance. This phasing will continue until all of India is in maintenance by 1973 and the eradication program has been concluded. Meanwhile, the attack phase will be pursued energetically to eliminate remaining pockets of transmission. Concurrently, the units in consolidation will be under careful surveillance to assure that transmission remains interrupted.

The three US AID malaria advisors assigned to this program in the past have worked with the NMEP Directorate. All have been involved at various times in evaluating field activities, reporting deficiencies found and assisting in the solutions of problems encountered. One of these positions has been deleted from the US AID staff. Since most of the work is in the field there is at present a proposal to assign one of the two existing positions to one of the NMEP regional posts and re-establishing a third position which would also be assigned to another NMEP regional post. In this connection, in order to promote better implementation of the malaria eradication project and to coordinate more fully with WHO's effort in this direction, US AID/India feels that three additional positions should be established, - one for each of the other NMEP regional offices. This proposal is under consideration by US AID and GOI, and if mutually agreed upon, the E-1 will be amended to reflect this change.

Considering the enormity, complexity and state-retained autonomy of the Indian program, this type of assistance and assessment should serve as a vital intelligence arm of the NMEP center. At the same time, each technician would strive to raise the working standards of the state organizations in his region. In sum, it is expected that these six technicians would play key roles in the continuous independent assessment so essential to the project's success.

As in previous years, independent assessment teams will inspect the units proposed by NMEP for withdrawal of spraying. To strengthen this effort, 12 US AID malaria advisors from outside countries will be invited to participate as assessment team members each year. It might be useful at this stage in the campaign to subject these annual appraisals to careful analysis in order to determine whether they are worth the effort and money invested in them.

The course of action objectives may be summarized thus: As of 1 April, 104 units were in the attack phase and 288 in consolidation. During the balance of FY 1965 (CY 1964) 80 of the 288 consolidation units are to phase into maintenance. In FY 1966, according to present estimates, there will be 64 units left in attack, 149 in consolidation and 180 in maintenance; in FY 1967, 30 in the attack, 138 in consolidation and 225 in maintenance; in FY 1968, 20 in attack

AID 1020-1 (7-64)	1. DATA CURRENT AS OF:	2. COOPERATING COUNTRY	SECURITY CLASSIFICATION	386-31-510-135 386-11-510-135	Malaria Eradication
K-1	1 November 1964	INDIA	UNCLASSIFIED		

102 in consolidation, 271 in maintenance. From FY 1969 until program termination in 1973 the rate of progress will be slower. At that time a total of 393 units with a population of 583 millions will have passed into maintenance, and eradication will have been achieved.

The NMEP Directorate's complete phasing projections are shown in the table below. This does not necessarily reflect US AID's projections.

Calendar Year	Attack		Consolidation		Maintenance		Total	
	units	Popula- tion (in millions)	Units	Popula- tion (in millions)	Units	Popula- tion (in millions)	Units	Popula- tion (in millions)
1963	163.70	192	228.30	268	-	-	392	460
1964	104	125	208.30	249	80	96	392	470
1965	64.45	79	148.80	182	180	220	393.25	481
1966	30.27	38	137.53	172	225.45	281	"	491
1967	19.55	25	102.25	131	271.45	348	"	504
1968	12.75	17	45.84	60	334.66	440	"	517
1969	4.00	6	28.41	38	360.84	485	"	529
1970	3.50	5	12.00	16	377.75	521	"	542
1971	-	-	3.50	5	389.75	550	"	555
1972	-	-	3.50	5	389.75	564	"	569
1973	-	-	-	-	393.25	583	"	583

**MAINTENANCE PREPARATIONS:** The plan for takeover of maintenance phase functions by regular health services will affect the NMEP mainly at the unit level. Preparations made for the 80 units about to enter the maintenance phase will involve turnover of each eligible NMEP unit (comprising 1 million population), its subunits and sections to the district health office and its primary health centers (blocks) and sub-centers. There will be 15 primary health centers per district of one million people. Each district health office, through its Assistant Medical Officer of Health, will supervise 45 Health Inspectors, 100 basic health workers and 15 microscopists, distributed to the lesser levels in a pattern broadly similar to that of the existing NMEP scheme. The above staff will perform antimalaria as well as other health work.

On the State and Zone levels, however, maintenance responsibilities will rest with the State Malariologist and his staff of Zonal Officers until such time as nationwide maintenance has been achieved.

Intensive training in multi-purpose health duties is another important feature in the preparation for maintenance. The NMEP unit

Officer (titled the Assistant District Medical Officer of Health after his transfer to maintenance), his Assistant Unit Officer, Malaria Inspectors, Surveillance Workers, and Microscopists will receive such training, then will be absorbed into the regular district health organizations at all echelons.

In addition to active malaria surveillance through monthly house visits, the Basic Health Workers and their supervisors will collect vital statistics and report epidemic diseases such as smallpox and cholera. They will also work in the Family Planning Program, in environmental sanitation and in health education.

The combination of Primary Health Centers being built and staffed and the corps of trained malaria surveillance teams becoming available for additional duties offers an opportunity to keep the malaria force on the job for as long as there is danger of reintroduction of malaria in India, and educating and training these workers to take on additional tasks in support of the general health service. All of the competent malaria personnel will be retained as part of the health service and they will be a valuable adjunct to the Primary Health Centers as they become operable and as the personnel are retrained.

During FY 1965 the Entomologist and the Malaria Advisor will be continued for short periods. Twelve malariologists from AID Missions outside India will be assigned for a period of three weeks for the annual malaria eradication appraisal. U. S. training for three participants for four months each will be given.

During FY 1966, the Entomologist, having been appointed Regional Malaria Advisor, will be replaced by an Epidemiologist and assigned to NMEP in New Delhi. The Malaria Advisor, after completion of his tour in February 1965, will be replaced by another Advisor and assigned to an NMEP regional post. A second Malaria Advisor will be recruited and posted to another NMEP regional post. It is expected that the above three technicians will be on board early in FY 66 and continue until the end of FY 67. Twelve AID malaria advisors from outside countries will be recruited to constitute independent appraisal teams. Participant training will continue at the FY 65 level of 3 for four months each. The GOI will determine the foreign exchange requirements for equipment and commodities and these will be made available from the U. S. non-project loans in subsequent years.

During FY 1967, the three technicians will be continued; twelve AID malaria advisors will be invited to participate as assessment team members; three participants will be sent to the U.S. for training.

SECURITY CLASSIFICATION UNCLASSIFIED

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AID 1020-1 (7-64)	1. DATA CURRENT AS OF:	2. COOPERATING COUNTRY	SECURITY CLASSIFICATION	386-31-510-135 386-11-510-135	Malaria Eradication
E-1	1 November 1964	INDIA	UNCLASSIFIED		

Although it was believed that U. S. assistance to this program would terminate in FY 67, it now appears that certain additional requirements and requests will necessitate further assistance beyond this period. The nature and extent of such assistance is difficult to determine at this juncture.

### 3. Progress To Date

The size of the Indian Malaria Eradication Program is reflected by its enormous national commitments and its vast resource requirements. The NMEP is unique also in that it is more a federated program than a national one, being a composite of autonomous state programs. The responsibilities of the central Directorate include technical direction, assessment, coordination and special investigations. But administration and execution of the program rest with the separate states. In a national malaria eradication effort, considered analogous to a military campaign, coordination of policy, plans and actions among the various states and the Center is a very complicated business.

Nonetheless, the NMEP has made notable advances. Since 1958, all of the nation's 392 units, each with more than one million people, have been covered by spray operations. As a result, now in 288 units with 337 million people, malaria rates are so low that spraying has been withdrawn, thus putting three-fourths of the country into consolidation.

In 1963, from the 460 million people in India protected against malaria, 41.1 million fevers were recorded, 40.6 million blood films were collected, 38.7 million films were examined and 87,306 cases were detected.

In 1953, of all cases treated in hospitals and dispensaries, 10.8% were clinically diagnosed malaria; in 1963, this statistic had declined to 0.23%. In 1953, 100 million cases of malaria and one million deaths were recorded; in 1963, there were 87,306 cases and no deaths recorded. In 1953, India lost one billion man days to the disease; in 1963, the loss was estimated at 880,000 man days.

It is noteworthy, however, that the overall morbidity rate in 1963 was slightly higher than that for 1962. This rise occurred at an opportune time, for upon reflection, it serves to highlight two important points not commonly appreciated: 1) The fact that increased experience in surveillance enhances efficiency in case detection; 2) the truth in the FY 1965 E-1 statement that, "it would be a delusion to expect in the remaining years that the Indian Malaria Eradication Program will continue the gigantic strides witnessed in recent years... from now on it must be expected that the rate of advance will

be very slow....". Indeed, as viewed now, there may even be periods of regression, but it is believed they will be transitory.

Never before has a single project, like the Malaria Eradication, favorably affected the lives of so many people in such a short period of time. Though not completed, its success to date has inspired other malarious countries to undertake eradication for their own people. The tremendous effects of relief from this debilitating and burdensome scourge can be seen in nearly any part of India. In addition to the more than one billion man days per year of productive man power which has been injected into the rural and urban economy of India as a result of Malaria Eradication, thousands of children can go to school and learn today who ten years ago were ill and unable to take advantage of any educational opportunity.

### 4. Funding Requirements

It is anticipated that AID will continue to support the Malaria Eradication Program through FY 67, and as mentioned in Block 2, it appears that further U. S. assistance might be required to carry forward this program to a successful conclusion. The total dollar cost of this project through FY 67 is expected to be \$62,569,000 broken down by project elements as follows:

Technicians	\$ 371,000
Participants	107,000
Commodities	62,090,000
Others	1,000

During FY 1965 the Entomologist and the Malaria Advisor will continue their services for short periods. Seven short-term consultants will be provided for independent appraisal of the program. Total technician cost will be \$45,000. U. S. training for 3 participants for 4 months each will be provided at a cost of \$7,000. Commodities in support of the U. S. technicians will be given, \$1,000. Section 402 Rs. equivalent to \$20,000 will defray cost of international travel of participants (\$4,500) and technicians (\$15,500).

During FY 1966, it is estimated that the total dollar cost of the program will be \$81,000, as follows:

<u>Position</u>	<u>Location</u>	<u>ETA</u>	<u>ETD</u>	<u>\$ Cost</u>
1. Epidemiologist	New Delhi	7/65	6/67	20,000
2. Malaria Advisor	Regional	7/65	6/67	20,000
3. Malaria Advisor	Regional	7/65	6/67	20,000

U. S. training for three participants for 4 months each will be provided at a cost of \$7,000.

Twelve 2-weeks consultants for independent appraisal of the program - Cost \$14,000.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-31-510-135 386-11-510-135	Malaria Eradication
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Section 402 Rs. equivalent to \$34,000 will be needed to defray the international travel costs of participants (\$4,500) and technicians (\$29,500).

During FY 1967, the total dollar cost will be \$78,000 as follows:

The three technicians will continue their services throughout the FY - cost \$57,000; twelve 2-weeks consultants for independent appraisal of the program will be provided - cost \$14,000. U. S. training for three participants for 4 months each will be given - cost \$7,000.

Section 402 Rs. equivalent to \$34,000 will be provided to meet the costs of international travel of participants (\$4,500) and technicians (\$29,500).

It is understood that the GOI will determine the foreign exchange requirements for equipment and commodities such as DDT, anti-malaria drugs, microscopes, slides, etc., which will be made available from the U.S. non-project loans in subsequent years. The ~~report~~ has forecast the following foreign exchange requirements:

FY 1965	\$ 4.4 million
FY 1966	2.3 ,,
FY 1967	1.5 ,,

GOI Contributions: Employees attached to the NMEP both on state and Central Government payrolls, will number 85,000 including public health physicians, laboratory workers, malaria inspectors, surveillance staff unit workers, drivers, mechanics, and others. Contributions in kind will consist of State Health Department physical structures and facilities. To pay for all center and State rupee costs of the Program during the Third five year plan, the GOI will provide the equivalent of \$154 million. Most or all of this sum will derive from PL 480 grants.

WHO Contributions: WHO is assisting the Program by furnishing partial support for the regional organizations, providing six regional epidemiologists, granting fellowships and meeting expenditures in connection with travel costs of trainees, conference participants, etc. WHO's contribution for FY 1958 through FY 1966 will approximate \$3.2 million.

#### 5. Precautionary Notes

It is necessary to state once again that despite the malaria eradication campaign's impressive achievements until now, the real challenge is yet to be met. In the drive for 100%

success it will be imperative to detect and liquidate the elusive, potentially explosive remaining cases, wherever they are. To do this, an alert intelligence network must be established without delay, one conditioned to react swiftly and completely to the signs of danger which will inevitably appear.

A false sense of security has been engendered by the apparent absence of malaria. As a result, the growing popular and official attitude that support is no longer really important endangers the program and must be corrected. All must realize that false economizing and loss of momentum will set the Malaria Eradication Program back years or even destroy it completely. This would mean a tragic waste of the enormous efforts and resources already put into the NMEP.

#### 6. Special Recommendation:

The National Malaria Eradication Program presently depends on non-project loans to pay for dollar-purchased commodities such as DDT, drugs, etc. This compels competition with other GOI agencies for the funds needed and often leads to uncertainties, delays and shortages which damage the Program. It is strongly urged that future U. S. loans be negotiated for the exclusive use of the NMEP.

The paramedical personnel, now engaged only in malaria surveillance during the consolidation phase, are now being required to take on additional duties as the program enters the maintenance phase. The retraining and reorientation of this malaria paramedical personnel will become related to the GOI's paramedical training program with assistance from USAID's rural health development and paramedical training activities. Successful phasing of the eradication program depends upon early training and retraining of the paramedical personnel.

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

SECURITY CLASSIFICATION  
UNCLASSIFIED

E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		END FY		4. PROJECT NO.		5. TITLE				
	1 November 1964		INDIA		Funding 1962		1965		386-31-550-216		Primary Health Centers				
					Phys. Work 1962		1965				6. PRIOR REFERENCES:				
7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)					
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1)		(2)		(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED	OBLIGATED	DISBURSED	(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED		
I CUMULATIVE THRU ACTUAL YEAR	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT (ii) TRUST FUND														
	(iii) OTHER LC														
	B. P.L. 480 LC	Sec 104(e)	G	20,428	20,428	97,800	97,800	97,800	97,800						
TOTAL ACTUAL FY 1964	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT (ii) TRUST FUND														
	(iii) OTHER LC														
	B. P.L. 480 LC	Sec 104(e)	G	5,806	11,270	27,800	53,956	27,800	53,956						
II OPERATIONAL YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT (ii) TRUST FUND														
	(iii) OTHER LC														
	B. P.L. 480 LC	Sec 104(e)	G	5,493	5,493	26,300	26,300	26,300	26,300						
III BUDGET YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT (ii) TRUST FUND														
	(iii) OTHER LC														
	B. P.L. 480 LC														
IV PLANNING YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT (ii) TRUST FUND														
	(iii) OTHER LC														
	B. P.L. 480 LC														
V ALL SUBSEQUENT FYS (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT (ii) TRUST FUND														
	(iii) OTHER LC														
	B. P.L. 480 LC														
VI TOTAL ALL YEARS (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT (ii) TRUST FUND														
	(iii) OTHER LC														
	B. P.L. 480 LC	Sec 104(e)	G	25,921	25,921	124,100	124,100	124,100	124,100						

REMARKS:  
1/ Exchange Rate: \$1 = Rs. 4.7376  
2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E - 1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES		BEG. FY		END FY		4. PROJECT NO.					
										PARTICIPANT TRAINING											
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYS			g. TOTAL ALL YEARS		
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																			
		Non U.S.																			
B. ON BOARD	U.S.																				
	Non U.S.																				
II PARTICIPANTS PROGRAMMED	A. U.S.																				
	B. THIRD CTRY.																				

REMARKS:  
1/ End of Fiscal Year

AID 1020-4 (7-64)	1. DATA CURRENT AS OF:	2. COOPERATING COUNTRY	SECURITY CLASSIFICATION		
E-1	1 November 1964	INDIA	UNCLASSIFIED	386-11-550-216	Primary Health Centers

1. The Activity Target

The goal of this activity, an integral part of Government of India programs in community development and public health and incorporated in its Five Year Plans, is the establishment of 5,200 primary health centers by the end of the Third Plan period.

Primary health centers are being set up throughout the country as focal points for providing integrated preventive and curative health services for the 300 million people living in 500,000 villages of rural India. It is the GOI target to complete 5,200 primary health centers by the end of the Third Five Year Plan (1965) and to step up its efforts in training and retraining of personnel at all levels to staff this basic network. Each center is to have a dispensary and will have a minimum of six beds for maternity and emergency cases and will operate six sub-centers within its block area. The main services to be provided by the health teams at these centers are in medical care; maternal and child health services, including school health; control of communicable diseases; family planning; environmental sanitation, with priority for provision of safe water supply and hygienic disposal of waste; health education, etc.

Other all-India health programs initiated by the GOI for the eradication of malaria and small-pox, venereal diseases, tuberculosis, etc. now carried out by specialized units, will be integrated in due course in the maintenance phase with the health services of the centers.

The objective is not only to combine the curative and preventive services but also to bring the services through a system of regular visits to the villages and homes.

2. The Course of Action

U.S. participation in this program is confined to grants of rupees from the proceeds of agricultural commodities under PL 480. Immediately after independence, the GOI was faced with the problem of how to make the social services programs support rather than divert resources from higher productivity in the country essential to its economic development. To test its productivity as a possible alternative the GOI launched

the Community Development Program in 1952 in 55 projects as an experimental measure to attack poverty, ill-health and ignorance. In 1953 the Central Council of Health endorsed the principle of integrated development of community health and accepted the program of primary health centers as an essential part of the Community Development Project. A channel for providing specialist and consultation services at sub-divisional and district levels is being established through a system of referral hospitals and laboratories. The GOI funding arrangement is to contribute Rs.52,500 towards the Rs.90,000 non-recurring cost of each primary health center, the Ministry of Community Development Rs.15,000 while the State contributes the balance and carries the annual recurring cost of Rs.20,120 for each center. Under this project, US AID reimburses the Government of India out of PL 480 grant funds for the rupee expenditure incurred by the Central Health Ministry on these primary health centers.

3. Progress to Date

Long before India's independence the importance and urgency of rural reconstruction to raise the standard of life was highlighted. On the basis of the recommendations of the 1937 Inter-Governmental Conference of Far Eastern countries, seven experimental health units were established in the country. In 1944 the Health Survey and Development Committee recommended developing primary health centers to provide comprehensive curative and preventive health services in rural areas.

Since then considerable progress has been made in the various States and Union territories. In the first year (1961) of the Third Five Year Plan there were 2,695 centers, in the second year (1962) 3,050, in the third (1963) 3,350, and in the fourth (1964) 3,400.

4. Funding Requirements

It is expected that during FY 1965 Rs.26.3 million (\$5.5 million) will be granted to cover GOI expenditures upto 3/31/1966. GOI provision during the Third Five Year Plan (1961-66) for this activity is Rs.166.8 million (about \$35.0 million).

AID 1020-9 (7-64)		PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES							SECURITY CLASSIFICATION UNCLASSIFIED					
E-1b		1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA		3. Funding 1962 1965 Phys. Work 1962 1966		4. PROJECT NO. 386-31-510-217		5. TITLE Smallpox Eradication				
7. OBLIGATED AND DISBURSED		a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
		(1)	(2)	(3)	(1)		(2)		(1)	(2)	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
		TYPE	SOURCE	LOAN OR GRANT	DOLLAR EQUIVALENTS (000) 1/		LOCAL CURRENCY UNITS (000)		OBLIGATED	DISBURSED	OBLIGATED	DISBURSED	(a)	(b)
					(a)	(b)	(a)	(b)					(a)	(b)
					OBLIGATED	DISBURSED	OBLIGATED	DISBURSED					U.S. PERS.	NON-U.S. PERS.
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC	Sec 104(e)	G	18,255	18,255	87,400	87,400	87,400	87,400					
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC	Sec 104(e)	G	16,167	16,167	77,400	77,400	77,400	77,400					
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC	Sec 104(e)	G	4,742	4,742	22,700	22,700	22,700	22,700					
III BUDGET YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC													
IV PLANNING YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC													
V ALL SUBSEQUENT FYs (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC													
VI TOTAL ALL YEARS (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC	Sec 104(e)	G	22,997	22,997	110,100	110,100	110,100	110,100					

REMARKS:

1/ Exchange Rate: \$1 = Rs.4.7876

2/ The total dollar equivalent amounts are the same as in Col. i of Table E-1a

E-1c		PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS							1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES PARTICIPANT TRAINING			4. PROJECT NO.					
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																					
		Non U.S.																					
	B. ON 1/ BOARD	U.S.																					
		Non U.S.																					
II. PARTICIPANTS PROGRAMMED	A. U.S.																						
	B. THIRD CTRY.																						

REMARKS:

1/ End of Fiscal Year

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO.

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AID 1020-4 (7-64)	1. DATA CURRENT AS OF:	2. COOPERATING COUNTRY	SECURITY CLASSIFICATION		
E-1	1 November 1964	INDIA	UNCLASSIFIED	386-31-510-217	Smallpox Eradication

### 1. The Activity Target

The goal of this activity, included in the Third Five Year Plan, is eradication of smallpox from India.

### 2. The Course of Action

US AID support to this activity will be limited to grants of PL 480 rupees.

Eradication of smallpox in India will be achieved when no cases are reported from any territory for three successive years. This is at least ten years hence since most State programs were started less than two years ago. By the end of 1963 less than 30 percent of the population was protected. The target calls for completing the vaccination of over 80 percent of the population within the next two years and a continuing program of vaccinating babies before they reach one year of age.

In some of the States where the progress of the program has not been satisfactory and coverage not adequate, the authorities are being advised to conduct intensive mopping up operations. The program is being intensified with the involvement of circle health officers and laying emphasis on health education to break resistance against vaccination.

### 3. Progress to Date

There are now 150 teams in the field, each under the direction of a Supervising Officer of Health. Vaccination inspectors and a staff of five vaccinators are or will be assigned a population of 40 to 50 thousand. The 150 teams have been augmented with health educators to make the program acceptable to the people and to train the vaccinator, supervisor and staff in elemental public relations.

Two Indian institutions are now in pilot production of vaccine and three more have been selected. WHO/UNICEF are training the production staff and supplying much of the laboratory equipment. As was done for the malaria eradication program, a separate organization has been created for smallpox eradication.

### 4. Funding Requirements

Through June 30, 1964 the U.S. Government provided \$18.3 million equivalent from PL 480 grants for GOI expenditures. It is expected that during FY 1965 Rs.22.7 million (\$4.7 million) will be granted to cover GOI expenditures through March 31, 1966.

The financial requirements of the GOI during the Third Five Year Plan are Rs.105.0 million equivalent to approximately \$22.0 million. Besides this, there will be some expenditures on the smallpox organization at the Center.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-11-550-225				4. TITLE Communicable Disease Control						
	5. U.S. FUNDING:		BEGIN FY 1963		END FY 1969		6. PRIOR REFERENCES									
	PHYSICAL WORK:		1964		1970											
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a.	b.	c.	d.	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
		APPROPRIATION TITLE	LOAN OR GRANT	TOTAL	CONTRACT <sup>1/</sup>	(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT
						AID	PASA									
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	111	-	-	21	-	5	-	85	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	36	-	-	21	-	5	-	10	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	89	-	-	21	-	-	-	68	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)	TC	G	89	-	-	21	-	-	-	68	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	22	-	-	-	-	5	-	17	-	-	-	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	57	-	-	41	-	15	-	1	-	-	-	-	-
	B. EXPENDITURES	TC	G	51	-	-	38	-	9	-	4	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	28	-	-	3	-	11	-	14	-	-	-	-	-
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TC	G	117	-	-	97	-	20	-	-	-	-	-	-	-
	B. EXPENDITURES	TC	G	111	-	-	93	-	14	-	4	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	34	-	-	7	-	17	-	10	-	-	-	-	-
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS <sup>2/</sup>	TC	G	149	-	-	129	-	20	-	-	-	-	-	146	-
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>	TC	G	177	-	-	137	-	40	-	-	-	-	-	214	-
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>	TC	G	611	-	-	425	-	100	-	86	-	-	-	611	-

## REMARKS:

Refers to LAS Annex 17

<sup>1/</sup> This is a memorandum (non-add) column.<sup>2/</sup> Show estimated expenditures in column i.



AID 1020-1 (7-64)	1. DATA CURRENT AS OF:	2. COOPERATING COUNTRY	SECURITY CLASSIFICATION		
5-1	1 November 1964	INDIA	UNCLASSIFIED	386-11-550-225	Communicable Disease Control

### 1. The Activity Target

The activity target is to develop the National Institute of Communicable Diseases (NICD) as a central facility to provide technical support for programs leading to the control of major communicable diseases throughout India.

The Malaria Institute of India (MII), organized in 1909 as the Central malaria Bureau and continuing in active work until 1962, was largely responsible for the research, training and demonstration that culminated in the impressive success of the malaria eradication Program in India. With its background of experience, and because of the declining incidence of malaria the MII was reorganized in September 1962 and dedicated in July 1963 as the NICD, to broaden its area of interest to encompass the entire range of infectious diseases.

At the present time only a few of the major communicable diseases other than Malaria, such as filariasis, leprosy, tuberculosis, cholera and smallpox, receive specific attention and coordinated attack by National agencies. Even among these diseases, programs such as that of the National Smallpox Eradication Program are geared only to the mass application of standard techniques such as vaccination, and are without the facilities and competence to evaluate their results scientifically and concurrently, and to engage in the research investigations necessary to resolve the problems and local failures that inevitably appear. Other diseases of major importance, such as plague, typhoid and dysentery, influenza, meningitis, and hepatitis, are at present almost ignored despite the burden of disability and death they impose on India.

The NICD will be able to attack all these problems -- superficially but immediately -- by means of training courses for regional public health workers, and then fundamentally, but gradually, by the establishment of laboratories and research programs to define the problems, investigate control measures adapted to local conditions, and provide competent assistance to States and localities.

The target goal will have been reached when the NICD has the organizational and professional competence to fulfill its objectives with:

- a. Health intelligence -- to determine the incidence and prevalence of and to establish a continuous monitoring system for the communicable diseases found in India.
- b. Epidemiologic investigations -- to undertake studies to elucidate the biological, environmental, and social factors which determine variations in the endemic and epidemic occurrence of communicable diseases.

- c. Research -- to study etiological agents, vectors, zoonotic and other reservoirs, mechanisms of transmission, natural immunity patterns, artificial immunization, etc.
- d. Communicable disease control -- to study control methods in order to develop new techniques and improve old ones, to initiate demonstration control projects, and to evaluate the effectiveness of new or existing control programs.
- e. Training -- to conduct courses for professional and sub-professional (para-medical) personnel in epidemiology, microbiology, medical entomology, zoonoses, and communicable disease control.
- f. Advice and Assistance -- to Union and State Governments on all matters relating to communicable diseases in India, including epidemic aid.

### 2. The Course of Action

Because of similarity of objectives, historical background, political framework, and proposed methods of operation, the experience of the Communicable Disease Center (CDC) of the U. S. Public Health Service, Atlanta, Georgia, will be utilized wherever feasible in the development of the NICD. The CDC has indicated its interest and willingness to provide technicians, accept participants for training, and give guidance and consultation when requested and within the limits of its resources. Although \$75,000 were provided during FY 1963 for procurement of equipment for manufacture of polio vaccine at Pasteur Institute, Coonoor, collaboration actually started in FY 1964, with the arrival of the first technician, and will continue for six years.

The NICD is operating under a phased plan for the gradual extension of its activities. First priority has been given to the development of the Division of Epidemiology and Biostatistics, with emphasis on the development of a training program for local health officers and the inauguration of pilot investigations, evaluations and demonstrations. Simultaneously first priority among major disease categories has been given to the zoonoses (diseases transmissible from animals to man), as a logical extension of previous experience with malaria and filariasis.

In Section I "e" above the training aspect of the NICD will become an increasingly important function and beginning with the first course, the students trained will increasingly become the trainers of paramedical personnel at State and District levels. The institutional development features are prominent at the beginning but the paramedical training features will increase in importance even to including some participation of NICD in actual paramedical training. All the U.S. personnel in the institutional development phase will also have responsibilities in paramedical training and rural health development.

Early in FY 1964 an Epidemiologist from the US CDC was assigned to the NICD, and will continue until termination of this project. During FY 1965 a Public Health Veterinarian and a Biostatistician will be recruited and be on board; two 3-months consultants from CDC, Atlanta, will be provided. Three Indian participants will be sent to CDC for training-experience for 1 year each.

AID 1020-4 (7-64)	1. DATA CURRENT AS OF:	2. COOPERATING COUNTRY	SECURITY CLASSIFICATION		
E-1	1 November 1964	INDIA	UNCLASSIFIED	386-11-550-225	Communicable Disease Control

During FY 1966 and subsequent years, the following technician strength will be required:

<u>FY 1966</u>	<u>ETA</u>	<u>ETD</u>	<u>Man years</u>
1. Epidemiologist	8/63	6/69	1 - 0
2. Public Health Veterinarian	1/65	1/69	1 - 0
3. Biostatistician	1/65	1/67	1 - 0
4. Health Facilities Administrator	1/66	1/68	0 - 6
5. Microbiologist	1/66	1/68	0 - 6
4 Consultants ( 2 for 6 mos each; 2 for 3 mos each)			1 - 6
4 Participants (4 man years of training)			5 - 6

FY 1967

1. Epidemiologist	8/63	6/69	1 - 0
2. Public Health Veterinarian	1/65	1/69	1 - 0
3. Biostatistician	1/65	1/67	0 - 6
4. Health Facilities Administrator	1/66	1/68	1 - 0
5. Microbiologist	1/66	1/68	1 - 0

During this FY, one more Microbiologist and a Parasitologist will be recruited, and they will be on board.

6. Microbiologist	7/66	6/68	1 - 0
7. Parasitologist	7/66	6/68	1 - 0
2 Consultants (3 mos each)			0 - 6
4 Participants (4 man years of training)			7 - 0

FY 1968

1. Epidemiologist	8/63	6/69	1 - 0
2. Public Health Veterinarian	1/65	1/69	1 - 0
3. Health Facilities Administrator	1/66	1/68	0 - 6
4. Microbiologist	1/66	1/68	0 - 6
5. Microbiologist	7/66	6/68	1 - 0
6. Parasitologist	7/66	6/68	1 - 0

2 Consultants (3 mos each)			0 - 6
4 Participants (4 man years of training)			5 - 6

FY 1969

1. Epidemiologist	8/63	6/69	1 - 0
2. Public Health Veterinarian	1/65	1/69	0 - 6
2 Consultants (3 mos each)			0 - 6
4 Participants (4 man years of training)			2 - 0

The short-term consultants will be recruited to examine facilities and programs and to recommend modifications and improvements. These will include Bacteriologist, Virologist, Librarian, Training Aids Specialist, etc.

The Indian participants will be sent to CDC (or elsewhere) for training-experience tours of one year each. These will include officers in the following fields: Microbiologists, Biostatisticians and Epidemiologists.

US-use PL.480 funds allocated to CDC may be used through the Indian Council of Medical Research to support projects within NICD as consistent with its authority and GOI objectives, to expedite accomplishment of the research and training activities.

The GOI will provide all of the professional, technician and clerical personnel necessary to the accomplishment of the developing needs of the NICD and to the development missions of the AID technicians and consultants. It will complete the construction of the new laboratory building and will provide the necessary scientific equipment and expendable supplies. It will continue the remodeling of existing buildings, including reconstruction of rooms for use as classrooms for training purposes and expansion and improvement of the library. It will provide all necessary audio-visual equipment needed for training purposes. It is understood that the Ministry of Health will determine the foreign exchange requirements for equipment and commodities and that these may be made available from the U. S. non-project loans in subsequent years.

3. Progress To Date

The expansion of the responsibility of the Malaria Institute of India antedated its conversion to the NICD. For about ten years it has been deeply concerned with investigations which led to the establishment of the National Filariasis Control Program, which remains an integral part of the new NICD. Similarly, the responsibility for continuing research and training in malariology rests with NICD. During 1962 the Institute was called upon to establish a program of study and a pilot control scheme for plague in a persistent endemic focus in Mysore State; a permanent field station now is established there. During its formal dedication in July 1963, NICD was given responsibility for undertaking a pilot evaluation of the National Smallpox Eradication Program to lead to a system of self-evaluation, and this has been completed (see below).

During the last year, since the arrival of the first technician (Epidemiologist) in August 1963, the most important new activities which have been successfully introduced are :

1. The pilot evaluation of the National Smallpox Eradication Program was completed, and based on this experience a manual for self-assessment has been published. This activity and its result were enthusiastically received and permanently established the role of NICD as an independent control agency with responsibility in national communicable disease programs not under its direct control.

SECURITY CLASSIFICATION

UNCLASSIFIED

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AID 1020-1 (7-64)	1. DATA CURRENT AS OF:	2. COOPERATING COUNTRY	SECURITY CLASSIFICATION		
E-1	1 November 1964	INDIA	UNCLASSIFIED	386-11-550-225	Communicable Disease Control

2. At request, NICD investigated an outbreak of acute hemorrhagic fever in Calcutta in 1963 and prepared a plan for control in the event of further outbreaks. This episode established the role of NICD as a central agency available for epidemic aid and a consultant on local disease control problems.

3. In July 1964 a 5-month Epidemiology Training Course for District Health Officers was started. It is intended to repeat this course at least once, perhaps twice, each year, indefinitely. Plans are being made to supplement this core course with short (1 to 2 weeks) courses in the Epidemiology of specific diseases, to be given in the various states.

4. Bacteriology laboratories have been established on a small scale in order to gain experience which will be needed when the new 4-storied laboratory building is completed in about a year.

5. Epidemiologic investigations of tetanus are under way, as is a system of routine reporting from selected hospitals throughout the country of communicable disease cases and deaths.

During the last year, the Assistant Director (Biostatistics) and several Research Officers and laboratory technicians have come on duty. Deputy Directors for Microbiology and Zoonoses have been selected and will report for duty within a month. Three participants in microbiology and epidemiology, funded from Malaria Eradication in FY 64 are now in training at the Communicable Disease Center in Atlanta and four more have been nominated.

The GOI has assigned high priority to NICD, as its focal point for research, training, epidemic assistance and aid to States in the control of communicable diseases. With the completion of the laboratory building now under construction and the remodeling of existing space into classrooms, the space requirements for several years will be adequate for gradual expansion. The equipping of the laboratory building will be costly and funds have not yet been provided for this purpose. The expansion of the library and the establishment of an audio-visual unit represent two areas where concrete planning has not yet started. However, the major problem facing the new Institute is the over-enthusiasm of the Ministry of Health, and the danger that it will be given too many responsibilities in too many areas before it has the personnel, physical facilities, and experience to do a competent job in each instance.

The first primary bacteriology laboratories have been established, a new laboratory building is under construction, and the Deputy Director (Microbiology) has been recruited. As rapidly as personnel and equipment become available, new

laboratories will be made functional and field studies will be initiated in all other important fields relating to the control of infectious diseases.

#### 4. Funding Requirements

It is expected that the project will continue through FY 1969 with a total dollar cost of \$ 611,000 broken down by project elements as follows:

Technicians	\$ 425,000
Participants	100,000
Commodities	86,000

The Epidemiologist will continue his services during FY 1965. The Public Health Veterinarian and the Biostatistician will be on board; two 3-months consultants will be provided. Total technician cost will be \$41,000.

U. S. Training for three participants for 12 months each will be provided at a cost of \$ 15,000.

Commodities (\$1,000) in support of the U. S. technicians will be given.

Section 402 Rs. equivalent to \$24,000 will defray cost of international travel of participants (equivalent to \$4,500) and technicians (\$19,500).

During FY 1966, it is estimated that the total dollar cost of the project will be \$117,000 as follows:

The Epidemiologist, the Public Health Veterinarian and the Biostatistician will continue their services; the Health Facilities Administrator and the Microbiologist will be recruited and will be on board; two 6-months consultants and two 3-months consultants will be provided. Total technician cost will be \$97,000. Following is a list of the technicians showing position, ETAs and ETDs:

Position	Location	ETA	ETD	\$ Cost
1. Epidemiologist	New Delhi	8/63	6/69	18,000
2. P. H. Veterinarian	"	1/65	1/69	18,000
3. Biostatistician	"	4/65	1/67	18,000
4. Health Facilities Admn.	"	1/66	1/68	11,000
5. Microbiologist	"	1/66	1/68	11,000
4 Consultants (2 for 6 mos each) (2 for 3 mos each)				

U. S. training for four participants for 12 months each will be provided at a cost of \$20,000.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF:	2. COOPERATING COUNTRY	SECURITY CLASSIFICATION		
E-1	1 November 1964	INDIA	UNCLASSIFIED	386-11-550-225	Communicable Disease Control

Section 402 Rs. equivalent to \$53,000 will defray cost of international travel of participants (\$6,000) and technicians (47,000).

For FY 1967 and subsequent years the funding requirements are as follows:

FY 1967 - Total dollar cost \$14,9,000

	Location	ETA	ETD	\$ Cost
1. Epidemiologist	New Delhi	8/63	6/69	18,000
2. P. H. Veterinarian	"	1/65	1/69	18,000
3. Biostatistician	"	4/65	1/67	10,000
4. Health Facilities Admn.	"	1/66	1/68	18,000
5. Microbiologist	"	1/66	1/68	18,000
6. Microbiologist	"	7/66	6/68	20,000
7. Parasitologist	"	7/66	6/68	20,000
2 Consultants (3 mos each)				7,000
4 Participants (4 man years of training)				20,000

Section 402 Rs. equivalent to \$ 6,000 for participants and \$41,000 for technicians. (Total \$ 47,000)

FY 1968 - Total dollar cost \$121,000

1. Epidemiologist	New Delhi	8/63	6/69	18,000
2. P. H. Veterinarian	"	1/65	1/69	18,000
3. Health Facilities Admn.	"	1/66	1/68	10,000
4. Microbiologist	"	1/66	1/68	10,000
5. Microbiologist	"	7/66	6/68	19,000
6. Parasitologist	"	7/66	6/68	19,000
2 Consultants (3 mos each)				7,000
4 Participants (4 man years of training)				20,000

Section 402 Rs. equivalent to \$6,000 for participants and \$42,000 for technicians. (\$48,000)

FY 1969 - Total dollar cost \$56,000

1. Epidemiologist	New Delhi	8/63	6/69	19,000
2. P. H. Veterinarian	"	1/65	1/69	10,000
2 Consultants (3 mos each)				7,000
4 Participants (4 man years of training)				20,000

Section 402 Rs. equivalent to \$25,000 (\$6,000 for participants and \$19,000 for technicians.

## PROJECT DATA SUMMARY — AID DOLLAR COSTS

SECURITY CLASSIFICATION  
UNCLASSIFIED

7.	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. PROJECT NO.				4. TITLE							
	November 1, 1964		INDIA		386-11-660-027				Technical Education Institute							
	5.		BEGIN FY		END FY		6. PRIOR REFERENCES									
U.S. FUNDING:		1954	1964													
PHYSICAL WORK:		1954	1966													
AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)	e.	f.	g.	h.	PERSONNEL SERVICES		PARTICIPANTS		COMMODITIES		OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS			
					(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	
					AID	PASA										
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	4,378	3,503	31	-	1,976	27	687	816	214	1	626		
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	214	214	-	-	115	-	16	-	44	-	39		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	3,812	2,938	31	-	1,763	27	513	815	137	1	525	659	71
	EXPENDITURES (ACTUAL YEAR)	TC	G	660	634	-	-	393	-	103	26	23	-	115	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	566	565	-	-	213	-	174	1	77	-	101		
	A. GROSS OBLIGATIONS	TC	G	-	-	-	-	-	-	-	-	-	-	-	-	
II. OPERATIONAL YEAR (EST.) FY 1965	B. EXPENDITURES	TC	G	346	345	-	-	179	-	46	1	48	-	72		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	-	-	-	-	0	-	-	-	-	-	-		
	A. GROSS OBLIGATIONS	TC	G	-	-	-	-	-	-	-	-	-	-	-		
III. BUDGET YEAR (EST.) FY 1966	B. EXPENDITURES	TC	G	220	220	-	-	34	-	128	-	29	-	29		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	-	-	-	-	-	-	-	-	-	-	-		
	A. GROSS OBLIGATIONS	TC	G	-	-	-	-	-	-	-	-	-	-	-		
IV. PLANNING YR. (EST.) FY	GROSS OBLIGATIONS <sup>2/</sup>															
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>	TC	G	4,378	3,503	31	-	1,976	27	687	816	214	1	626	875	3,503

## REMARKS:

<sup>1/</sup> This is a memorandum (non-odd) column.<sup>2/</sup> Show estimated expenditures in column i.

Refers to Annex 19 of LAS.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED					
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA			3. PROJECT NO.				4. TITLE Goal: Education							
	5. U.S. FUNDING:		BEGIN FY 1954		END FY 1971		6. PRIOR REFERENCES										
	PHYSICAL WORK:		1954		1972												
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
						(1) U.S. AGENCIES		(2)	(1) U.S. AGENCIES	(2)	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		TC	G	21,043*	14,371	837	-	6,391	2,523	1,530	2,607	4,463	705	1,987		
	GROSS OBLIGATIONS (ACTUAL YEAR)		TC	G	2,913	2,463	-	-	714	-	236	-	1,280	450	233		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		TC	G	15,775	9,550	837	-	4,816	2,515	884	2,615	2,477	258	1,373	1,296*	221*
	EXPENDITURES (ACTUAL YEAR)		TC	G	3,816	3,645	-	-	1,334	6	187	26	1,726	139	398	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC	G	5,268	4,821	-	-	1,575	8	646	(8)	1,986	447	614		
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS		TC	G	4,507	3,286	41	20	1,899	-	300	-	700	1,160	387		
	B. EXPENDITURES		TC	G	3,606	3,320	40	19	1,336	8	337	(8)	1,243	227	804		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC	G	6,169	4,787	1	1	2,138	-	609	-	1,443	1,380	597		
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS		TC	G	6,928	6,866	42	20	4,392	-	850	-	700	-	924		
	DL		L	2,340	2,340	-	-	-	-	-	-	-	2,340	-	-		
	B. EXPENDITURES		TC	G	5,071	4,729	42	20	2,528	-	628	-	989	280	584		
	DL		L	1,778	1,778	-	-	-	-	-	-	-	1,778	-	-		
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/		TC	G	7,429	7,367	42	20	4,466	-	1,200	-	700	-	1,001	762	5,697
	DL		L	2,804	2,804	-	-	-	-	-	-	-	2,804	-	-	-	1,100
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/		TC	G	28,940	28,734	126	80	17,124	-	5,650	-	1,600	-	4,360	608	37,328
	DL		L	12,594	12,594	-	-	-	-	-	-	-	12,594	-	-	-	16,076
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/		TC	G	68,847*	60,624	1,088	140	34,272	2,523	9,530	2,607	8,163	1,865	8,659	8,223	60,624
	DL		L	17,738	17,738	-	-	-	-	-	-	-	17,738	-	-	-	17,738

## REMARKS:

1/ This is a memorandum (non-add) column.

2/ Show estimated expenditures in column i.

\*Includes for closed projects:

1. TC \$3,622
2. L/C charged to \$ Accounts \$ 398



AID FORM 10-112 (7-62)	DATE PREPARED	COOPERATING COUNTRY	SECURITY CLASSIFICATION	MULTI-YEAR LISTING					Goal: Education				E-4
	1 November 1964	INDIA	UNCLASSIFIED										
Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Oblig- ations	Cumulative Through Actual Year	Actual Year FY 1964	Operational Year FY 1965	Budget FY 1966	Budget +1 FY 1967	Budget +2 FY 1968	Budget +3 FY 1969	Budget +4 FY 1970	All Subsequent Years	Total All Years	
386-11-660-027	Technical Education Institutes	DL	-	-	-	-	-	-	-	-	-	-	
		DG	4,378	214	-	-	-	-	-	-	-	4,378	
		SA	-	-	-	-	-	-	-	-	-	-	
		480	-	-	-	-	-	-	-	-	-	-	
		L/C	892	72	-	-	-	-	-	-	-	-	892
		Coop. C.	-	-	-	-	-	-	-	-	-	-	-
386-11-650-063	Multipurpose Secondary Education	DL	-	-	-	-	-	-	-	-	-	-	
		DG	2,760	226	75	875	725	550	400	175	-	5,560	
		SA	-	-	-	-	-	-	-	-	-	-	
		480	-	-	-	-	-	-	-	-	-	-	
		L/C	514	169	24	253	210	159	115	51	-	1,326	
		Coop. C.	-	-	-	-	-	-	-	-	-	-	-
386-11-660-150	Indian Institute of Technology, Kanpur	DL	-	-	-	-	-	-	-	-	-	-	
		DG	5,839	1,563	1,660	1,741	1,336	1,342	1,002	902	-	13,822	
		SA	-	-	-	-	-	-	-	-	-	-	
		480	4,595	-	4,470	-	-	-	-	-	-	9,065	
		L/C	968	542	345	266	266	168	166	166	-	2,345	
		Coop. C.	-	-	-	-	-	-	-	-	-	-	-
386-15-660-154	Teacher Training in Engineering Education	DL	-	-	-	-	-	-	-	-	-	-	
		DG	2,241	-	-	-	-	-	-	-	-	-	2,241
		SA	-	-	-	-	-	-	-	-	-	-	
		480	-	-	-	-	-	-	-	-	-	-	
		L/C	-	-	-	-	-	-	-	-	-	-	
		Coop. C.	-	-	-	-	-	-	-	-	-	-	
386-11-660-184	National Institute of Education	DL	-	-	-	-	-	-	-	-	-	-	
		DG	1,617	460	152	967	744	642	487	332	-	4,941	
		SA	-	-	-	-	-	-	-	-	-	-	
		480	-	-	-	-	-	-	-	-	-	-	
		L/C	557	199	67	330	253	223	180	137	-	1,747	
		Coop. C.	-	-	-	-	-	-	-	-	-	-	

SECURITY CLASSIFICATION  
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AID FORM 10-112 (7-62)	DATE PREPARED	COOPERATING COUNTRY	SECURITY CLASSIFICATION	MULTI-YEAR LISTING							Goal: Education	E-4	
	1 November 1964	INDIA	UNCLASSIFIED										
Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year FY 1964	Operational Year FY 1965	Budget FY 1966	Budget +1 FY 1967	Budget +2 FY 1968	Budget +3 FY 1969	Budget +4 FY 1970	All Subsequent Years	Total All Years	
386-31-660-213	Higher Technical Education	DL	--	--	--	--	--	--	--	--	--	--	
		DG	--	--	--	--	--	--	--	--	--	--	
		SA	--	--	--	--	--	--	--	--	--	--	
		480	14,412	--	15,248	--	--	--	--	--	--	--	29,660
		L/C	--	--	--	--	--	--	--	--	--	--	--
		Coop. C.	--	--	--	--	--	--	--	--	--	--	--
		Other	--	--	--	--	--	--	--	--	--	--	--
386-31-640-218	Elementary Education	DL	--	--	--	--	--	--	--	--	--	--	
		DG	--	--	--	--	--	--	--	--	--	--	
		SA	--	--	--	--	--	--	--	--	--	--	
		480	87,727	--	95,643	--	--	--	--	--	--	--	183,370
		L/C	--	--	--	--	--	--	--	--	--	--	--
		Coop. C.	--	--	--	--	--	--	--	--	--	--	--
		Other	--	--	--	--	--	--	--	--	--	--	--
396-11-660-226	Higher Education - Summer Institutes and Sciences	DL	--	--	--	2,340	2,804	3,984	3,980	3,630	1,000	17,738	
		DG	--	--	1,400	3,345	4,624	5,632	6,725	5,876	4,875	32,477	
		SA	--	--	--	--	--	--	--	--	--	--	
		480	--	--	--	--	--	--	--	--	--	--	
		L/C	--	--	947	1,698	2,758	3,552	4,139	3,877	3,568	20,539	
		Coop. C.	--	--	--	--	--	--	--	--	--	--	
		Other	--	--	--	--	--	--	--	--	--	--	
386-33-670-232	World Education Inc. (Literacy Village)	DL	--	--	--	--	--	--	--	--	--	--	
		DG	--	--	--	--	--	--	--	--	--	--	
		SA	--	--	--	--	--	--	--	--	--	--	
		480	--	--	1,657	--	--	--	--	--	--	--	1,657
		L/C	--	--	--	--	--	--	--	--	--	--	
		Coop. C.	--	--	--	--	--	--	--	--	--	--	
		Other	--	--	--	--	--	--	--	--	--	--	
386-11-650-263	Delhi Regional Secondary School	DL	--	--	--	--	--	--	--	--	--	--	
		DG	586	450	1,220	--	--	--	--	--	--	--	1,806
		SA	--	--	--	--	--	--	--	--	--	--	
		480	--	--	--	--	--	--	--	--	--	--	
		L/C	--	--	--	--	--	--	--	--	--	--	
		Coop. C.	--	--	--	--	--	--	--	--	--	--	
		Other	--	--	--	--	--	--	--	--	--	--	

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AID FORM 10-112 (7-62)	DATE PREPARED 1 November 1964	COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	MULTI-YEAR LISTING	Goal: Education	E-4
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Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year	Operational Year	Budget	Budget +1	Budget +2	Budget +3	Budget +4	All Subsequent Years	Total All Years
				FY 1964	FY 1965	FY 1966	FY 1967	FY 1968	FY 1969	FY 1970		
Total: AID Activities, Education	DL	-	-	-	-	2,340	2,804	3,984	3,980	3,630	1,000	17,738
	DG	17,421	2,913	4,507	6,928	7,429	8,166	8,614	7,285	4,875	65,225	
	SA	-	-	-	-	-	-	-	-	-	-	-
	480	106,734	-	117,018	-	-	-	-	-	-	-	223,752
	L/C	2,931	982	1,383	2,547	3,487	4,102	4,600	4,231	3,568	26,849	
	Coop. C.	-	-	-	-	-	-	-	-	-	-	-
	Other	-	-	-	-	-	-	-	-	-	-	-
	DL											
	DG											
	SA											
	480											
	L/C											
	Coop. C.											
	Other											
	DL											
	DG											
	SA											
	480											
	L/C											
	Coop. C.											
	Other											
	DL											
	DG											
	SA											
	480											
	L/C											
	Coop. C.											
	Other											

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BEST AVAILABLE

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-11-660-027				4. TITLE Technical Education Institute							
	5. U.S. FUNDING:	BEGIN FY 1954		END FY 1964		6. PRIOR REFERENCES										
	PHYSICAL WORK:	1954		1866												
7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)	a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT <sup>1/</sup>	e. PERSONNEL SERVICES		f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. <sup>1/</sup> LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS			
					(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
					AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	4,378	3,503	31	-	1,976	27	687	816	214	1	626		
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	214	214	-	-	115	-	16	-	44	-	39		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	3,812	2,938	31	-	1,763	27	513	815	137	1	525	659	71
	EXPENDITURES (ACTUAL YEAR)	TC	G	660	634	-	-	393	-	103	26	23	-	115	-	
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	-	-	-	-	-	-	-	-	-	-	-		
	B. EXPENDITURES	TC	G	346	345	-	-	179	-	46	1	48	-	72		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	220	220	-	-	34	-	128	-	29	-	29		
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TC	G	-	-	-	-	-	-	-	-	-	-	-		
	B. EXPENDITURES	TC	G	220	220	-	-	34	-	128	-	29	-	29		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	-	-	-	-	-	-	-	-	-	-	-		
IV. PLANNING YR. (EST.) FY	GROSS OBLIGATIONS <sup>2/</sup>															
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>	TC	G	4,378	3,503	31	-	1,976	27	687	816	214	1	626	875	3,503

## REMARKS:

<sup>1/</sup> This is a memorandum (non-add) column.<sup>2/</sup> Show estimated expenditures in column i.

Refers to Annex 19 of LAS

AID 1020-3 (7-64)		PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES										SECURITY CLASSIFICATION UNCLASSIFIED										
E - 1b	1. DATA CURRENT AS OF: November 1, 64		2. COOPERATING COUNTRY INDIA		3. BEG. FY 1954 1964 1954 1966		4. PROJECT NO. 386-11-660-027		5. TITLE Technical Education Institutes				6. PRIOR REFERENCES:									
	7. OBLIGATED AND DISBURSED			8. FUNDS				9. TOTALS				10. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		11. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)								
			(1) TYPE		(2) SOURCE		(3) LOAN OR GRANT		(1) DOLLAR EQUIVALENTS (000) 1/				(2) LOCAL CURRENCY UNITS (000)		(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER					
									(a) OBLIGATED		(b) DISBURSED		(a) OBLIGATED		(b) DISBURSED		(a) U.S. PERS.		(b) NON-U.S. PERS.			
I CUMULATIVE THRU ACTUAL YEAR			A. (i) LC COSTS CHGD TO \$ ACCTS. 2/		G				730		3,497						1,651		-		1,846	
			FA ACT (ii) TRUST FUND		Govt. Rev.		-		75		74		360		353		-		-		360	
			ACT (iii) OTHER LC		Sec. 402		G		892		701		4,269		3,358		-		-		1,056	
			B. P.L. 480 LC																			
TOTAL ACTUAL FY 1964			A. (i) LC COSTS CHGD TO \$ ACCTS. 2/		G				-		-						-		-		-	
			FA ACT (ii) TRUST FUND		Govt. Rev.		-		11		11		54		54		-		-		54	
			ACT (iii) OTHER LC		Sec. 402		G		72		242		343		1,160		-		-		86	
			B. P.L. 480 LC														819		60		281	
II OPERATIONAL YEAR (EST.)			A. (i) LC COSTS CHGD TO \$ ACCTS. 2/																			
			FA ACT (ii) TRUST FUND		Govt. Rev.		-		4		1		-		7		-		-		7	
			ACT (iii) OTHER LC		Sec. 402		G		-		98		-		466		-		-		23	
			B. P.L. 480 LC														412		31			
FY 1965			A. (i) LC COSTS CHGD TO \$ ACCTS. 2/																			
			FA ACT (ii) TRUST FUND																			
			ACT (iii) OTHER LC		Sec. 402		G		-		93		-		445		-		-		2	
			B. P.L. 480 LC														413		30			
FY 1966			A. (i) LC COSTS CHGD TO \$ ACCTS. 2/																			
			FA ACT (ii) TRUST FUND																			
			ACT (iii) OTHER LC																			
			B. P.L. 480 LC																			
IV PLANNING YEAR (EST.)			A. (i) LC COSTS CHGD TO \$ ACCTS. 2/																			
			FA ACT (ii) TRUST FUND																			
			ACT (iii) OTHER LC																			
			B. P.L. 480 LC																			
FY _____			A. (i) LC COSTS CHGD TO \$ ACCTS. 2/																			
			FA ACT (ii) TRUST FUND																			
			ACT (iii) OTHER LC																			
			B. P.L. 480 LC																			
V ALL SUBSEQUENT FYs (EST.)			A. (i) LC COSTS CHGD TO \$ ACCTS. 2/																			
			FA ACT (ii) TRUST FUND																			
			ACT (iii) OTHER LC																			
			B. P.L. 480 LC																			
VI TOTAL ALL YEARS (EST.)			A. (i) LC COSTS CHGD TO \$ ACCTS. 2/		G				730		3,497						1,651		-		1,846	
			FA ACT (ii) TRUST FUND		Govt. Rev.		-		75		75		360		360		-		-		360	
			ACT (iii) OTHER LC		Sec. 402		G		892		892		4,269		4,269		-		-		1,056	
			B. P.L. 480 LC														2,994		219		1,056	

## REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E - 1a

E - 1c		PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS						1. DATA CURRENT AS OF: November 1, 1964		2. COOPERATING CTRY. INDIA		3. PERSONNEL SERVICES PARTICIPANT TRAINING		BEG. FY END FY		4. PROJECT NO. 386-11-660-027						
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		a. CUM. THRU ACTUAL FY			b. ACTUAL FY 1964			c. OPERATIONAL FY 1965			d. BUDGET 1966			e. PLANNING FY 1967			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	1	-	203	-	-	31.7	-	-	-	-	-	-	-	-	-	-	-	1	-	203
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B. ON BOARD	U.S.	-	-	-	-	-	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II. PARTICIPANTS PROGRAMMED	A. U.S.	4	-	166	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	166
	B. THIRD CTRY.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## REMARKS:

1/ End of Fiscal Year

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AID 1020-4 (7-64)	1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-660-027	Technical Education Institutes
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### 1. The Activity Targets:

The USAID Technical Education Project was established in 1953 to assist the Government of India in the improvement of Engineering Education. There were two inter-related phases of this project: (1) an initial phase, FY 1953-57, which provided assistance for the development of 11 engineering educational institutions in India; and (2) a final phase, FY 1958-63 focused assisting the GOI's post-graduate-cum-teacher training program in five demonstrational engineering institutes.

To alleviate the shortage of trained engineering teachers, the GOI selected five pilot institutes to serve as demonstration centers to train teachers, through a post-graduate-cum-teacher training program for an eventual all-India application of the scheme. Beginning in 1959 the GOI awarded yearly three-year fellowships in these five institutes to 100 top-ranking engineering graduates. The fellowship holders were pledged under bond to teach in engineering colleges for three years after completion of their fellowships.

The target of this terminating activity was to improve training of 400 new engineering teachers (from 1959 to 1963); to improve post-graduate curricula; to establish research facilities and projects and to furnish research and teaching equipment unavailable in India to one National and four regional engineering colleges.

In addition, during the summer of 1964 it was planned to train about 500 engineering college and polytechnic faculty members from all over India through summer school programs designed to increase their skills as teachers.

### 2. The Course of Action:

To achieve the above targets, contracts with Illinois, Wisconsin, Michigan State and Houston Universities were signed. U.S. technicians, participant training, and commodities were provided by the University of Illinois to the Indian Institute of Technology, Kharagpur; by the University of Wisconsin to the Bengal Engineering College, Howrah and the University of Roorkee, Roorkee; and by the Michigan State University to the College of Engineering at Guindy-Madras, and the college of Engineering, Poona. A total of 26 technician positions for three years each, two engineering summer school consultants for two months each, one administrative officer at Guindy-Madras, 112 participant positions for training in the U.S., and \$130,000 for commodities were provided under the three contracts.

The University of Houston provided fourteen summer school consultants for approximately eight weeks each, two consultants for nine weeks each, one group leader and \$36,000 for commodities.

It was proposed that:

all technicians and consultants, except those who were to serve on the engineering and polytechnic summer schools, leave India by June 30, 1964;

that the commodities be ordered before June 30, 1964; the remaining participants leave for the U.S. in September, 1964;

that the contracts with the University of Houston terminate November 30, 1964; with the University of Illinois and Michigan State University terminate March 29, 1965; and the University of Wisconsin terminate June 30, 1966;

### 3. Progress to Date:

The first phase of the Program--1953-57--provided 46 U.S. technicians for a total of 63 man-years of service and training of 58 Indian participants in the U.S., also books and scientific equipment costing \$879,000 for the 11 engineering institutes was provided.

From 1959 to 1963, 421 candidates were admitted for the post-graduate-cum-teacher training program. Out of 227 who joined by 1961, 12 dropped because of family circumstances or because they obtained better scholarships for training abroad. One hundred eighty-eight trained teachers have been posted as lecturers or Assistant Professors and the remaining 27 are expected to obtain teaching assignments during the next few months. Research facilities

Research facilities have been established under the leadership of American technicians at the five engineering institutes. The American method of "do it yourself" has been emphasized. New curricula in the fields of Civil, Electrical and Mechanical Engineering have been developed for the post-graduate research scholars. Seminars were held with the lectures delivered to Indian engineering professors on "Techniques and Methods of Instruction". A system of internal assessment of student accomplishments, leading to sounder evaluation of student/instructor accomplishments, has been introduced. A good working relationship between the engineering school and industry has been established in most of the institutes. New departments, e.g., Instrumentation, Production Engineering, Computer, etc. have been developed within the institutes, to make the engineering college a more functional unit. All equipment supplied to facilitate engineering education and research is being fully utilized. Reports indicate that the graduates of these colleges have gained recognition from their employers by virtue of their engineering know-how.

Under the present phase of the project 67 professors, including engineering and polytechnic summer schools consultants, completed 54 man-years in India. In addition to the 300 graduates who came

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INDIA

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Technical Education Institutes

under the tutelage of American professors, about 150 engineering teachers worked with and obtained guidance from the American guest professors.

Eight engineering and Polytechnic summer schools were conducted in the four regions of India; 424 Engineering School and Polytechnic faculty members attended. An over-all evaluation indicates that the American approach to solving engineering education problems has had wide acceptance by these teachers. The GOI is satisfied with the contractors' efforts to achieve project objectives.

Of the 112 participant positions, 99 Indian engineering instructors have gone to the U.S. for training as of November 1, 1964; 63 have returned, 36 are still there; and 13 are expected to leave for the U.S. within the next few months.

Orders for commodities worth approximately \$86,000 have been processed.

Progress under the Technical Education Project was not entirely in accordance with expectations. The University of Wisconsin fulfilled all contract obligations, placing well selected technicians in carefully analyzed assignments. The University of Illinois provided comparable services, except that it was unable to provide qualified technicians for several selected assignments. Michigan State University failed to fill many technician positions in critical areas of engineering education and its performance generally did not come up to expectations.

The Technical Education Project has advanced engineering education in India by helping to provide better qualified teachers, redefining curricula, developing new post-graduate course and, through participant training, providing engineering teachers with American educational experience and know-how.

The results achieved are very small in the light of needs for development of all phases of engineering education in India. Although many new patterns have been developed and engineering education concepts established because of the project, engineering education must continue to be given high priority so that technical manpower can be provided for India's development.

This project helped in a limited way to meet India's need for numbers of engineers adequately trained to play a significant role in the industrial development of this nation.

The principal contribution of the project has been through its participant training program. Returnees, though hampered by youth, low academic rank, and the general ineptness and poverty of engineering

schools, show signs of progress in realizing their desires to introduce into India's technology the more advanced American engineering knowledge and skill.

Results of technicians' activity have been somewhat disappointing, perhaps for the following reasons:

a) Dependence upon contract arrangements with large, busy, U.S. oriented universities has been a generally adverse factor in this case.

b) Obligations as to numbers, quality and timing of technicians, have not been met in all instances.

c) The quality of faculty members "spared" for these contracts or recruited from wherever available has not been of the caliber expected. ~~In the sense that a good~~

In the sense that a good beginning has been made, this project has not been a failure. India now stands ready and willing to follow American guidance into a new phase of its technical education development. It remains to be seen whether AID can find a better means to provide that guidance.

The Mission does not recommend a repetition of the 027 contract arrangement in India or elsewhere. Rather it calls attention to the success of the consortium concept in attracting U.S. academic talent to help in development of institutions of learning abroad.

<u>Component</u>	<u>Before 1958</u>	<u>Now (1964)</u>
Curriculum Development	Old and outdated syllabus was being followed for undergraduate and post-graduate classes.	Syllabus for post-graduate and undergraduate students in Civil, Electrical and Mechanical Engineering revised. New Production Eng. Dept. introduced at Roorkee. Most of the undergraduate courses were modernized, and for the first time elective courses were offered in the fourth year. Five completely new courses were introduced in the graduate program which emphasizes design project work and an experimental thesis.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-660-027	Technical Education Institutes
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Component	Before 1958	Now (1964)		
Examinations	Except at IIT, Kharagpur where American professors influenced setting up of the system of internal examinations, examinations are conducted externally.	Examinations are still conducted externally. But strong feeling has been created among the faculty members by American technicians for the need of a system of internal evaluation.		has a new wing to house new equipment. To provide physical facilities for the new program an instrumentation laboratory, an experimental project room and a design hall were established at Roorkee.
Participants training in Indian institutions.	Post-graduate-cum-teacher training program did not exist before 1958.	From 1959 to 1963, 421 candidates were admitted for three years post-graduate-cum-teacher training program. Out of 227 who joined up to 1961, twelve dropped because of family circumstances, or they obtained better scholarships for training abroad. 188 trained teachers have been posted as lecturers or assistant professors and the remaining 27 are expected to obtain teaching assignments during the next few months. 194 are still in training.	Research and development.	Non-existent  Internal Combustion Engine laboratory has been renovated machines repaired and staff trained in the use of these machines.  Central Instrumentation Service Section was established at IIT, Kharagpur. Developed a smokeless furnace for Indian coal. Helped design new refrigeration and airconditioning laboratory for more effective use.
Organization of departments re: academic affairs.	Only a few Heads of Departments had controlling authority in the academic affairs of the institution.	The idea in principle has been accepted to form organizations of Readers and Lecturers in the different departments to report periodically to the faculty on academic affairs of the departments.	Libraries.	Libraries at Poona and Guindy were housed in old buildings with storate space.  Plans for new library buildings were developed. Building at Guindy has started; that at Poona will start in another few months. These buildings will have better internal arrangement for approximately ten thousand scientific and technical books, types of furniture to be used, and use of space and internal arrangement of various services.
Attitude of Staff in Workshops and Labs.	The staff largely depended upon imported equipment. If an instrument did not work because of lack of parts, no attempt was made to repair it.	Dependence on indigenous equipment has increased. Teachers have started designing and manufacturing most of the parts required to maintain the machines, in their own workshops and laboratories.  An old storage place at Roorkee was reclaimed from the Stores Department. The rooms were redecorated, floor fixed and furniture built to provide needed facilities for Production Engineering. Hydraulics lab, in the CE department was expanded. ME	Computers	No computer was available in any of these institutes.  Two computers have been made available by IBM for Kharagpur and Guindy, and will be installed in the next few months. Two computer experts at Guindy and Kharagpur conducted a number of seminars with the staff and students at these institutes on computer programming and operations.

UNCLASSIFIED

SECURITY CLASSIFICATION

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AID 10204 (7-64)	1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-660-027	Technical Education Institutes
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Motion  
Picture  
Study

Did not exist  
before.

The University of Roorkee agreed in principle to the suggestion of the American professor to start Motion Picture Study program. They have decided to develop films on Fluid Mechanics and Strength of Materials. Film "Loops" have been made for use in Production Engineering programs.

Industry and  
Institution  
Relationship

There was no  
coordination  
between indus-  
try and technical  
institutes.

A relationship has been established. ~~It~~  
Seminars have been conducted by the  
Institute of Applied Manpower Research.  
American Professors read papers in  
these seminars.

AID 1020-2 (8.64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-11-650-063				4. TITLE Multipurpose Secondary Education						
	5. U.S. FUNDING:		BEGIN FY		END FY		6. PRIOR REFERENCES									
	PHYSICAL WORK:		1956		1970											
7.		a.	b.	c.	d.	e.			f.		g.		h.		i. 1/	
AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		APPROPRIATION TITLE	LOAN OR GRANT	TOTAL	CONTRACT 1/	PERSONNEL SERVICES			PARTICIPANTS		COMMODITIES		OTHER COSTS		LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2)	(1) U.S. AGENCIES	(2)	(1) DIRECT AND U.S. AGENCIES	(2)	(1) DIRECT AND U.S. AGENCIES	(2)	(1) DIRECT AND U.S. AGENCIES	(2)
						AID	PASA	CONTRACT								
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	2,760	1,763	-	-	964	-	232	997	387	-	180		
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	226	226	-	-	95	-	50	-	75	-	6		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	2,157	1,151	-	-	797	-	43	1,006	184	-	127	127	44
	EXPENDITURES (ACTUAL YEAR)	TC	G	352	352	-	-	243	-	13	-	56	-	40	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	603	612	-	-	167	-	189	(9)	203	-	53		
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	75	75	-	-	63	-	-	-	-	-	12		
	B. EXPENDITURES	TC	G	205	214	-	-	101	-	40	(9)	51	-	22	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	473	473	-	-	129	-	149	-	152	-	43		
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TC	G	875	875	-	-	527	-	200	-	-	-	148		
	B. EXPENDITURES	TC	G	462	462	-	-	288	-	73	-	38	-	63		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	886	886	-	-	368	-	276	-	114	-	128		
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/	TC	G	725	725	-	-	427	-	175	-	-	-	123	-	558
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	1,125	1,125	-	-	684	-	250	-	-	-	191	-	2,178
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	5,560	4,563	-	-	2,665	-	857	997	387	-	654	997	4,563

## REMARKS:

- 1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

Refer to Annex 19 Sec. V of LAS.

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO.

AF-12

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

SECURITY CLASSIFICATION  
UNCLASSIFIED

E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		END FY		4. PROJECT NO.		5. TITLE			
	1 November 1964		INDIA		Funding	1956	1970	1956	1972	386-11-650-063		Multipurpose Secondary Education		
7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED	
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G		171		820			381			439	
	FA	(ii) TRUST FUND Govt. Revenue	-	72	40	199	192	-	-	-	-	199	192	
	ACT	(iii) OTHER LC Sec. 402	G	514	244	2,461	1,167	-	-	899	89	369	179	
	B. P.L. 480 LC													
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G											
	FA	(ii) TRUST FUND Govt. Revenue	-	12	11	57	53	-	-	-	-	57	53	
	ACT	(iii) OTHER LC Sec. 402	G	169	127	810	606	-	-	466	45	126	95	
	B. P.L. 480 LC													
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA	(ii) TRUST FUND Govt. Revenue	-	48	48	229	229	-	-	-	-	229	229	
	ACT	(iii) OTHER LC Sec. 402	G	24	94	115	452	-	-	358	31	-	63	
	B. P.L. 480 LC													
III BUDGET YEAR (EST.) FY 1966	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA	(ii) TRUST FUND Govt. Revenue	-	135	135	646	646	-	-	-	-	646	646	
	ACT	(iii) OTHER LC Sec. 402	G	253	146	1,211	697	-	-	518	36	306	143	
	B. P.L. 480 LC													
IV PLANNING YEAR (EST.) FY 1967	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA	(ii) TRUST FUND Govt. Rev.	-	243	243	1,163	1,163	-	-	-	-	1,163	1,163	
	ACT	(iii) OTHER LC Sec. 402	G	210	166	1,005	796	-	-	573	39	268	184	
	B. P.L. 480 LC													
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA	(ii) TRUST FUND Govt. Rev.	-	372	374	1,780	1,787	-	-	-	-	1,780	1,787	
	ACT	(iii) OTHER LC Sec. 402	G	325	676	1,556	3,236	-	-	2,250	229	383	757	
	B. P.L. 480 LC													
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G		171		820			381			439	
	FA	(ii) TRUST FUND Govt. Rev.	-	840	840	4,017	4,017	-	-	-	-	4,017	4,017	
	ACT	(iii) OTHER LC Sec. 402	G	1,326	1,326	6,348	6,348	-	-	4,598	424	1,326	1,326	
	B. P.L. 480 LC													

REMARKS:

1/ Exchange Rate: \$1 = Rs.4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS		1. DATA CURRENT AS OF:		2. COOPERATING CTRY.		3. PERSONNEL SERVICES PARTICIPANT TRAINING		BEG. FY		END FY		4. PROJECT NO.											
	PERSONNEL AND PARTICIPANTS		1 November 1964		INDIA				1956	1972	1962		1972		386-11-650-063									
I PROJECT PERSONNEL	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			a. CUM. THRU ACTUAL FY			b. ACTUAL FY 1964			c. OPERATIONAL FY 1965			d. BUDGET FY 1966			e. PLANNING FY 1967			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract			
A. MAN YEARS	U.S.	-	-	51.3	-	-	13.3	-	-	9.1	-	-	25.2	-	-	45.3	-	-	69.8	-	-	200.7		
	Non U.S.	-	-	24	-	-	6	-	-	8	-	-	10	-	-	10	-	-	30	-	-	82		
B. ON BOARD	U.S.	-	-	-	-	-	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	Non U.S.	-	-	-	-	-	6	-	-	8	-	-	-	-	-	-	-	-	-	-	-			
II. PARTICIPANTS PROGRAMMED	A. U.S.	-	-	45	-	-	10	-	-	21	-	-	40	-	-	35	-	-	50	-	-	191		
	B. THIRD CTRY.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			

REMARKS:

1/ End of Fiscal Year



AID 1020-4 (7-64)	1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-650-063	Multipurpose Secondary Education
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### Background

Status of Education in India: Illiteracy remains alarmingly high in this largest democracy in the world. Some progress is recognizable, but the steady rapid increase in population tends to negate the relative small increases in literacy. In fact, both the number of literates and the number of illiterates are on the increase. This unusual phenomena is possible since literacy from 1951 to 1961 increased only 7.1 percent while the overall population increase was 11.5 percent. Around one-fourth of the children of the age group 11-13 years and only 13 percent of those from 14-17 years are in school. Of the children in high school (age 14-17), boys outnumber girls four to one. Approximately three-fourths of the children of ages 6-10 years are enrolled in school; enrollment in the primary schools actually has surpassed MOE expectations.

There is a known shortage of qualified teachers in all fields; exact figures for the secondary level are not available. The shortage is said by MOE to be most acute in the vocational streams characteristic of the multipurpose-type secondary schools - - agriculture, technology, crafts, fine arts. India had not provided for the preparation of high school teachers in either agriculture or technology before the opening of the four Regional Colleges of Education.

India's post independence period brought a need for a different kind of education for the rapidly developing democracy. A fundamental reorientation of the objectives of education to the requirements of a developing economy and a new social purpose was called for. The 1953 report of the Secondary Education Committee declared secondary education to be the "weakest joint" in their educational machinery. The schools had been too bookish and mechanical, too stereotyped and rigidly uniform, too isolated from reality, and with a unilateral purpose - entrance to a university. Teaching methods were judged to be hopelessly inadequate, classrooms were seriously overcrowded and materials of instruction conspicuous by their absence. Two glaring problems were isolated: (1) A paucity of professionally trained educational leaders and (2) a severe shortage of qualified secondary teachers especially in the vocational areas.

The commission suggested diversification of courses and the introduction of many practical

streams, and the Central Advisory Board of Education accepted this recommendation in 1954. Multipurpose schools, instituted in the First and the Second Five Year Plan periods, increased in number from 503 in 1956/57 to 2,115 in 1962/63. The Commission defined a multipurpose school as one which

"... seeks to provide varied types of courses for students with diverse aims, interests, and abilities. It endeavors to provide for each individual pupil suitable opportunities to use and develop his natural aptitude and inclinations in the specific course of study chosen by him."

It was proposed that each multipurpose school offer, in addition to the usual academic college preparatory course, three or more of the following streams: Humanities, Science, Technology, Commerce, Agriculture, Fine Arts, Home Science.

### The Course of Action

- A. To bring the four Regional Colleges of Education to fruition by October 1966:
  - a. To prepare 800 teachers during FY 1966 for teaching positions in multipurpose higher secondary schools.
  - b. To revise programs and syllabi as needed.
  - c. To provide a strong inservice education program to upgrade faculty members.
  - d. To provide appropriate training programs in the U.S. for 40 participants (faculty members and potential faculty members).
- B. To develop and stabilize by 1970 the operation of the demonstration multipurpose school on each of the four campuses by
  - a. Demonstrating how an effective multipurpose secondary education program can be organized and operated. Each school will plan demonstration and open house activities and will be open at all times for observation visits.
  - b. Taking initiative in preparing, trying out and evaluating new instructional materials.

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-650-63	Multipurpose Secondary Education
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- c. Providing sound observation programs for pre-service and in-service teachers.
  - d. Establishing and experimenting with new teaching media. There will be an electronic language laboratory in each school to assist in the teaching of languages, especially English.
- C. To strengthen by 1970 the extension service projects in the region. (There are approximately 23 centers in each of the four regions, each normally catering to 150 to 200 schools. The staffing pattern for each Regional Colleges of Education provides personnel for extension service in each department). This is to be accomplished by
- a. providing in-service education to 1,200 or more educator-teachers, headmasters, inspectors, during FY 1966;
  - b. disseminating instructional materials aids and information to secondary and multipurpose schools in the region;
  - c. assisting the State Departments of Education in the development of secondary education through suggested improvements in teacher qualifications, syllabi, instructional materials, and equipment and facilities;
  - d. working constantly at improving teacher education in other institutions (teacher training colleges and departments of education in universities), especially in those having extension centers.

To assist in this monumental effort to improve secondary education in India with particular emphasis on the multipurpose idea, the Ministry of Education has requested that 27 new U.S. technician position and 40 additional participant slots be provided for in the contract.

#### Progress to Date

On February 11, 1956, the Ohio State University entered into contract with the United States Government at the request of the GOI, Ministry of Education, "to provide assistance to the All India Council for Secondary Education, with respect to the extension training program for secondary school teachers." Three staff members, two short-term consultants and commodities worth \$333,000 contributed substantially to the initial and continuing

success of the original 54 extension centers assisted in the project's first phase. There are 92 extension centers in operation today, each normally working within a radius of 50 miles, catering to the needs of 50 schools and influencing approximately 500 teachers.

During the second phase (1959-61) the Ohio State University assisted in the selection and development of 26 multipurpose high schools located throughout India. The team concentrated its initial effort on establishing the status of multipurpose education with, special reference to the vocational and practical arts. Major activity consisted of organizing and conducting workshops and seminars dealing with problems in vocational and practical arts for teachers and administrators of multipurpose schools and for coordinators of extension program. The services of five technicians and commodities valued at \$167,000 were provided.

The third phase (1962-65) activity has been confined principally to bringing into being the four Regional Colleges of Education with attached demonstration multipurpose schools, including planning of course offerings, syllabus outline and the overall organizational pattern. A headquarters team of four technicians has completed nine manyears of service and eight regional college experts are in India, three in Agriculture Education and five in Industrial Arts. Training for 45 participants in programs totalling 432 manmonths and commodities worth \$375,000 (including summer institutes teaching aids in the amount of \$45,000) are financed also in the present contract. Of these participants, 15 have completed 97 months of training, 21 are ready to leave for the U.S. for 12 months' training each.

The GOI Ministry of Education is considering the possibility of making the Regional Colleges truly regional centers for the improvement of the whole of secondary education. These colleges with their attached demonstration schools are in a strategic position to exert leadership, especially in (1) pre-service education, (2) in-service education, (3) extension center development and operation, (4) secondary school program development, and (5) teacher education program development.

Progress toward the third phase activity target includes the following lines of work, all supported by the contract technician group:

1. Planning the design of and consulting on the construction of the buildings to house the four

SECURITY CLASSIFICATION UNCLASSIFIED

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AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY <del>INDIA</del> INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-650-63	Multipurpose Secondary Education
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Regional Colleges and the four associated experimental demonstration multipurpose secondary schools.

2. Preparing specifications for and selected equipment and supplies for the colleges and the secondary schools. Technicians will supervise the installation of equipment as it arrives.
3. Preparing appropriate curricula in all fields for the colleges, and for the demonstration multipurpose secondary schools; advising on the preparation and acquisition of appropriate instructional materials.
4. Planning and initiating teacher education courses, workshops, and seminars for the preparation and upgrading of the teaching and administrative staffs of the colleges.
5. Participating in the teaching of courses on a limited basis where necessary.
6. Providing in-service training to 800 college and university teachers of physics, chemistry, biology, and mathematics through 16 summer institutes, June 8 to July 16, 1964.
7. Training seven faculty members for the regional colleges on the Ohio State University Campus.

The colleges at Bhubaneswar, Ajmer and Mysore started operations in July 1963; that at Bhopal started its first year in July 1964. Three demonstration multipurpose schools have started partial programs, with the expectation of reaching full strength gradually during the next two years.

Enrollment as of July 1964 at the four Regional Colleges was as follows:

Ajmer	299
Bhubaneswar	193
Mysore	179
Bhopal	94

Enrollment at the three demonstration multipurpose schools was:

Ajmer	266
Bhubaneswar	256
Mysore	255

While the project, in the main, has been able to maintain its operational schedule there have been problems. Most important among these are:

- a. Construction of the physical plant for the Regional College at Bhopal was delayed nearly one year because of the national emergency, with a resultant delay to July 1964 in the opening of that College of Education and of its attached demonstration multipurpose school to July 1965.
- b. Procedures for ordering equipment for this federal project are difficult and time-consuming.
- c. While U.S. purchased equipment is arriving promptly and regularly at the colleges, delivery of indigenous equipment is slow; -- delivery of local items may take as long as two years.
- d. The Ministry of Education is reluctant to request technical assistance in several areas, science, guidance, methodology, school administration, home science, for instance, even though USAID and the contracting teams strongly recommend them.

PROJECT DATA SUMMARY — AID DOLLAR COSTS

E-1a

1. DATA CURRENT AS OF: November 1, 1964		2. COOPERATING COUNTRY INDIA		3. PROJECT NO. 386-11-660-150 386-31-660-150		4. TITLE Indian Institute of Technology, Kampur	
5. U.S. FUNDING: 1959		BEGIN FY 1957		END FY 1970		6. PRIOR REFERENCES	
PHYSICAL WORK:		1959		1972			

7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)	a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES		f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS			
					(1) U.S. AGENCIES		(2)	(1) U.S. AGENCIES	(2)	(1) DIRECT AND U.S. AGENCIES	(2)	(1) DIRECT AND U.S. AGENCIES	(2)	(1) DIRECT AND U.S. AGENCIES	(2)	
					AID	PASA	CONTRACT	CONTRACT	CONTRACT	CONTRACT	CONTRACT	CONTRACT				
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	5,839	5,737	11	-	1,492	-	257	91	3,373	-	615		
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	1,563	1,563	-	-	355	-	120	-	970	-	138		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	2,880	2,778	11	-	584	-	12	91	1,916	-	266	54	-
	EXPENDITURES (ACTUAL YEAR)	TC	G	2,140	2,140	-	-	359	-	12	-	1,622	-	147	-	-
C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	2,959	2,959	-	-	908	-	245	-	1,457	-	349			
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	1,660	1,641	19	-	800	-	-	-	700	-	141		
	B. EXPENDITURES	TC	G	1,878	1,860	18	-	478	-	108	-	1,122	-	152	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	2,741	2,740	1	-	1,230	-	137	-	1,035	-	338		
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TC	G	1,741	1,721	20	-	861	-	-	-	700	-	160		
	B. EXPENDITURES	TC	G	1,721	1,701	20	-	585	-	60	-	902	-	154		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	2,761	2,760	1	-	1,506	-	77	-	833	-	344		
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/	TC	G	1,336	1,316	20	-	419	-	-	-	700	-	197	20	1,581
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	3,246	3,186	60	-	1,108	-	-	-	1,600	-	478	61	5,681
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	13,822	13,601	130	-	4,680	-	257	91	7,073	-	1,591	221	13,601

REMARKS:

- 1/ This is a memorandum (non-add) column.
- 2/ Show estimated expenditures in column i.

Refers to Annex 19 of IAS

AID 1020-3 (7-64)		PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES								SECURITY CLASSIFICATION UNCLASSIFIED				
E-1b		1. DATA CURRENT AS OF: 1 November, 1964		2. COOPERATING COUNTRY INDIA		3. Funding 1959 1972		4. PROJECT NO. 386-11-660-150 386-31-660-150		5. TITLE Indian Institute of Technology, Kanpur				
7. OBLIGATED AND DISBURSED		a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
		(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
					(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(c) OBLIGATED	(d) DISBURSED
I. CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G		54		258		-	120	-		138
	FA ACT	(ii) TRUST FUND		-	53	49	252	235	-	-	-	-	252	235
		(iii) OTHER LC		G	968	405	4,632	1,939	-	-	1,469	165	713	305
	B. P.L. 480 LC			G	4,595	4,595	22,000	22,000	22,000	22,000	-	-	-	-
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G		-		-		-	-	-		-
	FA ACT	(ii) TRUST FUND	Govt. Revn.	-	31	30	150	145	-	-	-	-	150	145
		(iii) OTHER LC	Sec. 402	G	542	252	2,579	1,209	-	-	923	103	400	183
	B. P.L. 480 LC		Sec. 104(e)	G	-	2,607	-	12,482	-	12,482	-	-	-	-
II. OPERATIONAL YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G										
	FA ACT	(ii) TRUST FUND	Govt. Revn.	-	216	216	1,034	1,034	-	-	-	-	1,034	1,034
		(iii) OTHER LC	Sec. 402	G	345	281	1,658	1,346	-	-	1,091	122	22	123
	B. P.L. 480 LC		Sec. 104(e)	G	4,400	4,400	21,400	21,400	21,400	21,400	-	-	-	-
III. BUDGET YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G										
	FA ACT	(ii) TRUST FUND	Govt. Revn.	-	140	140	670	670	-	-	-	-	670	670
		(iii) OTHER LC	Sec. 402	G	266	277	1,274	1,325	-	-	1,099	123	36	103
	B. P.L. 480 LC			G										
IV. PLANNING YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G										
	FA ACT	(ii) TRUST FUND	Govt. Revn.	-	108	108	517	517	-	-	-	-	517	517
		(iii) OTHER LC	Sec. 402	G	266	274	1,274	1,311	-	-	1,100	122	50	89
	B. P.L. 480 LC			G										
V. ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G										
	FA ACT	(ii) TRUST FUND	Govt. Revn.	-	270	274	1,292	1,309	-	-	-	-	1,292	1,309
		(iii) OTHER LC	Sec. 402	G	500	1,108	2,394	5,305	-	-	4,421	492	201	392
	B. P.L. 480 LC			G										
VI. TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G		54		258			120			138
	FA ACT	(ii) TRUST FUND	Govt. Revn.	-	787	787	3,765	3,765	-	-	-	-	3,765	3,765
		(iii) OTHER LC	Sec. 402	G	2,345	2,345	11,226	11,226	-	-	9,180	1,024	1,022	1,022
	B. P.L. 480 LC		Sec. 104(e)	G	9,065	9,065	43,400	43,400	43,400	43,400	-	-	-	-

REMARKS:  
 1/ Exchange Rate: \$1 = Rs. 4.7876  
 2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c		PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF: 1 November, 1964		2. COOPERATING CTRY. INDIA		3. PERSONNEL SERVICES PARTICIPANT TRAINING		BEG. FY 1959 1972		END FY 1963 1972		4. PROJECT NO. 386-11-660-150							
I. PROJECT PERSONNEL		a. CUM. THRU ACTUAL FY			b. ACTUAL FY 1964			c. OPERATIONAL FY 1965			d. BUDGET FY 1966			e. PLANNING FY 1967			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
A. MAN YEARS	U.S.	4	-	56.3	-	-	36	1	-	40	1	-	20	1	-	20	3	-	50	10	-	186.3
	Non U.S.	-	-	60	-	-	22	-	-	26	-	-	24	-	-	24	-	-	72	-	-	206
B. ON BOARD	U.S.	-	-	-	-	-	17	1	-	37	1	-	37	1	-	-	-	-	-	-	-	-
	Non U.S.	-	-	-	-	-	22	-	-	26	-	-	20	-	-	24	-	-	-	-	-	-
II. PARTICIPANTS PROGRAMMED	A. U.S.	-	-	2	-	-	1	-	-	3	-	-	5	-	-	7	-	-	25	-	-	42
	B. THIRD CTRY.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

REMARKS:  
 1/ End of Fiscal Year

SECURITY CLASSIFICATION UNCLASSIFIED

PAGE NO. AP-18 (Revised)

PROJECT DATA SUMMARY — AID DOLLAR COSTS

E-1a

1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY INDIA	3. PROJECT NO. 386-11-660-150 386-31-660-150	4. TITLE Indian Institute of Technology, Kanpur
5. U.S. FUNDING: PHYSICAL WORK:	BEGIN FY 1957 1959	END FY 1970 1972	6. PRIOR REFERENCES

7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)	a. APPROPRIATION TITLE	b. LCAN OR GRANT	c. TOTAL	d. CONTRACT <sup>1/</sup>	e. PERSONNEL SERVICES		f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS			
					(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	
					AID	PASA										
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	5,839	5,737	11	-	1,492	-	257	91	3,373	-	615		
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	1,563	1,563	-	-	335	-	120	-	970	-	138		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	2,880	2,778	-	-	584	-	12	91	1,916	-	266	54	-
	EXPENDITURES (ACTUAL YEAR)	TC	G	2,140	2,140	-	-	359	-	12	-	1,622	-	147	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	1,660	1,641	19	-	800	-	-	-	700	-	141		
	B. EXPENDITURES	TC	G	1,878	1,860	18	-	478	-	108	-	1,122	-	152	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	2,741	2,740	1	-	1,230	-	137	-	1,035	-	338		
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TC	G	1,741	1,721	20	-	861	-	-	-	700	-	160		
	B. EXPENDITURES	TC	G	1,721	1,701	20	-	585	-	60	-	902	-	154		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	2,761	2,760	1	-	1,506	-	71	-	833	-	344		
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS <sup>2/</sup>	TC	G	1,336	1,316	20	-	419	-	-	-	700	-	197	20	1,581
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>	TC	G	3,246	3,186	60	-	1,108	-	-	-	1,600	-	478	61	5,681
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>	TC	G	13,822	13,601	130	-	4,680	-	257	91	7,073	-	1,591	221	13,601

REMARKS:

- <sup>1/</sup> This is a memorandum (non-add) column.
- <sup>2/</sup> Show estimated expenditures in column i.

Refers to Annex 19 of LAS

AID 1020-3 (7-64)		PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES							SECURITY CLASSIFICATION UNCLASSIFIED						
E-1b		1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		END FY		4. PROJECT NO.		5. TITLE			
		1 November, 1964		INDIA		Funding 1957		1970		386-11-660-150		Indian Institute of Technology, Kanpur			
						Phys. Work 1959		1972		386-31-660-150		6. PRIOR REFERENCES:			
7. OBLIGATED AND DISBURSED	e. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)					
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1)		(2)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER			
				DOLLAR EQUIVALENTS (000) 1/		LOCAL CURRENCY UNITS (000)				(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED		
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED								
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G		54		258			120			138		
	FA ACT	(ii) TRUST FUND			49	252	235						235		
		(iii) OTHER LC	G		968	4,632	1,939			1,469	165	713	305		
	B. P.L. 480 LC		G	4,595	4,595	22,000	22,000	22,000	22,000						
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G												
	FA ACT	(ii) TRUST FUND	Govt. Revn		31	30	150	145				150	145		
		(iii) OTHER LC	Sec. 402	G	542	252	2,579	1,209		923	103	400	183		
	B. P.L. 480 LC	Sec. 104(e)	G		2,607		12,482		12,482						
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND	Govt. Reven		216	216	1,034	1,034				1,034	1,034		
		(iii) OTHER LC	Sec. 402	G	345	281	1,652	1,346		1,091	122	22	133		
	B. P.L. 480 LC	Sec. 104(e)	G	4,470	4,470	21,400	21,400	21,400	21,400						
III BUDGET YEAR (EST.) FY 1966	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND	Govt. Reven		140	140	670	670				670	670		
		(iii) OTHER LC	Sec. 402	G	266	277	1,274	1,325		1,099	123	96	103		
	B. P.L. 480 LC														
IV PLANNING YEAR (EST.) FY 1967	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND	Govt. Reven		108	108	517	517				517	517		
		(iii) OTHER LC	Sec. 402	G	266	274	1,274	1,311		1,100	122	50	89		
	B. P.L. 480 LC														
V ALL SUBSEQUENT FYS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND	Govt. Reven		270	274	1,292	1,309				1,292	1,309		
		(iii) OTHER LC	Sec. 402	G	500	1,108	2,394	5,305		4,421	492	201	392		
	B. P.L. 480 LC														
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND	Govt. Reven		787	787	3,765	3,765				3,765	3,765		
		(iii) OTHER LC	Sec. 402	G	2,345	2,345	11,226	11,226		9,180	1,024	1,022	1,022		
	B. P.L. 480 LC	Sec. 104(e)	G	9,065	9,065	43,400	43,400	43,400	43,400						

## REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. i of Table E-1a

E-1c		PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:		2. COOPERATING CTRY.		3. PERSONNEL SERVICES		BEG. FY		END FY		4. PROJECT NO.							
		1 November, 1964			INDIA		PERSONNEL SERVICES		1959		1972		386-11-660-150									
		PARTICIPANT TRAINING			1963		1972															
I PROJECT PERSONNEL	A. MAN YEARS	a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYS			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
I	U.S.	4	-	56.3	-	-	36	1	-	40	1	-	20	1	-	20	3	-	50	10	-	192.3
	Non U.S.	-	-	60	-	-	22	-	-	26	-	-	24	-	-	24	-	-	72	-	-	206
B. ON 1 BOARD	U.S.	-	-	-	-	-	17	1	-	37	1	-	37	1	-	-	-	-	-	-	-	-
	Non U.S.	-	-	-	-	-	22	-	-	26	-	-	20	-	-	24	-	-	-	-	-	-
II. PARTICIPANTS PROGRAMMED	A. U.S.	-	-	2	-	-	1	-	-	3	-	-	5	-	-	7	-	-	25	-	-	42
	B. THIRD CTRY.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## REMARKS:

1/ End of Fiscal Year

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO. AF-18

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-660-150	Indian Institute of Technology, Kanpur
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1. The Activity Target:

This activity is intended to guide and support GOI efforts to develop by 1970 an institution which possesses a science-based undergraduate program for 1600 undergraduates with specialisation at the postgraduate level for 400 students and an industry-oriented research program and which is capable of setting standards for up-to-date functional engineering education throughout India.

This will require that the best in American engineering education be suitably adapted to Indian needs, American instructional and student assessment methods, preparation of teachers and faculty members for engineering, scientific, and technological colleges, training of high level people for scientific, technological and engineering work must be tailored to the curriculum. These factors must be emphasized in the effort to change Indian engineering education pattern to fit the demands of an industrial society.

Background:

India is engaged in a long range program to expand and redirect her educational system so that education may assist more effectively in the implementation of the Five Year Plans. The GOI committee appointed to study the development of technical education in India reported in 1948 that "...the existing facilities for higher technical education in India are inadequate both in quality and quantity to satisfy India's post-war need for high grade technologists." The Committee also recommended that four regional national higher technological institutions be established to set the standards for engineering institutions throughout India and provide a relatively large number of additional places for students.

The first of the four institutes started in 1951 at Kharagpur (east) with help from UNESCO and Colombo Plan; the second in 1958 at Bombay (west) with UNESCO help, using largely Soviet technicians and equipment; and the third in 1959 at Madras (south) with help from West Germany. The GOI approached the Mission for assistance for the fourth at Kanpur.

It is intended that IIT Kanpur will serve as a center for the education of engineers and scientists, for the production of teaching staffs for Indian engineering and technological institutions, and for research and extension. The institute will accommodate 1,600 undergraduates and 400 postgraduates and a faculty of about 250, with all personnel resident on the campus. When fully developed, with U.S. assistance, the institution will be one of the best in the whole of Asia. All other engineering institutions in India will follow this pattern.

2. The Course of Action:

Although the undergraduate program is expected to be in full operation by the end of FY 1965, AID assistance will be continued through FY 1970, in order to provide advice on the curricula for new courses in science and engineering on the undergraduate level and in the full development of anticipated research and training programs.

Educational Services, Incorporated, through a consortium of nine American universities, provides U.S. technical advice, participant training and commodities, as detailed under Funding Requirements.

For FY 1966 this includes: A Program Leader for one man year; two administrative assistants for two man years; one architectural consultant for one man year; 24 professors in various specialties for 24 man years; eight graduate research/laboratory assistants for one year each; one librarian for one year; six short-term consultants to provide a total of 3 man years; and commodities valued at \$700,000.

The Faculty Selection Committee of American and Indian professors will continue to seek professors, associate and assistant professors, and lecturers to fill the staff openings in the six engineering, the three science and the humanities and social science departments. Curricula will be developed and refined and faculty trained for them as well.

The faculty now consists of 83 members (four Professors, nine Associate Professors, 27 Assistant Professors, 40 Lecturers, and three Associate Lecturers); it is expected that about 25 new members will be added shortly.

In FY 1966 twenty-four American professors will work in these areas. Systematic training will be given by various departments to their research assistants and scholars to develop research methods and techniques, and to encourage them to undertake research projects. Seminars will be held to benefit research workers.

Commodity requisitions to include laboratory and workshop equipment, library books and periodicals and student texts, selected to meet the educational objectives of each department by Indian and/or American faculty members will be cleared through the IIT Equipment Committee, which makes for careful selection and minimum processing time. Indian professors will be trained to use and to provide for the maintenance of all U.S. procured equipment.

AID 10204 (7-64)	1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-660-150	Indian Institute of Technology, Kanpur
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All services indicated above and requiring U.S. action are included in the Educational Services Incorporated contract and are to be carried out under supervision of USAID/India.

The GOI provide for cost of transportation of commodities from port of entry to the Institute, internal travel costs of technicians and recurring expenditures incurred in the development of the institute, and provided 1,200 acres of land for the campus site.

No other foreign or international agency is assisting with this activity.

### 3. Progress to Date:

In the first phase of the project (FY 1959) a survey team of U.S. engineering educators, under a contract with the American Society for Engineering Education (ASEE); visited Indian engineering institutes and industries for six weeks; the team's report supported the establishment of an IIT at Kanpur. Non-contract commodities in the amount of \$91,000 also were provided, and one short-term consultant served as Advisor to the IIT Director from November 11, 1960, through March 8, 1961.

During the greater part of 1959 and 1960 the program was developed. Under a Ford Foundation grant, a three-member survey team from the Massachusetts Institute of Technology suggested that MIT alone could not undertake the activity. Eventually nine universities, collaborating in an organization called Educational Services Incorporated sent to India a seven-man team from member universities to explore its situation further. In early fall 1961 the Mission Technical Education Advisor, the Joint Educational Advisor of the Ministry of Education (formerly Ministry of Scientific Research and Cultural Affairs) and the Director of the IIT Kanpur conferred with consortium members in the U.S. and contract was signed on 21 February 1962 under which ESI now renders technical advice and assistance in the development of IIT Kanpur.

The GOI put IIT Kanpur into operation in 1960, with its 100 first term undergraduate students housed in a nearby technical institute. The GOI obtained 1,200 acres of land for the campus and engaged architects to prepare building plans as recommended in the ASEE report. Three groups of students of 100 each in 1960, 1961 and 1962, 200 in 1963 and 300 in 1964 were admitted to the first year of the five year course.

With the arrival during March and May 1962 of the Program Leader and the Administrative Officer to set up program operations, the activity began to move ahead on schedule. As of September 1964, 42 U.S. staff members, including five short-term consultants, were at the post.

Four short-term consultants, one each in metallurgy, humanities, graphics and sanitary engineering and two short-term library consultants

completed their tours and returned to the U.S. Two professors each in the fields of electrical engineering, chemical engineering and mathematics, three professors in mechanical engineering and one each in curriculum development, library, linguistics and the program leader completed their tours, for a total of 200 man months of service.

Commodities worth \$2,199,436.69 were ordered, including one IBM 1620 computer.

One participant completed his 12 months' training in laboratory planning and has returned to India, and another is in the United States for sanitary engineering training at the University of California, Berkeley.

During the last year the contract was amended to permit use of U.S.-owned rupees for the transportation of Indian scholars (and their dependents) living abroad who have accepted appointments for the IIT faculty; eight so selected have accepted IIT appointments.

The contract was amended further to provide payment to participants pursuing degree programs. The faculty in the professional grades has tripled during the last year; all the new members are well qualified and most of them have had valuable research and teaching experience abroad.

A member of the ESI Steering Committee (a professor of aeronautical engineering) visited aeronautical establishments in Kanpur, Delhi and Bangalore for four weeks, as a basis for detailed plans for the undergraduate program in aeronautical engineering at IIT.

Thirty thousand books were added to the library, the building for which is under construction; the Government of India has agreed to air-conditioning and the project will supply that part of the equipment not manufactured in India.

Construction work at the campus site is on schedule. The western laboratory (Engineering Block I) and southern laboratory (Engineering Science Block) are occupied, although allotment of space is not complete. Working drawings for the Lecture Hall building, which is to have seven lecture halls--one to seat 400, two for 200 and four of 100 seats -- have been completed. The Faculty and Core Laboratory, which will provide office space for about 60 percent of the faculty, research areas, and department headquarters have been designed. The Officers hostel is nearly ready and 20 Type V faculty houses are completed. Two student hostels are finished and work has begun on the third. Paving of the permanent roads and installation of street lighting have begun.

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO. AF-20

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-660-150	Indian Institute of Technology, Kanpur.
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The IBM 1620 computer system is functioning well, and instruction in its use has been offered to all the faculty and almost all students. Courses and workshops were conducted under the leadership of ESI staff members for IIT students and for representatives of government agencies and other educational institutions. Discussions are being held with the IBM India and GOI officials about obtaining a larger IBM 7044 system to meet the needs of the expanding computer program.

Another development is a rotation policy whereby each of the departmental faculty members serve as the department head for a period. This is a radical departure from the traditional Indian University organization pattern, by which a department head is permanently incharge. There also has been progress in setting up a procedure for establishing and periodically reviewing requirements for personnel, facilities, equipment and services needed to carry out the agreed educational and research programs of the Institute and for allocating the current resources of the Institute to specific requirements. A Central Instrumentation Service to maintain records on equipment and to avoid unnecessary duplication is being organized.

Progress has been made in working plans for a Master's program in each of the several departments; doctoral degree programs are operating in mechanical engineering and physics and are planned for other fields. The introduction of textbooks for widespread use has been successful. Another favorable development was faculty counselling of the students; it is proposed that in 1965 forty faculty members will be engaged in counselling of first and second year students, as an aid to maintaining high academic standards.

U.S. professors at IIT Kanpur visited other engineering institutions in different parts of the country and delivered lectures in their respective fields, conducted seminars and workshops, and attended conferences.

#### Funding Requirements

The total, operational year, budget year, and future year requirements are shown as follows:

	U.S.Tech. Cost	Cont. Services Cost	Commodities	ESTIMATED REQUIREMENTS FOR FY 65 AND SUBSEQUENT YEARS		
				402 Rs.		P.L.480
			Tech.	Parts.		
1965	19,000	941,000	700,000	340,500	4,500	4,470,000
1966	20,000	1,021,000 (includes \$30,000 for 5 participants)	700,000	258,500	7,500	-
1967	20,000	616,000 (includes \$42,000 for 7 participants)	700,000	255,500	10,500	-
1968	20,000	622,000 (includes \$48,000 for 8 participants)	700,000	156,000	12,000	-
1969	20,000	482,000 (includes \$60,000 for 10 participants)	500,000	151,000	15,000	-
1970	20,000	482,000 (includes \$60,000 for 10 participants)	400,000	151,000	15,000	-
<b>TOTAL</b>	<b>119,000</b>	<b>4,164,000</b>	<b>3,700,000</b>	<b>1,312,500</b>	<b>64,500</b>	<b>4,470,000</b>

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-660-150	Indian Institute of Technology, Kanpur
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Project Title: Indian Institute of Technology, Kanpur

FY-1966

Contract No. : AIDc - 2285  
 Contractor : Educational Services Incorporated  
 Original Contract signed : February 21, 1962  
 Latest Extension signed : November 1, 1962  
 Scheduled Termination date: October 31, 1965  
 Contract Year : November to October

Field Staff Position held	Date of Arr.	Date of Dep.	Annual Salary	REMARKS
1 Project Manager Group Leader Replacement	7/65	6/66		
23 Professors in different fields	"	"		
1 Architectural Consultant	"	"		
1 Administrative Officer	"	"		
10 Research Assistants-/ Laboratory Technicians	"	"		
6 Short Term Consultants	"	"		
1 Architectural Consultant	"	"		

Contract Staff

FY-1965

Field Staff Position held	Date of Arrival	Date of Dept.	Annual Salary	REMARKS
1 Project Manager Group Leader Replacement	7/64	6/65	\$25,500	
23 Professors in different fields	"	"	\$25,500 each	
10 Research Assistants/Laboratory Technicians	"	"	\$20,000 each	
6 Short Term Consultants (for six months each)	1/65	6/65	\$ 1,725 p.m.	
1 Architectural Consultant	7/64	6/65	\$22,300	
2 Administrative Officers	"	"	\$22,300 each	

Commodities	Category of Equipment	Desired Delivery Date
\$700,000	Books, Periodicals and Laboratory Equipment.	June, 1966.

Commodities	Category of Equipment	Desired Delivery Date
\$700,000	Books, Periodicals and Laboratory Equipment.	June, 1965.

PROJECT DATA SUMMARY — AID DOLLAR COSTS

E-1a		1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA		3. PROJECT NO. 386-15-660-154				4. TITLE Teacher Training in Engineering Education						
		5. U.S. FUNDING:		BEGIN FY 1958	END FY 1961	6. PRIOR REFERENCES						7.				
		PHYSICAL WORK:		1959	1965	PERSONNEL SERVICES		PARTICIPANTS		COMMODITIES		OTHER COSTS		LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES		(2) DIRECT AND U.S. AGENCIES		(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT
						AID	PASA				(1)	(2)	(1)	(2)		
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	2,241	-	-	-	-	2,241	-	-	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	2,233	-	-	-	-	2,233	-	-	-	-	-	154	-
	EXPENDITURES (ACTUAL YEAR)	TC	G	6	-	-	-	-	6	-	-	-	-	-	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	8	-	-	-	-	8	-	-	-	-	-	-	-
	A. GROSS OBLIGATIONS	TC	G	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. EXPENDITURES	TC	G	8	-	-	-	-	8	-	-	-	-	-	-	-
III. BUDGET YEAR (EST.) FY _____	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
	A. GROSS OBLIGATIONS															
	B. EXPENDITURES															
IV. PLANNING YR. (EST.) FY _____	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
	A. GROSS OBLIGATIONS															
V. ALL SUBSEQUENT YEARS (EST.)	B. EXPENDITURES															
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	A. GROSS OBLIGATIONS 2/	TC	G	2,241	-	-	-	-	2,241	-	-	-	-	-	2,241	-
	GROSS OBLIGATIONS 2/															

REMARKS:

- 1/ This is a memorandum (non-add) column.
- 2/ Show estimated expenditures in column i.

Refers to Annex 19 of LAS

PROJECT DATA SUMMARY — AID DOLLAR COSTS

E-10

1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA		3. PROJECT NO. 386-15-660-154		4. TITLE Teacher Training in Engineering Education										
		5. U.S. FUNDING: 1958		END FY 1961		6. PRIOR REFERENCES										
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a.	b.	c.	d.	e. PERSONNEL SERVICES		f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
		APPROPRIATION TITLE	LOAN OR GRANT	TOTAL	CONTRACT 1/	(1) U.S. AGENCIES		(2)	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT
						AID	PASA	CONTRACT	CONTRACT							
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	2,241	-	-	-	-	2,241	-	-	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	2,233	-	-	-	-	2,233	-	-	-	-	-	154	-
	EXPENDITURES (ACTUAL YEAR)	TC	G	6	-	-	-	-	6	-	-	-	-	-	-	-
C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	8	-	-	-	-	8	-	-	-	-	-	-	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. EXPENDITURES	TC	G	8	-	-	-	-	-8	-	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
III. BUDGET YEAR (EST.) FY _____	A. GROSS OBLIGATIONS															
	B. EXPENDITURES															
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
IV. PLANNING YR. (EST.) FY _____	GROSS OBLIGATIONS 2/															
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	2,241	-	-	-	-	2,241	-	-	-	-	-	154	-

REMARKS:

1/ This is a memorandum (non-add) column.

2/ Show estimated expenditures in column i. Refers to Annex 19 of LAS

AID 1020-3 (7-64)	PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES					SECURITY CLASSIFICATION UNCLASSIFIED
	<b>E-1b</b>	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	3. Funding Phys. Work	BEG. FY END FY	4. PROJECT NO. 386-15-660-154

7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	TYPE	SOURCE	LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
TOTAL ACTUAL	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
FY	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
II OPERATIONAL YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
FY	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
III BUDGET YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
FY	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
IV PLANNING YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
FY	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYS (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (ii) TRUST FUND												
	(iii) OTHER LC												
	B. P.L. 480 LC												

REMARKS:  
 1/ Exchange Rate: \$1 =  
 2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

<b>E-1c</b>	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS		1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING CTRY. INDIA	3. PERSONNEL SERVICES PARTICIPANT TRAINING	BEG. FY 1959	END FY 1965	4. PROJECT NO. 386-15-660-154											
	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		a. CUM. THRU ACTUAL FY	b. ACTUAL FY <u>64</u>	c. OPERATIONAL FY <u>65</u>	d. BUDGET FY	e. PLANNING FY <u>67</u>	f. ALL SUBSEQUENT FYS	g. TOTAL ALL YEARS										
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract		
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	B. ON BOARD	U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
II PARTICIPANTS PROGRAMMED	A. U.S.	299	-	-	-	-	-	-	-	-	-	-	-	-	-	-	299	-	-
	B. THIRD CTRY.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

REMARKS:  
 1/ End of Fiscal Year

AID 1020-1 (7-64)	1. DATA CURRENT AS OF:	2. COOPERATING COUNTRY	SECURITY CLASSIFICATION	386-11-660-154	Teacher Training in Engineering Education
		INDIA	UNCLASSIFIED		

1. The Activity Target

The target of this terminated activity was to provide U.S. post-graduate training to approximately 300 of the 6,600 engineering teachers required by 1961, in a crash program designed to meet the critical shortage of engineering teachers until the post-graduate-cum-teacher-training program of the GOI (assisted under Activity No. 386-11-660-027, Technical Education Institutes) got under way.

2. The Course of Action

This activity, started in 1958, achieved its quantitative target and was terminated in 1961. It is proposed now to intensify our efforts in a participant Follow-up Program for this activity, to strengthen the contribution of the U.S. returned participants to engineering education in India.

To help meet the continuing need for additional engineering teachers, in FY 1962 the participant training element of project 027 was increased to 112 opportunities.

3. Progress to Date

Of 299 Indian engineering teachers sent to the U.S. for training, 295 have completed their training for 442 man years and are teaching in Indian engineering institutions. Seven still in the U.S. are expected to complete their training by June 1965.

Against the 112 supplemental training opportunities in project 027, 87 participants have gone to the U.S. as of September 1, 1964 of whom 62 have completed their training.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY -- AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED					
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-11-660-184				4. TITLE National Institute of Education							
	5. U.S. FUNDING:		BEGIN FY 1960		END FY 1970		6. PRIOR REFERENCES										
	PHYSICAL WORK:		1960		1972												
7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. 1/ LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
						(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	
						AID	PASA										
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		TC	G	1,617	1,583	33	-	874	1	140	-	291	-	278		
	GROSS OBLIGATIONS (ACTUAL YEAR)		TC	G	460	460	-	-	169	-	50	-	191	-	50		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		TC	G	932	898	33	-	587	1	102	-	42	-	167	-	10
	EXPENDITURES (ACTUAL YEAR)		TC	G	519	519	-	-	339	-	59	-	25	-	96	-	-
C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC	G	685	685	-	-	287	-	38	-	249	-	111			
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS		TC	G	152	130	22	-	106	-	-	-	-	24			
	B. EXPENDITURES		TC	G	341	319	22	-	212	-	23	-	22	-	62		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC	G	496	496	-	-	181	-	15	-	221	-	73		
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS		TC	G	967	945	22	-	624	-	125	-	-	-	196		
	B. EXPENDITURES		TC	G	686	664	22	-	435	-	85	-	20	-	124		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC	G	777	777	-	-	370	-	55	-	207	-	145		
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/		TC	G	744	722	22	-	456	-	150	-	-	-	122	22	10
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/		TC	G	1,461	1,395	66	-	933	-	225	-	-	-	237	66	2,184
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/		TC	G	4,941	4,775	165	-	2,987	1	640	-	291	-	857	166	4,775

## REMARKS:

1/ This is a memorandum (non-add) column.

2/ Show estimated expenditures in column i. Refer to Annex 19 Section V of LAS

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED					
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-11-660-184			4. TITLE National Institute of Education								
	5. U.S. FUNDING:		BEGIN FY 1960	END FY 1970	6. PRIOR REFERENCES												
	PHYSICAL WORK:		1960	1972													
7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LCAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. 1/ LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
						(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	
						AID	PASA										
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		TC	G	1,617	1,583	33	-	874	1	140	-	291	-	278		
	GROSS OBLIGATIONS (ACTUAL YEAR)		TC	G	460	460	-	-	169	-	50	-	191	-	50		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		TC	G	932	898	33	-	587	1	102	-	42	-	167	-	10
	EXPENDITURES (ACTUAL YEAR)		TC	G	519	519	-	-	339	-	59	-	25	-	96	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC	G	685	685	-	-	287	-	38	-	249	-	111		
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS		TC	G	152	130	22	-	106	-	-	-	-	-	24		
	B. EXPENDITURES		TC	G	341	319	22	-	212	-	23	-	22	-	62		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC	G	496	496	-	-	181	-	15	-	227	-	73		
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS		TC	G	967	945	22	-	624	-	125	-	-	-	196		
	B. EXPENDITURES		TC	G	686	664	22	-	435	-	85	-	20	-	124		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC	G	777	777	-	-	370	-	55	-	207	-	145		
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/		TC	G	744	722	22	-	450	-	150	-	-	-	122	22	710
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/		TC	G	1,461	1,395	66	-	933	-	225	-	-	-	237	66	2,184
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/		TC	G	4,941	4,775	165	-	2,987	1	640	-	291	-	857	166	4,775

## REMARKS:

- 1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

Refer to Annex 19 Section V of LAS

AID 1020-3 (7-64)	PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES										SECURITY CLASSIFICATION UNCLASSIFIED						
	E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3.		BEG. FY		END FY		4. PROJECT NO.		5. TITLE		6. PRIOR REFERENCES:	
		1 November 1964		INDIA		Funding		1960		1970		386-11-660-184		National Institute of Education			
7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)							
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER					
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED				
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	10	-	48	-	-	48	-	-	-	-			
	FA ACT	(ii) TRUST FUND Govt. Rev.	-	36	34	173	165	-	-	-	-	173	165	-			
		(iii) OTHER LC Sec. 402	G	557	243	2,668	1,163	-	-	705	95	808	363	-			
	B. P.L. 480 LC																
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	-	-	-	-	-	-	-	-	-	-			
	FA ACT	(ii) TRUST FUND Govt. Rev.	-	26	26	125	125	-	-	-	-	125	125	-			
		(iii) OTHER LC Sec. 402	G	199	90	952	433	-	-	268	36	283	129	-			
	B. P.L. 480 LC																
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	-	-	-	-	-	-	-	-	-	-			
	FA ACT	(ii) TRUST FUND Govt. Rev.	-	21	21	99	99	-	-	-	-	99	99	-			
		(iii) OTHER LC Sec. 402	G	67	86	321	413	-	-	259	47	-	107	-			
	B. P.L. 480 LC																
III BUDGET YEAR (EST.) FY 1966	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	-	-	-	-	-	-	-	-	-	-			
	FA ACT	(ii) TRUST FUND Govt. Rev.	-	47	47	225	225	-	-	-	-	225	225	-			
		(iii) OTHER LC Sec. 402	G	330	140	1,580	672	-	-	459	86	192	127	-			
	B. P.L. 480 LC																
IV PLANNING YEAR (EST.) FY 1967	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	-	-	-	-	-	-	-	-	-	-			
	FA ACT	(ii) TRUST FUND Govt. Rev.	-	41	41	198	198	-	-	-	-	198	198	-			
		(iii) OTHER LC Sec. 402	G	253	166	1,211	795	-	-	526	117	230	152	-			
	B. P.L. 480 LC																
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	-	-	-	-	-	-	-	-	-	-			
	FA ACT	(ii) TRUST FUND Govt. Rev.	-	85	87	405	413	-	-	-	-	405	413	-			
		(iii) OTHER LC Sec. 402	G	540	1,112	2,585	5,322	-	-	3,443	1,053	345	826	-			
	B. P.L. 480 LC																
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	10	-	48	-	-	48	-	-	-	-			
	FA ACT	(ii) TRUST FUND Govt. Rev.	-	230	230	1,100	1,100	-	-	-	-	1,100	1,100	-			
		(iii) OTHER LC Sec. 402	G	1,747	1,747	8,365	8,365	-	-	5,392	1,398	1,575	1,575	-			
	B. P.L. 480 LC																

REMARKS:  
 1/ Exchange Rate: \$1 = 47876  
 2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS										1. DATA CURRENT AS OF:		2. COOPERATING CTRY.		3.		BEG. FY		END FY		4. PROJECT NO.		
	PERSONNEL SERVICES										1 November 1964		INDIA		PERSONNEL SERVICES		1960		1972		386-11-660-184		
	PARTICIPANT TRAINING																						
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY			b. ACTUAL FY 1964			c. OPERATIONAL FY 1965			d. BUDGET FY 1966			e. PLANNING FY 1967			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS				
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract		
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	-	-	40.3	-	-	16	-	-	10	-	-	25	-	-	25	-	-	95.9	-	-	196.2
		Non U.S.	-	-	32	-	-	9	-	-	11	-	-	31	-	-	31	-	-	35	-	-	140
B. ON BOARD	U.S.	-	-	-	-	42	-	-	8	-	-	25	-	-	25	-	-	-	-	-	-	-	-
	Non U.S.	-	-	-	-	9	-	-	11	-	-	31	-	-	31	-	-	-	-	-	-	-	-
II. PARTICIPANTS PROGRAMMED	A. U.S.	4	-	44	-	-	10	-	-	-	-	25	-	-	30	-	-	45	4	-	-	144	
	B. THIRD CTRY.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

REMARKS:  
 1/ End of Fiscal Year Refer to Annex 19 Sec. V of LAS

SECURITY CLASSIFICATION UNCLASSIFIED

PAGE NO. AF-27 (Revised)

AID 1020-3 (7-64)	PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES										SECURITY CLASSIFICATION UNCLASSIFIED			
	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		END FY		4. PROJECT NO.		5. TITLE		6. PRIOR REFERENCES:	
E-1b	1 November 1964		INDIA		Funding 1960 Phys. Work 1960		1970 1972		386-11-660-184		National Institute of Education			
7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
	(1) TYPE	(2) SOURCE	(3) LOAN LOAN GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED	
	I CUMULATIVE THRU ACTUAL YEAR													
TOTAL ACTUAL FY 1964														
II OPERATIONAL YEAR (EST.)														
FY 1965														
III BUDGET YEAR (EST.)														
FY 1966														
IV PLANNING YEAR (EST.)														
FY 1967														
V ALL SUBSEQUENT FYs (EST.)														
VI TOTAL ALL YEARS (EST.)														

## REMARKS:

1/ Exchange Rate: \$1 = 47876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS										1. DATA CURRENT AS OF:		2. COOPERATING CTRY.		3. PERSONNEL SERVICES		BEG. FY		END FY		4. PROJECT NO.	
											1 November 1964		INDIA		PARTICIPANT TRAINING		1960		1972		386-11-660-184	
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		a. CUM. THRU ACTUAL FY			b. ACTUAL FY 1964			c. OPERATIONAL FY 1965			d. BUDGET FY 1966			e. PLANNING FY 1967			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
I PROJECT PERSONNEL	A. MAN YEARS	-	-	40.3	-	-	16	-	-	10	-	-	25	-	-	25	-	-	95.9	-	-	206.2
	Non U.S.	-	-	32	-	-	9	-	-	11	-	-	31	-	-	31	-	-	35	-	-	103
B. ON BOARD	U.S.	-	-	-	-	-	42	-	-	8	-	-	25	-	-	25	-	-	-	-	-	-
	Non U.S.	-	-	-	-	-	9	-	-	11	-	-	31	-	-	31	-	-	-	-	-	-
II. PARTICIPANTS PROGRAMMED	A. U.S.	4	-	44	-	-	10	-	-	-	-	-	25	-	-	30	-	-	45	4	-	144
	B. THIRD CTRY.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## REMARKS:

1/ End of Fiscal Year

Refer to Annex 19 Sec. V of IAS

SECURITY CLASSIFICATION UNCLASSIFIED

PAGE NO.

AF-27

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-660-184	National Institute of Education
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1. The Activity Target:

To provide technical assistance to each of nine departments of the newly developing National Institute of Education and to the administrative officers of the NIE sufficient to develop by 1970 a professional institution comparable to a similar branch of a high quality American university.

into the research work undertaken by faculty members; they will direct experimental and demonstrational projects and advise the administration throughout its crucial formative period. Each department will then be encouraged, guided and assisted along the lines of good American know-how.

Commodities valued at \$291,000 are being procured, including \$136,000 worth procured for 1964 Summer Institute program.

2. The Course of Action:

1. To assist in selecting and training a high quality faculty and staff for each of the nine departments of the NIE. Each year, 10 to 15 faculty members or potential faculty members are sent to the Teachers College campus of Columbia University for approximately one year of specialized training. Seminars, study groups, and individual conferences are promoted by the contracting team to provide on-the-job training for the present staff.
2. To train educational leaders for India. University level graduate instruction will be available to interested and qualified candidates from six of the nine departments during FY 1966. By September 1966 it is estimated that 100 candidates for a master of education degree and 25 for a doctoral degree will be enrolled in NIE which is designed for 600 students.
3. To engage in a program of fundamental research on educational problems of national significance in cooperation with various State Departments of Education and interested teacher education institutions.
4. To develop and extend a program of extension services for teachers of both the elementary and secondary schools to improve the quality of classroom instruction. There now are 122 extension centers and it is planned to add 30 to 40 during FY 65 and FY 66.
5. To study in broad context the elementary, secondary, and teacher levels of education with the aim of assisting the Ministry of Education in establishing central guidelines, directives, and policies.

To help achieve the proposed target and carry out the course of action, the Ministry of Education has asked the contractor to have 25 technicians in India during FY 1966 to serve as consultants to all the major areas of the NIE, to facilitate its firm establishment as a single broad-purpose organization. Technicians will consult and sometimes assist in the teaching of graduate courses; they will assist in building quality

The contractor's Chief of Party indicates that no definite plans have been made for the termination of this contract. Tentative thinking is that a full staff of technicians (10 to 12) should continue through FY 1968; USAID suggests an orderly reduction of technicians thereafter, with termination of the contract by the end of FY 1970.

Necessary expansion and growth of the separate divisions and institutes scheduled to become a part of NIE led the Ministry of Education to rent larger office accommodations in some instances. These accommodations, unfortunately, have not been chosen in any one given area, so that an already scattered series of departments and units has become within the last year, even more so. As a result, certain members of the team must spend considerable time in traveling from one unit to another.

The NIE is sorely in need of a full-time superior person to serve as Dean of Educational Services, to coordinate the work of the respective departments. Recruitment for this vital position is under way, and it is expected that a director will be named in the very near future.

3. Progress To Date:

Plans for the National Institute of Education call for the construction of a completely new physical plant on the outskirts of New Delhi to consist of the following buildings: Science wing (for which educational specifications have been drawn up), instruction administration, library, hostels, staff housing, and a demonstration school. The land has been purchased, and the cornerstone was laid in August 1962. Construction on the first unit (science wing) began in August 1964 and is expected to be completed in early 1966.

The instructional program at NIE began in March 1963, when 19 students enrolled in a nine-month intensive course in "Research Design and Methodology" very carefully supervised by the contract team; another course in this subject, also for nine months, in which 44 students are enrolled, began on 10 August 1964. A different course, "Development and Growth of Young Children", began in July 1963; the team is not directly supervising this course.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-660-184	National Institute of Education
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Sixteen Summer Institutes for high school teachers of biology, chemistry, mathematics and physics, jointly planned, financed and administered by the Ministry of Education, the University Grants Commission, USAID and Teachers College, Columbia University, were held from June 8 to July 15, 1964 with nearly 700 high school teachers in attendance. These Institutes which introduced to Indian teachers the new U.S. National Science Foundation materials and methodology received widespread enthusiastic acceptance by high-level Indian educators; as a consequence, the GOI has requested 40 such institutes for the summer of 1965.

The Department of Textbooks and Curriculum has produced the following publications:

1. A primer and a teacher's manual for grade; gone to press.
2. A General science syllabus for grades VI to VIII; printed and distributed.
3. Handbook of Science activities for grades VI to VIII; printed and distributed.

A volume containing all the courses for NIE for both the masters and doctors degrees, together with the requirements for admission, and the programs to be pursued by individuals specializing in training for certain fields, is soon to be published.

Research work being done by the NIE in cooperation with the TCCU team falls in four areas:

1. Experimental projects in relation to the development of reading, science and social studies teaching materials.
2. Development of courses in research to be taught to potential research workers.
3. Counseling with individual staff members on research problems in which they are engaged.
4. Continuations of the research work on the nine projects in Health Education and Welfare, U.S. Office of Education cooperative research program.

Contract activities of the TCCU team were initiated in FY 1960 by consolidating and transferring GOI requests received against projects 114-National Institute of Basic Education; 118-Training in Adult Education; 120-Teacher Training in Audio-Visual Education; 146-National Program of Professional Education (which was formed

in FY 58 by merger of two earlier activities) U.S. assistance, partly through a contract with Teachers College, Columbia University, to these individual agencies and bureaus, which now form departments of the National Institutes of Education, totalled five technicians and three consultants for six man-years, five participants for 49 man-months, and \$284,013 worth of commodities (including \$25,000 as grant-in-aid equipment to National Institute of Audio-Visual Education).

Since FY 1960, assistance has been provided mainly through a contract with Teachers College, Columbia University; 24 technicians have completed 27 man-years of service and 36 participants have received advanced U.S. training for 245 man-months (five are still in the U.S.).

As of October 12, 1964, eight technicians in the fields of educational administration, educational research, textbook production, extension services, in-service training for elementary school teachers, measurement testing, testing (evaluation), and methodology of language instruction are at work. In addition, the budget for 40 summer institutes for high school teachers of science and mathematics has been approved for FY 1965.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-660-184	National Institute of Education
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Estimated Requirements for FY 1965  
And Subsequent Years

(In Thousands of Dollars)

	<u>Dollar Costs</u>	<u>Section 402 Rupee Costs (\$ Equivalent)</u>
<u>FY 1965</u>		
1 Project Manager Additional Funding for FY 1963 and FY 1964 positions	152	51 plus 16 = 67
<u>FY 1966</u>		
Technicians 25	820	244 plus 46 =
Participants 25	<u>125</u>	<u>40</u>
	945	330
<u>FY 1967</u>		
Technicians 22	572	159 plus 46
Participants 30	<u>150</u>	<u>48</u>
	722	<u>243</u>
<u>FY 1968</u>		
Technicians 20	520	145 plus 46
Participants 20	<u>100</u>	<u>32</u>
	620	223
<u>FY 1969</u>		
Technicians 15	390	110 plus 46
Participants 15	<u>75</u>	<u>24</u>
	465	180
<u>FY 1970</u>		
Technicians 10	260	75 plus 46
Participants 10	<u>50</u>	<u>16</u>
	310	137

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

SECURITY CLASSIFICATION  
UNCLASSIFIED

E-1b

1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY INDIA	3. Funding Phys. Work	BEG. FY 1962 1961	END FY 1965 1966	4. PROJECT NO. 386-31-660-213	5. TITLE Higher Technical Education	6. PRIOR REFERENCES:
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7. OBLIGATED AND DISBURSED	d. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN FOR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
i CUMULATIVE THRU ACTUAL YEAR	A. FA ACT												
	B. P.L. 480 LC	Sec. 104(e)	G	14,412	14,412	69,000	69,000	69,000	69,000	-	-	-	-
TOTAL ACTUAL FY 1964	A. FA ACT												
	B. P.L. 480 LC	Sec. 104(e)	G	-	6,057	-	29,000	-	29,000	-	-	-	-
ii OPERATIONAL YEAR (EST.)	A. FA ACT												
	B. P.L. 480 LC	Sec. 104(e)	G	15,248	15,248	73,000	73,000	73,000	73,000	-	-	-	-
iii BUDGET YEAR (EST.)	A. FA ACT												
	B. P.L. 480 LC												
iv PLANNING YEAR (EST.)	A. FA ACT												
	B. P.L. 480 LC												
v ALL SUBSEQUENT FYs (EST.)	A. FA ACT												
	B. P.L. 480 LC												
vi TOTAL ALL YEARS (EST.)	A. FA ACT												
	B. P.L. 480 LC	Sec. 104(e)	G	29,660	29,660	142,000	142,000	142,000	142,000	-	-	-	-

REMARKS:

1/ Exchange Rate: \$1 = 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c

PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS

1. DATA CURRENT AS OF:	2. COOPERATING CTRY.	3. PERSONNEL SERVICES PARTICIPANT TRAINING	BEG. FY	END FY	4. PROJECT NO.
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5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY	b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																	
		Non U.S.																	
B. ON BOARD	U.S.																		
	Non U.S.																		
II. PARTICIPANTS PROGRAMMED	A. U.S.																		
	B. THIRD CTRY.																		

REMARKS:

1/ End of Fiscal Year

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-31-660-213	Higher Technical Education
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1. The Activity Target:

The target of this activity is financial support to GOI/State Governments in the establishment and/or development of 15 regional engineering colleges offering diploma and degree courses with a planned annual output of 3500 graduates. Eleven existing regional engineering institutes and four more to be established during the Third Five Year Plan are intended to insure an adequate supply of technical personnel during the Third and future Plan periods. The colleges will be located at Warangal, Andhra Pradesh; Jamshedpur, Bihar; Nagpur, Maharashtra; Mangalore, Mysore; Allahabad, Uttar Pradesh; Durgapur, West Bengal; Bhopal, Madhya Pradesh; Silichar, Assam; Surat, Gujarat; Calicut, Kerala; Tirucherapalli, Madras; Rourkella, Orissa; Jaipur, Rajasthan; Srinagar, Jammu & Kashmir; and Kurukshetra, Punjab.

2. The Course of Action:

Cumulative obligations through FY-64 of grants from PL-480 sales proceeds amounting to 69 million rupees (\$14.4 million) to cover GOI-estimated development costs from 1 April 1961 to 31 March 1964 were made. No technical services or commodity support is contemplated. The GOI Ministry of Education and the respective State Governments are sponsoring the development of these regional engineering colleges.

It is proposed to obligate an additional grant of 73 million rupees during FY-1965 required to complete the development of these colleges.

Obligations during FY-66 are not contemplated.

3. Progress to Date:

Of the four new colleges to be established, buildings for three of the colleges, is under construction. The building for the fourth is expected to start some time in 1965.

As of November 1, 1964, payments had been made to the GOI Finance Ministry totalling Rs. 69,000,000 to cover outlays for regional college building construction under this project.

AID 1020-3 (7-64)		PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES							SECURITY CLASSIFICATION UNCLASSIFIED					
E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		END FY		4. PROJECT NO.		5. TITLE			
	November 1, 1964		INDIA		Funding 1962		1965		386-31-640-218		Elementary Education			
7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED	
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC	Sec. 104(e)	G	87,727	87,727	420,000	420,000	420,000	420,000					
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC	Sec. 104(e)	G	-	23,715	-	113,538	-	113,538					
II OPERATIONAL YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC	Sec. 104(e)	G	95,643	95,643	457,900	457,900	457,900	457,900					
III BUDGET YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC													
IV PLANNING YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC													
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC													
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
	B. P.L. 480 LC	Sec. 104(e)	G	183,370	183,370	877,900	877,900	877,900	877,900	-	-	-	-	

## REMARKS:

1/ Exchange Rate: \$1 = 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c		PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES PARTICIPANT TRAINING			4. PROJECT NO.								
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																				
		Non U.S.																				
B. ON BOARD	U.S.																					
	Non U.S.																					
II. PARTICIPANTS PROGRAMMED	A. U.S.																					
	B. THIRD CTRY.																					

## REMARKS:

1/ End of Fiscal Year

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-31-640-218	Elementary Education
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1. The Activity Target:

The target of this activity is to assist the GOI to reach its Third Five Year Plan objectives: (1) to increase enrollment from 34.3 million (61.1% of the total 6-11 age group) to 49.6 million (76.4%) (Classes I to V); (2) to increase enrollment from 6.3 to 9.7 million in the age group 11-14 (Classes VI to VIII); (3) to recruit 500,000 additional teachers required to meet the additional enrollment in the primary schools.

A GOI survey in 1958-59 indicated that 100,000 additional schools would be needed to accommodate the additional enrollment in primary schools. To achieve the above targets, the GOI has planned a number of schemes for quantitative expansion of primary education, such as:

- a. To open 70,000 schools in addition to the 30,000 already open.
- b. To open about 80 new teacher-training schools each year.
- c. To increase remuneration in primary education.
- d. Construct additional buildings.
- e. Launching special drives to induce more girls to enter schools.
- f. Supplying mid-day meals with Food-for-Peace to help increase the enrollment in primary schools.

The development cost of these schemes (Rs. 2,020 million or \$424 million) is a firm part of the Third Five Year Plan, and the U.S. agreement to support this sector with PL-480 rupees and Titles III Food has helped stimulate activity.

2. The Course of Action:

It is proposed that the U.S. contribute approximately Rs.878 million of PL-480 grant funds in support of this GOI activity, for construction of new primary schools and related facilities throughout India, Rs.420 million through FY-64, Rs.457.9 million in 65 to cover GOI expenditures upto March 31, 1966.

It is also proposed to supply PL-480 Title III Commodities for school lunch programs administered by CARE, UNICEF, Catholic Relief Services and Church World Services to feed 7,000,000 primary school children in FY-63, 8,000,000 in FY-64, and about 9,000,000 in FY-65, if logistic and administrative facilities of GOI, State Governments and Voluntary Agencies permit.

Commodities to be supplied include milk powder, cornmeal, butter, oil, wheat flour, and bulgur wheat.

3. Progress to Date:

The targets for the first three years of the Third Plan have been achieved. The State Governments have shown keen interest in expansion of Elementary Education. Enrollment is climbing faster than anticipated. The U.S. grant of Rs.120 million was obligated in FY-62. An additional grant of Rs.300 million was obligated in FY-63. To date Rs.420,000,000 have been paid to the GOI Finance Ministry to cover outlays for school construction.

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO. AF-33

PROJECT DATA SUMMARY — AID DOLLAR COSTS

E-1a

1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA		3. PROJECT NO. 386-11-660-226		4. TITLE Higher Education - Summer Institutes and Sciences			
5. U.S. FUNDING:		BEGIN FY 1965	END FY 1971	6. PRIOR REFERENCES					
PHYSICAL WORK:		1965	1972						

7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)	e. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS			
					(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)		
					AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT		
																	DIRECT AND U.S. AGENCIES
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR																
	GROSS OBLIGATIONS (ACTUAL YEAR)																
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR																
	EXPENDITURES (ACTUAL YEAR)																
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR																
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS *	TC	G	1,400	1,380	-	20	890	-	300	-	-	-	190			
	B. EXPENDITURES	TC	G	571	552	-	19	356	-	120	-	-	-	76	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	829	828	-	1	534	-	180	-	-	-	114			
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	DL	I	2,340	2,340	-	-	-	-	-	-	3,340	-	-			
		TC	G	3,345	3,325	-	20	2,380	-	525	-	-	-	420			
	B. EXPENDITURES	DL	I	562	562	-	-	-	-	-	-	562	-	-	-	-	
		TC	G	1,682	1,662	-	20	1,166	-	282	-	-	-	214	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	I	1,778	1,778	-	-	-	-	-	-	1,778	-	-	-		
		TC	G	2,492	2,491	-	1	1,748	-	423	-	-	-	320			
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/	DL	L	2,804	2,804	-	-	-	-	-	-	2,804	-	-	-	1,100	
		TC	G	4,624	4,604	-	20	3,170	-	875	-	-	-	559	20	2,838	
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/	DL	L	12,594	12,594	-	-	-	-	-	-	12,594	-	-	-	16,076	
		TC	G	23,108	23,028	-	80	14,399	-	5,175	-	-	-	3,454	81	27,285	
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	DL	L	17,738	17,738	-	-	-	-	-	-	17,738	-	-	-	17,738	
		TC	G	32,477	32,337	-	140	20,839	-	6,875	-	-	-	4,623	140	32,337	

REMARKS:

1/ This is a memorandum (non-add) column.

2/ Show estimated expenditures in column i.

\* To be obligated under TCCU, OSU, Wisconsin, and Houston Universities Contracts.

Refers to Annex 19 of LAS

AID 1020-3 (7-64)	PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES							SECURITY CLASSIFICATION UNCLASSIFIED					
	1. DATA CURRENT AS OF:	2. COOPERATING COUNTRY		3. BEG. FY		END FY	4. PROJECT NO.		5. TITLE				
E-1b	1 November 1964	INDIA		Funding 1965	1971	1972	386-11-660-226		Higher Education - Summer Institutes and Sciences				
7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
		(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
TOTAL ACTUAL FY 1964	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
		(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
II OPERATIONAL YEAR (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
		(ii) TRUST FUND	Govt. Rev.	38	38	182	182	-	-	-	-	182	182
		(iii) OTHER LC	Sec. 402 Rs	947	449	4,534	2,152	-	-	1,652	-	862	500
	B. P.L. 480 LC												
III BUDGET YEAR (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
		(ii) TRUST FUND	Govt. Rev.	122	122	584	584	-	-	-	-	584	584
		(iii) OTHER LC	Sec. 402 Rs	1,698	1,018	8,129	4,875	-	-	4,228	-	754	647
	B. P.L. 480 LC												
IV PLANNING YEAR (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
		(ii) TRUST FUND	Govt. Rev.	160	160	766	766	-	-	-	-	766	766
		(iii) OTHER LC	Sec. 402 Rs	2,758	1,818	13,204	8,702	-	-	7,701	-	1,257	1,001
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
		(ii) TRUST FUND	Govt. Rev.	715	715	3,423	3,423	-	-	-	-	3,423	3,423
		(iii) OTHER LC	Sec. 402 Rs	15,136	17,254	72,465	82,603	-	-	74,445	-	7,433	8,158
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
		(ii) TRUST FUND	Govt. Funds	1,035	1,035	4,955	4,955	-	-	-	-	4,955	4,955
		(iii) OTHER LC	Sec. 402 Rs	20,539	20,539	98,332	98,332	-	-	88,026	-	10,306	10,306
	B. P.L. 480 LC												

## REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

AID 1020-3 (7-64)	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS							SECURITY CLASSIFICATION UNCLASSIFIED													
	1. DATA CURRENT AS OF:	2. COOPERATING CTRY.		3. PERSONNEL SERVICES		BEG. FY	END FY	4. PROJECT NO.													
E-1c	1 November 1964	INDIA		PERSONNEL SERVICES 1965	1972	1965	1972	386-11-660-226													
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY 1965			d. BUDGET FY 1966			e. PLANNING FY 1967			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
I PROJECT PERSONNEL	A. MAN YEARS	U.S.					-	-	43.8	-	-	113.4	-	-	147.4	-	-	710.8	-	-	1015
	B. ON BOARD	Non U.S.																			
II PARTICIPANTS PROGRAMMED	A. U.S.								120			105			175			1035			1435
	B. THIRD CTRY.																				

## REMARKS:

1/ End of Fiscal Year

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO. AF-35 (Revised)

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	396-11-660-226	Higher Education Summer Institutes and Sciences
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## Introduction

### Long Range Assistance Goals:

The basic thinking reflected in the recent Long Range Assistance Strategy analysis has already been essentially accepted by the GOI.

The seven year program has been accepted in principle by the Mission and by AID/W.

USAID/India, in seeking implementation of this strategy, and with the full support and endorsement of the GOI, advocates the establishment of three projects in education in addition to the three now moving toward culmination.

- a) The three in operation are: the establishment of four "multipurpose secondary school" teachers colleges; the establishment of the Indian Institute of Technology at Kanpur; and the establishment of the National Institute of Education.
- b) All projects which have to do with science and technology, except for the one instance of Kanpur, have now run their course. The first two of the three new projects outlined below have to do with renewed activity in this vital area.
- c) The three new projects are all part of a Higher Education Program. They are:
  - I. Higher Education - Summer Institutes and the Sciences;
  - II. Higher Education - Technology; and
  - III. Higher Education - Teacher Education and Training.

### Quantity vs Quality:

It is obvious that India's vast quantity needs in education are beyond AID ability to meet. These quantity needs have to do with the elimination of illiteracy, the construction and equipment of half a million school houses, the upgrading of teachers' salaries, and other related quantitative factors in the education of 150,000,000 young people, whose number is increasing currently at 2.5 percent or more per annum.

Instead of diffusing its effort to assist India by moves to meet these quantity needs, priority emphasis of the proposed AID effort

is placed upon bringing to this vast nation non-indigenous quality factors in the most crucial areas of education and implementing them at various important levels of the educational system so that they may permeate the whole as rapidly as possible.

The quality factors which must be imported are those which have to do with academic standards; with academic policy and practices; with administration; with understanding of what goes on in the outside academic world; and, of course, with knowledge -- especially in the science and technology. In these latter areas there must be developed an appreciation of laboratory work and the significance of teaching students to think for themselves as they use their hands rather than, as is the case now, of forcing them to regurgitate memorized formulae (some proved to be wrong forty years ago) and untried and undemonstrated theories.

India is ready for and its leaders are desirous of an attack upon the qualitative factor. There is in process in top political circles a serious debate as to what quality must be sought from what source. A major influence is a growing undercurrent favoring emulation of American education, especially in the scientific and technological areas. The past year has seen something of a surge in that undercurrent. Leadership of the Ministry of Education, the University Grants Commission, State officials, and the institutions of higher learning are now openly expressing desire for the importation of American understanding, knowledge, and know-how. They have become convinced that strong action must be taken toward that end now.

Despite the debate in top political circles, and without waiting for the Planning Commission to produce its Fourth Five Year Plan for 1966-71, or for an internationally influenced Education Commission to make its recommendations, the GOI is asking for large scale AID help. It has decided that the need for American scientific and technological quality is so urgent that the nation can wait no longer. The Mission agrees that its approved LAS/ED seven years means, unprecedented, if need be, to export to India for implanting at the levels where it will do the most good as much American educational quality as the U.S.A. can afford to contribute, and which India has demonstrated the capacity to absorb and apply.

### I. HIGHER EDUCATION - SUMMER INSTITUTES AND THE SCIENCES

#### 1. The Activity Target:

The objectives of this specific project, "Higher Education - Summer Institutes and the Sciences", are four-fold:

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-660-226	Higher Education Summer Institutes and Sciences
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- (A) The introduction of new knowledge and the ingrafting of the "New Approach" to the teaching of mathematics, the sciences, engineering, and applied technology. This would be done at all appropriate levels of Indian education by American professors.
- (B) The arresting of current deterioration of English, and strengthening of the teaching of this absolutely requisite instructional tool.
- (C) The accomplishing of such a change in educational administration, procedures, and academic environment that India can receive, can add to, and can apply twentieth century scientific knowledge and skills required in industrial and economic development.
- (D) Through the instrumentality of higher education and government the promulgation of the new scientific knowledge and skills throughout Indian education, especially in the nation's secondary schools.

The following narrative is in support of these four objectives:

Objective (A):

India's educational approach to things scientific and technological is now completely inadequate — antiquated, impractical, and unrelated to national needs. Both scientists and engineers are spinning their wheels in little disconnected eddies, busy keeping the little eddies whirling to no purpose. The emphasis is upon learning by rote from out-of-date syllabi, old formulae and theories. The student is then put through the ordeal of repeating what he has memorized in unrealistic examinations. The grade he gets not only brands him for life but also helps to determine the salary of his teacher who dares not depart from the out-of-date syllabi. The "external examinations" are based on these syllabi and made up by entrenched examiners, mostly highly senior professors, who derive half their professional income from grading the papers.

The vicious system encourages dishonesty. It does not encourage progress. It allows little emphasis upon investigation, experimentation, improvisation, modifications, innovation, invention, and discovery. There is little or no attempt to make the student, even the graduate student, think and do for himself.

It is a sad fact that industry does not sponsor university research for the very simple reason that professors just do not do much laboratory work and neither do their students. Most of them do not know how, and they are afraid to show their ignorance.

What is required at this stage of Indian development is a massive dose of American "do-it-yourself" spirit. This can only be produced by personal contact between Indian classroom teachers and skillful American educators.

Objective (B):

The prospective American professors speak English; the books they will introduce are written in English; the educational films produced by Americans, including those financed by the National Science Foundation, are in English. Not one of the fourteen major native languages including Hindi, can possibly for many years be an instrument for the learning of the sciences.

Since British educators departed from the Indian scene, English usage and the teaching of English have deteriorated rapidly. Chauvinism, "anti-imperialism", and demagogy have furthered that deterioration. Fortunately there is the inescapable fact that in India English is the essential tool for scientific, technological, and thus of industrial progress. This fact will allow an arrest in deterioration and may reverse the trend in use of English if action to that end is quickly taken.

Enlightened Indian leadership is now calling for American (not British) help in a national effort to turn the tide of retrogression in use of English. USAID wishes to provide that help for many reasons, only one of which is that it is essential to that accomplishment of this activity target.

Objective (C):

Parallel in importance to the importation of scientific knowledge and its application is the creation of an environment in which this importation may take root and flourish. The whole of Indian education suffers from two great faults which can be corrected: (1) It is so authoritarian in its administration from rank to rank that academic freedom, which is essential to the advancement and application of knowledge, is virtually smothered; and (2) it is so hide-bound by tradition that the American technicians who have so far served in

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-660-226	Higher Education Summer Institutes and Sciences
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India and the more numerous returned participants have made little progress in effecting innovation.

But indications are that a break-through is in the offing and that the summer science institutes may be the spear-point that makes this possible. They should be assisted concurrently by a deliberate injection of American administrative influence. Top Indian academic officials must be shown what is required to create an environment which not only tolerates but which encourages progress. Concurrently heads of departments and full professors must be provided incentives to give up their vested interests in the pernicious, revenue-producing "syllabus cum external examination" system. Measures must be taken to offset the loss of this revenue by merit salary increases, and related measures must be instituted to raise academic standards.

Merit increases in salary; a promotion system which is not impeded by unimaginative rules of seniority and the allowance of only one professor in a department (the others are lecturers and readers); improved means of enforcing class attendance, punctuality, and continuous study; a far larger part of the calendar year devoted to work in class and laboratory and library; and better, far better teaching — all of these things must come to Indian higher education. The furtherance of these non-quantitative things is one of the objectives of this project.

Objective (D):

The newly imported quality must permeate and radically change scientific and technological education at all levels. This must be deliberately planned. Such planning and programming is already underway; it is part of the target of this activity to strengthen and guide formulation of plans (See 3 below).

By 1971 about 15,000 high school science teachers, whose total number is expected to reach 55,000 to 60,000 during the Fourth Five year Plan (1966-71) would be given in-service training in the "New Approach" at summer institutes. It is possible that this proportion may be greater if increasing emphasis is placed upon training of skilled Indian directors and staff members for institutes so as to increase the total number of institutes held under completely Indian auspices. About 850 high school teachers have already received that training. Some 1800 more will be trained in the 1965 summer institutes. They are to be provided the books and other teaching aids necessary to conduct their classes in accordance with what they learn.

Furthermore, appropriate steps will be taken, by GOI and State officials working with USAID, to induce their administrative superiors to make this possible.

Toward the end of this period, it is expected that the colleges and universities would be producing in increasing volume "New Approach" science teachers.

Eventually, this new American approach to the Learning and useful application of science will be absorbed by progressively increasing numbers of high school students whose knowledge of English will be materially heightened in the process. Its broadening application to Indian socio-economic life will follow.

2. The Course of Action:

A. The Summer Institutes:

During the summer of 1963 an experiment of conducting four National Science Foundation type summer science institutes was so successful (see 3, below) that the GOI asked that in 1964 the USAID assist in providing U.S. Professors for 40 summer institutes and several seminars. This was done with such success that again Indian educators are asking for as many institutes in the future as the U.S.A. can mount.

The 1964 institutes attended by a total of 2,031 teachers, included 16 for high school teachers of mathematics and sciences; 16 institutes and a series of seminars for college teachers of the sciences; four for engineering college faculty members; and four for polytechnic faculty members.

In 1965 the GOI and the Mission are holding 90 institutes (12 in chemistry and physics each, 16 mathematics and 7 biology for high school teachers; 6 each in Mathematics, Physics and Chemistry, 5 each in Zoology and Botany, 3 High School Science Education; 4 Engineering and 8 in Polytechnic). Some 3,600 professors and teachers will attend.

There is a steep increase planned in this popular American directed institute program with totals by year as follows:

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Year	Secondary School Sciences	College Sciences	Engineering	Polytechnics	English & Others
1963	4				
1964	16	16	4	4	4 = 44
1965	47	31	4	8	- = 90
1966	64	50	8	16	16 = 154
1967	80	60	16	24	30 = 210
1968	89	70	32	32	60 = 283
1969	108	70	32	40	100 = 350
1970	108	70	32	40	100 = 350
1971	108	70	32	40	100 = 350

While this is an American directed program it is essential a pump-priming operation in which Indian directors will take over and operate on a continuing basis, some 350 institutes for some 14,000 teachers per summer.

The number of American consultants will reach a peak of 154 in 1966, they will decrease in number until in 1971 there will be only 20 American consultants and 660 Indians directing 330 of the 350 institutes.

The schedule of directorship follows:

Year	Total Institutes	Institutes by Americans	Institutes by Indians
1965	90	90	224
1966	182	154	362
1967	210	152	356
1968	283	139	326
1969	350	105	246
1970	350	70	166
1971	350	20	48

The Indian Directors and Assistant Directors (two professors per institute) will be trained for their positions of leadership by two means: (1) a Participants' Program; and (2) a training program conducted by U.S. Technicians.

#### B. The Participants' Program:

The Participant's Program for the summer institutes and the sciences embraces both the training in the U.S.A. of directors and

Assistant Directors of Summer Institutes and the training and/or observation tours of those who will be in key positions in conducting and/or administering the follow-up program. The programmed allocation of man years to this phase of the LAS is: FY-65, 120 participants for six months each (and in subsequent years for 12 months each); FY 1966, 105; 1967, 175; 1968, 240; 1969, 365; 1970, 270; and 1971, 160.

#### C. Institute Follow-up Program:

The American technicians will not only train the Indian Directors and Assistant Directors, they will be primarily responsible for planning and guidance of the whole institute program plus the very important supervision of the follow-up program in the Sciences and related areas.

#### D. Technicians:

The primary activity of the technicians will be assistance to the Ministry of Education, the University Grants Commission, the State Ministries of Education, and the Universities and Colleges in vigorously implementing in the class-rooms -- college and secondary -- the new approach to the sciences, technology, and related disciplines.

The numbers needed in this year-round activity follow:

In 1966, 50; in 1967, 65; in 1968, 70; in 1969, 65; in 1970, 50; and in 1971, 32.

Besides the follow-up program in mathematics, chemistry, biology, physics, engineering and applied technology in which forty of the fifty FY 66 technicians will be engaged, attention must be focussed upon two other areas of concern: English and Academic Administration and Institutional Development.

#### English:

English, for the Indians, is their window to the outside world. Not only does the achievement of the primary objective of the summer science institute program and of the year around promotion of the sciences in the universities depend basically upon effective use of English, but in turn the whole of U.S. hopes and aspirations for this half of the peoples of developing nations depend greatly upon communication with them in English. Yet, not one American is working in the field of linguistics in all of India. Under Ford Foundation auspices a small English Language Institute has been

ND 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-660-226	Higher Education Summer Institutes and Sciences
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established in Hyderabad where two young Englishmen with poor materials and methods are wrestling with the problem. USIS has no Linguistics program.

USAID believes that a well-applied and vigorous, though relatively small effort, begun now, can help to arrest the current deterioration and then to turn the tide.

As in the case of the scientists, the specialists in the teaching of English as a second language will work at the Higher Education level. They too will be only temporarily assigned to specific institutions, with their activities planned and carried out in the closest possible coordination with USAID/ED.

Their responsibility will be that of advisors, demonstrators, and promotional agents to university and college departments of English or Linguistics to facilitate their use of the latest methods and materials as developed by U.S. experts.

#### Fiscal Year 1966 Institute Requirements

A total of 360 American consultants would be required for the 154 FY 66 institutes. These consultants would be required for two months duty each.

Experience in 1963-64 demonstrated that a minimum of two American scientists is required to operate each of the intensive six weeks science institutes; and that four different specialists are required for each of the engineering and applied technology institutes. It is proposed that in 1966 there be conducted for secondary school teachers 20 institutes in mathematics, 17 each in chemistry, physics, and 10 in biology. For college scientists there will be 10 institutes each in mathematics, chemistry and physics; 8 each in zoology and botany; and 4 in High School Science Education; 8 in engineering; 16 in polytechnic; and 16 in English.

Specific qualifications for the summer institute consultants are:

Forty mathematics professors and 20 mathematics educators. All 60 of them should be thoroughly familiar with the advanced methods now being undertaken by the "School Mathematics Study Group" (SMSG);

Thirty-seven chemistry professors and 17 chemistry teachers, all 54 of whom are specialists in the advanced U.S. subject-matter-teaching methods in chemistry, including the new "Chemical Materials Approach" (CHEMS).

Sixteen botany professors; 16 zoology professors and 10 biology professors and 10 biology teachers, all 52 of whom are specialists in the most advanced subject matter and U.S. methods of teaching biology, including "Biological Science Curriculum Study" (BSCS). It is proposed that the yellow version be emphasized at the secondary school level and the green version at the college level; but both levels are to receive instruction in yellow, blue and green versions.

Thirty-seven physics professors and 17 physics teachers, all 54 of whom are specialists in advanced aspects of the subject matter and methods of teaching physics, including "Physical Science Study Committee" (PSSC);

Eight High School Science Education teachers who are specialists in advanced aspects of the subject matter and methods of teaching Science Education.

Thirty-two engineering professors, to be divided almost equally among civil, mechanical, electrical, and industrial engineering. Preference will be given, as far as possible, to those who had proved themselves competent in technician and consultant activity in India and other developing countries;

Sixty-four technical institute professors, sixteen each in civil, mechanical, electrical, and industrial technology. They would all hold at least bachelor's degree in engineering or its equivalent in industrial experience, and be selected for outstanding prowess as teachers.

Thirty-two experts in English as a second language and related linguistic disciplines.

#### Fiscal Year 1966 Technician Requirements:

A total of 50 American technicians will be required in the institute follow-up program in FY 1966.

Specific qualifications of these technicians follow:

Ten mathematicians  
 Five chemists  
 Five biologists  
 Five physicists  
 Five engineers  
 Ten technical institute teachers  
 Ten linguistics experts and other humanities specialists.

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Year (1)	Consultants Man-Months (2)	Technicians	Participants (4)	Commodities (5)	Total Dollars (6)	Rs.402 \$ Equiv.	
		\$ 25,000 10 \$30,000 (3)				T.S. (7)	Participants (8)
1965	524 = \$1,040,000	-	120 = \$ 360,000	\$1,500,000	\$2,900,000	767,000	180,000
1966	760 = 1,520,000	50 = \$1,300,000	105 = 525,000	2,340,000	5,685,000	1,540,000	157,500
1967	988 = 2,074,800	65 = 1,675,000	175 = 875,000	2,804,000	7,428,800	2,496,000	262,500
1968	1,316 = 2,632,000	70 = 1,800,000	240 = 1,200,000	3,984,000	9,616,000	3,192,000	360,000
1969	1,536 = 3,225,600	65 = 1,675,000	365 = 1,825,000	3,980,000	10,705,600	3,592,000	547,500
1970	1,536 = 3,225,600	50 = 1,300,000	270 = 1,350,000	3,630,000	9,505,600	3,472,000	405,000
1971	1,536 = 3,225,600	32 = 850,000	160 = 800,000	1,000,000	5,875,600	3,328,000	240,000
<b>TOTALS:</b>	<b>8,196 = \$16,943,600</b>	<b>332 = \$8,600,000</b>	<b>1,435 = \$6,935,000</b>	<b>\$19,238,000</b>	<b>\$51,716,600</b>	<b>18,357,000</b>	<b>2,152,500</b>



AD 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-33-670-232	World Education Inc. (Literacy Village)
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1. The Activity Targets:

In the broadest sense the long range goal of Literacy Village is to improve communication -- the two way flow of ideas -- between India's leaders and her people. At present this communication is weak; the ability of the people to understand the changes they must make and their necessary education has not been judged critically or developed properly.

Specifically the long-range program goals are:

- (1) To stimulate other centers to undertake literacy work based on sound adult education principles, and guide them in such undertakings;
  - (2) to organize presently available knowledge to make it useful to others and to begin thorough research on problems of motivation and technique in the education of illiterates;
  - (3) to provide training in literacy teaching and to produce teaching and follow-up materials for the education of illiterates which will encourage them in the practice and improvement of their skills;
  - (4) to provide training in communication skills, to produce a variety of materials designed to inform and educate illiterate and newly literate audiences, and to devise effective means of distributing these materials;
  - (5) to continue active work in villages and cities as a means of constant testing of findings in realistic situations.
- The five-year target of this activity is:
- (a) To train 102 literacy teacher-trainers able to train 5,100 literacy teachers per year by the end of five years;
  - (b) to train 12,750 literacy teachers able to turn out 320,000 functionally literate adults per year;
  - (c) to train 850 supervisors of literacy instruction and 34 other administrative and leadership staff;
  - (d) to train 200 writers of literacy and follow-up materials;
  - (e) to make a half million adults functionally literate.

2. The Course of Action:

The Literacy House will have two Divisions to execute the activities set forth above. The Administration, Service and Research Division will consist of the a) General Administration Unit, b) Literacy Training Section, c) Mass Communication Department, d) Research Section, e) Field Work Section, and f) Extension Libraries Section. The Extension Program Division will be responsible to encourage and assist other organizations in India to establish their own literacy training programs.

Literacy House has courses of study and instructional materials ready to multiply the number of teacher-trainers, supervisors and writers of materials for new literates.

Six months are required to train teacher-training teams and the professional staff of State Literacy Centers. A team of three trainers can train 30 literacy teachers in one month. During the following month the trainers can field-supervise the organization of classes and instruction and can apprentice-train supervisors. Each team can prepare five such groups per year (150 teachers).

Candidates for training meeting basic qualifying requirements established by Literacy House will be deputized by governmental bodies and/or recruited by voluntary agencies. They will be paid and assigned by government or be committed to serve voluntary agencies such as the Village Volunteers being organized by the Ministry of Community Development.

Literacy instruction will be offered to those adults, especially young men and women past school age, who exhibit greatest readiness to learn to read and write with a minimum of persuasion. They will be in cities, industrial areas, commercial centers, and villages. The grant will not be used to any appreciable extent to persuade the backward, the unmotivated, and those unable to attend classes. As approximately 10 months of part-time instruction are required to establish functional literacy, preference will be given to those willing to commit themselves to the full course. The following course of action is proposed in the various units of the Literacy Village:

- 1) Training Section  
to give 15 courses, training 400 factory and village teachers and supervisors.
- 2) Field Work Section  
to operate 40 adult schools under direct Literacy Village sponsorship and 35 schools under Literacy Village supervision = 75 schools x 25 students = 1875 adults made functionally literate.

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-33-670-232	World Education Inc. (Literacy Village)
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3) Mass Communications Department

a) Publications Section

- 1) to publish 10 books for new literates
- 2) to produce 3 new sets of flashcards
- 3) to produce 2 new khaddargraph sets
- 4) to publish 12 issues of Ujala, a graded periodical for new literates
- 5) to translate 6 books into other languages
- 6) to experiment with different means of distributing these materials.

b) Audio-Visual Aids Section

- 1) to write and produce 2 folk dramas
- 2) to write and produce 4 new puppet plays
- 3) to give 75 puppet play performances as adult education programs
- 4) to give 75 film or other audio-visual aids programs a year
- 5) to make 300 puppets and 15 stages for use by other organizations.

c) Training Section

to give 3 courses for specialists in communicating with new literates. Each course will train 24 specialists.

d) Program Teaching

Both senior staff members who have been studying abroad this year and who are returning shortly have studied program teaching. Both are enthusiastic about its possibilities. During the year a section will be established specializing in program teaching which will bring construction of one course.

4) Extension Libraries Section

to have established by June 30, 1965 five mobile market libraries plus 30 village cycle libraries issuing a total of 40,000 books a year to village people.

5) Research Section

two qualified research specialists, one in education and one in communication, will be recruited and research targets will be planned and research initiated in consultation with them.

6) Extension Program Division

to help establish literacy training centers in two other states. This will involve training staff for such centers and beginning the process of upgrading the instructional materials available.

Recruitment of staff will be of primary importance during the first year.

During its history Literacy Village has emphasized getting the job done in the field, and the staff has tried to turn theory into effective practice. Consequently the experience gained has been embodied not in the form of research papers, but in Primer and follow-up Readers, a Teachers Guide and Books for new literates, all of which are now in extensive use. At present personnel is reasonably adequate for achieving the third, fourth and fifth long-term goals.

To achieve the other goals the staff must be strengthened. A number of senior staff members have received graduate training in the United States or Canada. In all cases their work included study in research techniques, but at Literacy Village they do not have the time for extensive research themselves. To carry out the proposed research program, research specialists must be recruited and added to the staff.

During its history Literacy Village has received an increasing number of requests for help in establishing training programs. The resources of the Grant will make it possible to provide such help; but additional staff is needed to organize this assistance effectively.

3. Progress to Date:

Literacy House was founded by Mrs. Welthy Fisher, an American citizen, to promote literacy in India. Later she organized World Education, Inc., in the United States as a non-sectarian, non-governmental, non-profit agency to raise funds for Literacy House and later for similar programs in other countries.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-33-670-232	World Education Inc. (Literacy Village)
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Literacy House, Lucknow, has already trained several thousand literacy teachers, village council heads, and workers with women. The School of Writing, initially subsidized by the Ford Foundation, trains writers to prepare materials for new literates. To date approximately 80 titles have been produced and are distributed at cost through a revolving-fund.

Income from other Indian and American sources amounts to approximately Rs. 210,000 annually.

AID/W has authorized a 104(e) P.L. 480 grant out of U.S.-Uses Rs. 7,934,970 to cover outlays from July 1, 1964 to June 30, 1969.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-16-650-263				4. TITLE Delhi Regional Secondary School						
	5. U.S. FUNDING:		BEGIN FY 1963		END FY 1965		6. PRIOR REFERENCES									
	PHYSICAL WORK:		1964		1968											
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT <sup>1/</sup>	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TG	G	586	-	-	-	-	-	-	-	586	-	-	-	
	GROSS OBLIGATIONS (ACTUAL YEAR)	TG	G	450	-	-	-	-	-	-	-	450	-	-	-	
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TG	G	139	-	-	-	-	-	-	-	139	-	-	-	
	EXPENDITURES (ACTUAL YEAR)	TG	G	139	-	-	-	-	-	-	-	139	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TG	G	447	-	-	-	-	-	-	-	447	-	-	-	
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TG	G	1,220	60	-	-	40	-	-	-	1,160	20	-	-	
	B. EXPENDITURES	TG	G	257	30	-	-	10	-	-	-	227	20	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TG	G	1,410	30	-	-	30	-	-	-	1,380	-	-	-	
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TG	G	-	-	-	-	-	-	-	-	-	-	-	-	
	B. EXPENDITURES	TG	G	300	20	-	-	20	-	-	-	280	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TG	G	1,110	10	-	-	10	-	-	-	1,100	-	-	-	
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS <sup>2/</sup>	TG	G	-	-	-	-	-	-	-	-	-	-	700	10	
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>	TG	G	-	-	-	-	-	-	-	-	-	-	400	-	
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>	TG	G	1,806	60	-	-	40	-	-	-	1,746	20	1,746	60	

## REMARKS:

<sup>1/</sup> This is a memorandum (non-odd) column.<sup>2/</sup> Show estimated expenditures in column i.

Refers to Annex 19 of L.A.S.

Narrative statement to be submitted later.

AID 1020-3 (7-64)		PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES							SECURITY CLASSIFICATION UNCLASSIFIED						
E-1b		1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA		3. BEG. FY Funding 1963 Phys. Work 1964		END FY 1965 1968		4. PROJECT NO. 386-16-650-263		5. TITLE Delhi Regional Secondary School			
7. OBLIGATED AND DISBURSED		a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
		(1) TYPE	(2) SOURCE	(3) LOAN GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
					(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED	
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
		B. P.L. 480 LC													
	TOTAL ACTUAL	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FY	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC													
		B. P.L. 480 LC													
II OPERATIONAL YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
		B. P.L. 480 LC													
III BUDGET YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
		B. P.L. 480 LC													
IV PLANNING YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
		B. P.L. 480 LC													
V ALL SUBSEQUENT FYS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
		B. P.L. 480 LC													
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
		B. P.L. 480 LC													

REMARKS:  
 1/ Exchange Rate: \$1 =  
 2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c		PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF: 1 November 1964			2. COOPERATING CTRY. INDIA			3. PERSONNEL SERVICES PARTICIPANT TRAINING			BEG. FY 1965		END FY 1967		4. PROJECT NO. 386-16-650-263				
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		a. CUM. THRU ACTUAL FY			b. ACTUAL FY 1964			c. OPERATIONAL FY 1964			d. BUDGET FY 1966			e. PLANNING FY 1967		f. ALL SUBSEQUENT FYS			g. TOTAL ALL YEARS			
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	-	-	-	-	-	-	-	5	-	-	-	1	-	5	-	-	-	-	-	2
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. ON BOARD	U.S.	-	-	-	-	-	-	-	1	-	-	-	1	-	1	-	-	-	-	-	-
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II. PARTICIPANTS PROGRAMMED	A. U.S.																					
	B. THIRD CTRY.																					

REMARKS:  
 1/ End of Fiscal Year

PROJECT DATA SUMMARY — AID DOLLAR COSTS

7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)	e.		c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS			
	APPROPRIATION TITLE	LCAN OR GRANT			(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES		(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES		(2) DIRECT AND U.S. AGENCIES		(1) DIRECT AND U.S. AGENCIES	1/ (2)	
			AID	PASA	U.S. AGENCIES	CONTRACT		DIRECT AND U.S. AGENCIES	CONTRACT		DIRECT AND U.S. AGENCIES	CONTRACT					
			1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA		3. PROJECT NO.				4. TITLE Goal: Minerals						
5. U.S. FUNDING:		BEGIN FY 1958		END FY 1965		6. PRIOR REFERENCES											
PHYSICAL WORK:		1962		1969													
I. THRU ACTUAL YEAR  FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		TG G	2,659*	116	413	-	59	263	15	1,855	26	12	16			
	DL L			17,000	-	-	-	-	-	-	17,000	-	-	-			
	GROSS OBLIGATIONS (ACTUAL YEAR)		DL L		12,800	-	-	-	-	-	-	12,800	-	-	-		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		TG G		2,659	116	413	-	59	263	15	1,855	26	12	16	114*	-
	DL L				5,677	-	-	-	-	-	-	5,677	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)		DL L		2,279	-	-	-	-	-	-	2,279	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL L		11,323	-	-	-	-	-	-	11,323	-	-	-		
	A. GROSS OBLIGATIONS		DL L		37,500	3,500	-	-	2,000	-	-	34,000	1,500	-	-		
	B. EXPENDITURES		DL L		6,234	500	-	-	500	-	-	5,734	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL L		42,589	3,000	-	-	1,500	-	-	39,589	1,500	-	-		
	A. GROSS OBLIGATIONS		DL L		-	-	-	-	-	-	-	-	-	-	-		
	B. EXPENDITURES		DL L		13,839	2,000	-	-	1,500	-	-	11,839	500	-	-		
C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL L		28,750	1,000	-	-	-	-	-	27,750	1,000	-	-			
GROSS OBLIGATIONS 2/		DL L		-	-	-	-	-	-	-	-	-	-	-	10,750	1,000	
GROSS OBLIGATIONS 2/		DL L		-	-	-	-	-	-	-	-	-	-	-	17,000	-	
GROSS OBLIGATIONS 2/		TG G		2,659*	116	413	-	59	263	15	1,855	26	12	16	2,543	116	
DL L				54,500	3,500	-	-	2,000	-	-	51,000	1,500	-	-	51,000	3,500	

REMARKS:

- 1/ This is a memorandum (non-add) column.
- 2/ Show estimated expenditures in column i.

\* Closed projects

AID 1020-3 (7-64)	PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES										SECURITY CLASSIFICATION UNCLASSIFIED		
E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		END FY		4. PROJECT NO.		5. TITLE		
	1 November 1964		INDIA		Funding		Phys. Work				Goal: Minerals		
7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G		114*		540			251			289
	FA ACT	(ii) TRUST FUND	=	19	19*	86	86	-	-	-	-	86	86
		(iii) OTHER LC	G	29	29*	139	139	-	-	23	-	116	116
		B. P.L. 480 LC											
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
		B. P.L. 480 LC											
II OPERATIONAL YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
		B. P.L. 480 LC											
III BUDGET YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
		B. P.L. 480 LC											
IV PLANNING YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
		B. P.L. 480 LC											
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
		B. P.L. 480 LC											
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G		114*		540			251			289
	FA ACT	(ii) TRUST FUND	Govt. Rev.	=	19	19*	86	86	-	-	-	86	86
		(iii) OTHER LC	Sec. 402	G	29	29*	139	139	-	-	23	116	116
		B. P.L. 480 LC											

REMARKS:  
 1/ Exchange Rate: \$1 = Rs. 4.7876 \* Includes closed projects: 1. LC costs charged to \$ Account = \$114  
 2. Govt. Revenue = \$ 19  
 2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a 3. Sec. 402 = \$ 29

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:		2. COOPERATING CTRY.		3. PERSONNEL SERVICES		BEG. FY		END FY		4. PROJECT NO.								
	PERSONNEL AND PARTICIPANTS			1 November, 1964		INDIA		PARTICIPANT TRAINING						Goal: Minerals								
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	-	10.4*	1.0*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. ON BOARD	U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II PARTICIPANTS PROGRAMMED	A. U.S.	-	55*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. THIRD CTRY.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

REMARKS: \*Data for closed projects addressed to this goal.

1/ End of Fiscal Year

SECURITY CLASSIFICATION UNCLASSIFIED

PAGE NO. AG-1a

AID FORM 10-112 (7-62)	DATE PREPARED	COOPERATING COUNTRY	SECURITY CLASSIFICATION	MULTI-YEAR LISTING				Goal: Minerals				E-4
	1 November 1964	INDIA	UNCLASSIFIED									
Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year FY 1964	Operational Year FY 1965	Budget FY 1966	Budget +1 FY 1967	Budget +2 FY 1968	Budget +3 FY 1969	Budget +4 FY 1970	All Subsequent Years	Total All Years
386-22-210-258	Patherdih Coal Washery	DL	4,200	-	-	-	-	-	-	-	-	4,200
		DG										
		SA										
		480										
		L/C										
		Coop. C.										
386-22-210-259	Dugda Coal Washery Expansion	DL	5,100	5,100	-	-	-	-	-	-	-	5,100
		DG										
		SA										
		480										
		L/C										
		Coop. C.										
386-22-210-260	Central Ropeway "F"	DL	7,700	7,700	-	-	-	-	-	-	-	7,700
		DG										
		SA										
		480										
		L/C										
		Coop. C.										
386-22-210-269	Rangarh Coal Washery	DL	-	-	8,000	-	-	-	-	-	-	8,000
		DG										
		SA										
		480										
		L/C										
		Coop. C.										
386-26-210-271	Bolani Ores	DL	-	-	5,000	-	-	-	-	-	-	5,000
		DG										
		SA										
		480										
		L/C										
		Coop. C.										

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE AG-2

BEST AVAILABLE

AID FORM 10-112 (7-62)	DATE PREPARED	COOPERATING COUNTRY	SECURITY CLASSIFICATION		MULTI-YEAR LISTING		Goal: Minerals					E-4		
			UNCLASSIFIED											
Goal Code or Activity Code	Title of Goal or Activity		\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year FY 1964	Operational Year FY 1965	Budget FY 1966	Budget +1 FY 1967	Budget +2 FY 1968	Budget +3 FY 1969	Budget +4 FY 1970	All Subsequent Years	Total All Years	
386-22-210-284	Khetri Copper Project		DL	-	-	21,000	-	-	-	-	-	-	21,000	
			DG											
			SA											
			480											
			L/C											
			Coop. C.											
386-24-230-286	Operation Hard Rock		DL	-	-	3,500	-	-	-	-	-	-	3,500	
			DG											
			SA											
			480											
			L/C											
			Coop. C.											
	Total: AID - Activities, Minerals Goal		DL	17,000	12,800	37,500	-	-	-	-	-	-	54,500	
			DG											
			SA											
			480											
			L/C											
			Coop. C.											
			DL											
			DG											
			SA											
			480											
			L/C											
			Coop. C.											
			DL											
			DG											
			SA											
			480											
			L/C											
			Coop. C.											

SECURITY CLASSIFICATION  
UNCLASSIFIED

PAGE AG-3

BEST AVAILABLE

AID 1080-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-22-210-258			4. TITLE Patherdih Coal Washery							
	U.S. FUNDING:		BEGIN FY 1962		END FY 1962	6. PRIOR REFERENCES										
	PHYSICAL WORK:		1962		1965											
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a.	b.	c.	d.	e.		f.		g.		h.		i.		
		APPROPRIATION TITLE	LOAN OR GRANT	TOTAL	CONTRACT 1/	PERSONNEL SERVICES		PARTICIPANTS		COMMODITIES		OTHER COSTS		LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	1/ (2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	DL	L*	4,200	-	-	-	-	-	-	4,200	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)	DL	L	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	DL	L*	3,566	-	-	-	-	-	-	3,566	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)	DL	L*	168	-	-	-	-	-	-	168	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L*	634	-	-	-	-	-	-	634	-	-	-	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS															
	B. EXPENDITURES	DL	L*	634	-	-	-	-	-	-	634	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
III. BUDGET YEAR (EST.) FY _____	A. GROSS OBLIGATIONS															
	B. EXPENDITURES															
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
IV. PLANNING YR. (EST.) FY _____	GROSS OBLIGATIONS 2/															
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	DL	L	4,200	-	-	-	-	-	-	4,200	-	-	-	4,200	-

REMARKS:

1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column 1.

\* Loan A.I.D. 15  
Refers to Annex on Minerals under preparation.

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-210-258	Patherdih Coal Washery
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1. The Activity Target.

The objective of this project is to provide the Hindustan Steel Company, a Government of India Corporation, with a 2 million ton per annum coal washery to be situated in the Jharia coal field adjacent to the Patherdih yard of the Eastern Railway on the left bank of river Damodar in the district of Dhanbad, Bihar. The United States is assisting the GOI to attain this target by financing the foreign exchange cost of engineering services and import of machinery and equipment. Initial operation of the washery has begun and the project will be completed by the end of FY 1965.

Background: The Patherdih Coal Washery is a part of an overall Government of India plan for the most effective use of the country's coal resources in connection with expansion of the iron and steel industry. Two measures have been adopted to conserve and make more effective use of the limited reserves of metallurgical coals: (1) enriching the coals by washing; (2) using a coking blend of semi-coking coal with fully coking coals.

The following sources of washed coal will be available by the end of Third Five Year Plan with capacities as shown:

Washery	Washed Coal (Million tons)
1. Jamdoba	1.0
2. West Bokaro	0.50
3. Lodna	0.23
4. Kargali	1.55
5. Durgapur	0.90
6. Dugda I	1.44
7. Bhojudih I	0.84
8. Patherdih	1.30
	<u>7.76</u>

It will be noted that this gives a washed coal capacity of 7.76 million tons. Anticipated steel plant requirement for washed coal by the end of the Third Five Year Plan (1965-66) is 10.92 million tons. Thus 3.2 million tons of prime coking coal must be mined and fed directly to the furnace, in addition to washed coal even if all the washeries work at full capacity.

At the end of the Fourth Five Year Plan the following washeries will be in operation or under construction.

Washery	Washed Coal (Million tons)
1. Jamdoba	1.0
2. West Bokaro	0.50
3. Lodna	0.23
4. Kargali I	1.55
5. Kargali II	0.40
6. Durgapur	0.90
7. Dugda I	1.44
8. Dugda II	1.20
9. Bhojudih I	0.84
10. Bhojudih II	0.56
11. Patherdih	1.30
12. Kathara	1.50
13. Durgapur Steel Plant Washery	0.67
	<u>12.09</u>

In addition the following coal washeries are being planned by the Government of India, for completion during the Fourth Five Year Plan.

Washery	Constructing Agency	Input	Output of washed coal.
1. Sudamdih	Heavy Engineering Corporation	2.16	1.04
2. Monadiah	" "	2.10	0.52
3. Govindpur	" "	2.25	0.88
4. Fundi	" "	1.50	0.90
5. Sawang	" "	0.75	0.50
6. Chasnala	Indian Iron & Steel Co.	2.70	1.35
7. Ramgarh	A.I.D.	1.50	1.05
8. Ramgarh II and III	(Undecided)	2.00	0.63
			<u>6.87</u>

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-210-258	Patherdih Coal Washery
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Accordingly, against an anticipated demand by steel plants and coke ovens totalling 23.57 million tons there will be available a projected total capacity of washed coking coal of 18.96 million tons.

Thus 4.61 million tons of prime coking coal will still be required even if all present and planned washeries work at full capacity.

Description of Project: The project is the construction and equipping of a complete coal preparation plant, including design, supply, erection and commissioning, and installation of all necessary auxiliary equipment. The plant will be located at the eastern part of the Jharia coal field in the state of Bihar, adjacent to the Patherdih yard of the Eastern Railway. It will treat coking coals drawn from approximately 22 collieries located in the Jharia field. The washed coal is scheduled for use mainly at the Indian Iron and Steel Company plant at Burnpur.

The washery plant will include railway dumping facilities; a screening, hand-picking and crushing division; raw coal storage and blending facilities; a main washery with Baum-type jigs, heavy media separators, heavy medium cyclones, thickener, and disc filters; clean coal and middlings bunkers; various belt conveyor systems; and miscellaneous auxiliary units. The plant is to be constructed on a turn-key basis, and, on the basis of world-wide bids, a U.S. firm, Roberts & Schaefer Co., Chicago, Illinois, has been awarded a contract for the Patherdih plant, including design, supply, erection and commissioning of the complete plant.

The plant will have a rated capacity of 460 metric tons of raw coal per hour and a normal capacity, with 10 percent continuous overload, of 500 metric tons per hour. On the basis of two 8-hour shifts per day and 300 working days per year, the plant will handle a minimum input of 6,600 metric tons of raw coal per day and 2,000,000 metric tons per year. It is anticipated that as a result of the washing operation, run-of-mine coal with an approximate ash content of 21.9 percent will be converted to clean coal with an ash content of 15.6 percent, usable middlings, and some rejects.

Because of the varying nature of the run-of-mine coal that will be treated the average yield and ash content of the washed products cannot be accurately forecast. However, laboratory tests indicate that the following results may be obtained

from run-of-mine coal with an average ash content of 21.9 percent.

<u>Products.</u>	<u>Weight %</u>	<u>Ash %</u>
Clean Coal (3" x 0")	73.05	15.6
Middlings (3" x 1")	10.26	32.7
Middlings (1" x 3/4")	9.02	32.4
Rejects (3" x 0")	7.67	55.2
	<u>100.00</u>	<u>21.9</u>

2. The Course of Action:

Financing: To provide \$4.2 million in dollar financing to meet the foreign exchange cost of the Patherdih Coal Washery.

Cost Estimate: The following is the estimated cost of the project in millions of dollars.

<u>Item</u>	<u>Foreign exchange</u>	<u>Local currency</u>	<u>Total \$</u>
Main plant, machinery, materials and equipment	\$3.00	\$0.82	\$3.82
Standbys and spares	0.36	-	0.36
Civil Works	-	1.96	1.96
Fabrication of Structural Steel	-	0.24	0.24
Plant Erection costs	-	0.44	0.44
U.S. Technical Personnel	0.22	0.05	0.27
Engineering Services	0.62	-	0.62
	<u>\$4.20</u>	<u>\$3.51</u>	<u>\$7.71</u>

AID 10204 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-210-258	Patherdih Coal Washery
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3. The Progress to Date.

Financing: A.I.D. Loan No. 15 was signed on June 21, 1962, to provide \$4.2 million to meet foreign exchange cost of the Patherdih Coal washery. As of July 31, 1964, \$3,566,000 of the loan had been disbursed.

Following is the project status according to the latest progress report for the quarter ending June 30, 1964.

Supply of U.S. machinery and equipment	99.7%
Supply of Indian Machinery	100.0%
Supply of Indian Structural Steel & Plates	100.0%
Civil Works Completed	100.0%
Fabrication of structural steel	100.0%
Erection of Plant & machinery	90.0%

AID 1020-2 (8-64)		PROJECT DATA SUMMARY -- AID DOLLAR COSTS											SECURITY CLASSIFICATION UNCLASSIFIED			
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-22-210-259				4. TITLE Dugda Coal Washery Expansion						
	5. U.S. FUNDING:		BEGIN FY 1964		END FY 1964		6. PRIOR REFERENCES									
	PHYSICAL WORK:		1964		1966											
7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. 1/ LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT
						AID	PASA									
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		DL	L*	5,100	-	-	-	-	-	5,100	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)		DL	L*	5,100	-	-	-	-	-	5,100	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		DL	L*	1,361	-	-	-	-	-	1,361	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)		DL	L*	1,361	-	-	-	-	-	1,361	-	-	-	-	-
C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L*	3,739	-	-	-	-	-	3,739	-	-	-	-	-	
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS		DL	L	-	-	-	-	-	-	-	-	-	-	-	
	B. EXPENDITURES		DL	L*	1,900	-	-	-	-	-	1,900	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L*	1,839	-	-	-	-	-	1,839	-	-	-	-	
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS		DL	L	-	-	-	-	-	-	-	-	-	-	-	
	B. EXPENDITURES		DL	L*	1,839	-	-	-	-	-	1,839	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L	-	-	-	-	-	-	-	-	-	-	-	
IV. PLANNING YR. (EST.) FY	GROSS OBLIGATIONS 2/															
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/		DL	L	5,100	-	-	-	-	-	5,100	-	-	-	5,100	-

## REMARKS:

- 1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column 1.

\* AID Loan # 87.

Refers to LAS Annex on minerals under preparation.

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-210-259	Dugda Coal Washery Expansion
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1. The Activity Target:

To finance the foreign exchange costs of construction and equipment (engineering services and import of machinery) of a coal washery at Dugda, with a rated capacity to wash 2.4 million tons of raw coal per annum. This project, Dugda II, is the second of a projected three units of washeries at Dugda in the Jharia coal field, in Bihar, the first of which, constructed with the help of the Export-Import Bank, and is in production. The plant will be owned and operated by Hindustan Steel Limited, and the washed coal will be used by Rourkela Steel Plant, built with the help of Germany.

Background: The steel industry is vital to the industrial growth of India. As envisaged in the Third Five Year Plan, steel production is to increase to 10.2 million tons per year, which, no doubt, will increase the demand of good quality coking or metallurgical coal. Since the reserves of metallurgical coal are limited, and continuous supplies to steel plants must be ensured, the upgrading of inferior grades of coal by washing becomes imperative. The expected increase in the installed ingot capacity of 3 million tons per year in 1960 to 10.2 million tons in 1966 will require expansion of additional washing capacity for 12.7 million tons of raw coal.

The results of extensive tests by the Central Fuel Research Institute, Government of India (made by drawing samples of coal from the different collieries expected to supply coal for Dugda II) establish that such a proposal is realistic and practicable. The advantage of installing Dugda II next to Dugda I is that all existing service facilities can be used, thereby reducing considerably local costs of installation and operation.

The following sources of washed coal will be available by the end of Third Five Year Plan with capacities as shown:

Washery	Washed Coal (Million tons)
1. Jamdoba	1.0
2. West Bokaro	0.50
3. Lodna	0.23
4. Kargali	1.55
5. Durgapur	0.90
6. Dugda I	1.44
7. Bhojudih I	0.84
8. Patherdih	1.30
<b>Total:</b>	<b>7.76</b>

It will be noted that this gives a washed coal capacity of 7.76 million tons. Anticipated steel plant requirement for washed coal by the end of the Third Five Year Plan (1965-66) is 10.92 million tons. Thus 3.2 million tons of prime coking coal must be mined and fed directly to the furnace, in addition to washed coal even if all the washeries work at full capacity.

At the end of the Fourth Five Year Plan the following washeries will be in operation or under construction.

Washery	Washed Coal (Million tons)
1. Jamdoba	1.0
2. West Bokaro	0.50
3. Lodna	0.23
4. Kargali I	1.55
5. Kargali II	0.40
6. Durgapur	0.90
7. Dugda I	1.44
8. Dugda II	1.20
9. Bhojudih I	0.84
10. Bhojudih II	0.56
11. Patherdih	1.30
12. Kathara	1.50
13. Durgapur Steel Plant Washery	0.67
<b>Total:</b>	<b>12.09</b>

In addition the following coal washeries are being planned by the Government of India, for completion during the Fourth Five Year Plan.

Washery	Constructing Agency	Input	Output of washed coal
1. Sudamdih	Heavy Engineering Coprn.	2.16	1.04
2. Monadih	" " "	2.10	0.52
3. Govindpur	" " "	2.25	0.88
4. Pundi	" " "	1.50	0.90
5. Sawang	" " "	0.75	0.50
6. Chasnala	Indian Iron & Steel Co.	2.70	1.35
7. Ramgarh	A.I.D.	1.50	1.05
8. Ramgarh II & III (Undecided)		2.00	0.63
			<b>6.87</b>

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-210-259	Dugda Coal Washery Expansion
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Accordingly, against an anticipated demand by steel plants and coke ovens totalling 23.57 million tons there will be available a projected total capacity of washed coking coal of 18.96 million tons.

Thus 4.61 million tons of prime coking coal will still be required even if all present and planned washeries work at full capacity.

Coking coal comes almost entirely from the Jharia coal field, comprising over 300 collieries. Of these about 120 raise coal containing ash which can be washed down to a limit acceptable to the steel works. The collieries have been grouped by Hindustan Steel Company, Limited, by suitability of their coals for washing and the convenience of railway transport, with each group to supply raw coal to one coal washing plant at a central railway point. The coal to be washed in plants at Jamadoba and Bhojudih is for the steel works at Jamshedpur (TISCO); that at Patherdih (under construction) is for the steel works at Burnpur (IISCO); that at Durgapur for the steel works in that area; and that at Dugda will be used by the steel works at Rourkela. The characteristics of the coal have been tested by the Central Fuel Research Institute of India, and the coal washing process adapted in each case to suit the coal supplied from each colliery group.

Description of Project: Dugda II is the second of a projected three-unit coal washery complex at Dugda, and is to be located next to Dugda I, in the western region of the Jharia coal field. It will have rated capacity to wash 2.4 million tons of raw coal per annum, and will be serviced by 43 collieries, mainly in the Bhaga, Mohoda, and Katrasgarh areas. The washery will include standard run-of-mine receiving facilities such as automatic dumpers, screening devices, hand sorting belts and storage bunkers; it will be served by the railroad car marshalling yard built for Dugda I.

The washing section, or main plant, will differ only slightly from the Dugda I unit, which followed tested and approved handling standards. Typically, the raw coal from storage bunkers will be washed and fed to a series of separators, thickeners and fitters where much of the ash-making slate will be removed economically. (Each one percent of ash in coking coal may reduce blast furnace capacity by as much as four percent.) In the present case, Hindustan Steel specifies that the contractor must guarantee that the cleaned coal will contain no more than 17 percent ash. Jharia's coal contains upwards of 33 percent ash, but the Indian Bureau of Mines has determined that its coal ash content can be washed down economically to a level of 15 to 17 percent.

## 2. The Course of Action:

Financing: To finance the foreign exchange costs of this project by providing an A.I.D. Loan of \$5.1 million.

Engineering: Tenders for the construction of the plant were invited from U.S. sources and also from the Indian firms licensed to manufacture coal washing plants. Three U.S. and one Indian tenders were received; of them that of Roberts & Schaefer company was accepted, and the contract was awarded to that company. According to contract the plant is to be completed in 24 months, and will have the rated capacity to wash 2.4 million tons of raw coal per annum.

Cost Estimate: The estimated cost of the project in millions of dollars is:

Item	Foreign Exchange	Local Currency	Total
Plant, machinery, material and equipment	\$3.1	\$4.8	\$7.9
Standby and spares	0.7	0.2	0.9
Design & Const. Service	0.9	0.7	1.6
Technical Services	0.3	0.1	0.4
Steel Fabrication		0.4	0.4
Civil Works		3.3	3.3
Ocean Freight	0.1		0.1
	5.1	9.5	14.6

Local currency requirements will be met by Hindustan Steel Company Limited.

The question of sending participants to the USA for training to maintain and operate the plant is under consideration.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-210-259	Dugda Coal Washery Expansion
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3. The Progress to Date:

AID Loan No. 087 for \$5.1 was signed on November 29, 1963, out of which \$1.36 million has been disbursed, as of June 1964.

By the end of June 1964, excavation in manual unloading bins, tippler and R.C.M. tunnel, primary crusher and screens, small coal crusher and screens and picking bins had been completed, as had that for raw coal storage bunkers and the washery building.

Overall progress of earthwork is 55 percent for concrete and 10 percent for building work.

E-1a	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	3. PROJECT NO. 386-22-210-260	4. TITLE Central Ropeway "F"
	5. BEGIN FY 1964		END FY 1964	
	6. PRIOR REFERENCES			

7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)	a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES		f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS 1/			
					(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	
					AID	PASA										
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	DL	L*	7,700	-	-	-	-	-	7,700	-	-	-	-		
	GROSS OBLIGATIONS (ACTUAL YEAR)	DL	L*	7,700	-	-	-	-	-	7,700	-	-	-	-		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	DL	L*	750	-	-	-	-	-	750	-	-	-	-		
	EXPENDITURES (ACTUAL YEAR)	DL	L*	750	-	-	-	-	-	750	-	-	-	-		
C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L*	6,950	-	-	-	-	-	-	6,950	-	-	-	-		
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	DL	L	-	-	-	-	-	-	-	-	-	-	-		
	B. EXPENDITURES	DL	L*	3,000	-	-	-	-	-	3,000	-	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L*	3,950	-	-	-	-	-	3,950	-	-	-	-		
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	DL	L	-	-	-	-	-	-	-	-	-	-	-		
	B. EXPENDITURES	DL	L*	3,000	-	-	-	-	-	3,000	-	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L*	950	-	-	-	-	-	950	-	-	-	-		
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/	DL	L*	-	-	-	-	-	-	-	-	-	950	-		
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	DL	L	7,700	-	-	-	-	-	7,700	-	-	-	7,700		

REMARKS:

1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

\* AID Loan - 81

Refers to IAS Annex on Minerals under preparation.

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-210-260	Central Ropeway "F"
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### 1. The Activity Target.

To provide the Coal Board, Government of India, a loan to finance the import and erection of machinery and ancillary equipment for the extraction and transportation of sand by a bicable aerial ropeway with a total capacity of 900 tons per hour to transport sand 15 miles from the Damodar River to the Jharia coal field in Bihar. The ropeway will provide selected coal mines with sufficient sand for "stowing", to permit removal of the pillar coal in the affected mines, thereby increasing the production of metallurgical coking and blending coal by 1.5 million tons per year. The project is expected to be completed by the end of FY 1967.

Background: Coal has been mined in the Jharia coal field, Bihar State, for nearly a century. It is one of India's principal raw material resources and the lifeblood of her growing industry. In addition to supplying the rapidly rising requirements for steel production, coal furnishes the motive power for most of the railway system and generates most of the country's electricity supplies. Some of the best and readily produceable good coking coal exists in the Jharia coal field where thick coal seams provide high ash coking coal mined by the room and pillar method. However, in order to recover the maximum quantity of the pillar coal and to do so with safety to the workers minimum surface subsidence, it has been found necessary to provide a sufficient supply of sand to support hanging walls. Local mining authorities have determined that sand stowing (filling the space from which coal has been removed with sand) is the best and cheapest remedy when sand is available within reasonable distance, as, in this case, from the nearby Damodar River.

The Coal Board was established to assist in conserving coal and effecting safety in mines, to be accomplished primarily by using improved methods for sand stowing. Since large scale extracting, transporting and stowing are beyond the financial and physical capacity of most of the collieries, the Coal Board has statutory responsibility to grant financial assistance for this purpose. However, instead of merely granting financial assistance and leaving the individual collieries to arrange for delivery of sand to the mines, it was deemed preferable that the Coal Board provide the sand. Also, considering the large number of collieries using sand, it was determined that a series of ropeways, operated under a Central Authority, could best do the job. Accordingly, the Government of India has authorized construction of four new ropeways, including three in the Jharia coal field.

This loan proposal calls for financing one of the three bicable ropeway systems, designated as "F". The Government of India originally proposed that A.I.D. finance the foreign exchange for another Jharia ropeway at once, but recently decided to defer the ropeway designated as "B-C" to a later date.

A portion of the 97 million tons of coal per annum by 1966 targeted by the Third Five Year Plan will come from that extracted from the pillars in the Jharia coal fields. This depillaring will involve the stowing of approximately 14 million tons of sand per annum; such so large a quantity is available only from the beds of the Damodar and Ajoy rivers which flow alongside the coal fields but at some distance from most of the mines. The Government of India has proposed, therefore, that sand be extracted and transported from the Damodar River to the Jharia coal field by a bicable aerial ropeway capable of carrying 3 million tons of sand annually. This will increase coal production in the mines affected by 1.5 million tons a year. Overall erection and operation will be under the supervision of the Coal Board.

Description of Project: The basic plan for Ropeway "F", as shown by the tender documents, provides for gathering sand from the Damodar River, piling it along the river bank and transporting it by aerial ropeways to a series of storage bins near the mines selected for such service. The project will consist of:

1. Three portable-type dredges, each with a rated sand/gravel output of 240 cubic yards (300 tons) per hour, which will gather and stockpile the sand on the river bank, where it will be dewatered naturally.
2. Mobile 450 tons per hour loading systems which will reclaim the sand and place it on a 1,000 ton per hour belt conveyor, to be carried to a 300,000 ton stockpile. As needed, the sand will be loaded by gravity on to another conveyor and deposited in two 1,000 ton bins at the head of the twin ropeways. Auxiliary equipment will be provided for keeping sand within reach of the conveyors.
3. Twin main ropeway systems, of a special bicable type, which will extend for about 10 miles from the loading terminal. One then will branch off and extend for about 2.3 miles to serve three unloading terminals; the other will continue for about 3.2 miles to serve four. Each ropeway will have a capacity of 450 tons of sand per hour. Sixty cubic feet (2.7 tons) tramway cars designed to ride the track cables will be used. Arrangements provide for automatic loading and discharging of the cars at the terminals. The ropeway will be provided with two 2-inch diameter track cables for carrying the loaded tram cars and with two 1-1/2 inch track cables for the empty cars. Specifications for the towers, terminals, track cables, haulage cables, tram cars, power equipment auxiliary equipment, and safety guards required for the ropeway have been prepared.

SECURITY CLASSIFICATION

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4. One 900 ton steel bin is to be provided at each of seven bunker sites near the mines to be served. The bins will be designed to permit gravity loading into road trucks or rail cars. Provision is also made for delivery of sand to a long boom belt, so that a 60,000 ton stockpile may be stored, from which portable loaders will be able to reclaim sand.

5. A two-year supply of spare parts is to be provided.

6. Tools and equipment required to erect the ropeway will be turned over to the Coal Board by the contractor.

An adequate supply of sand is essential for the successful operation of the ropeway. The quantity extractable from the Damodar River, year by year, has been studied by several agencies and, while there is considerable variance in the several estimates, it is believed the supply will be adequate for about 15 to 20 years.

The project calls for a "turnkey" job, insofar as the ropeway and accessory equipment is concerned. Material normally available in India, such as steel, cement, etc., will be utilized by the contractor and an ample supply of labor is available. Suitable Indian personnel will be placed with the contractor for training, in the U.S. and in India. The contractor also will assign an adequate staff to stay in India, for a limited period after the completion of construction, to assist the Indian personnel in the maintenance and operation of the facility. The Coal Board will assign qualified engineering officers from their staff for the overall supervision of the project, will arrange for power and water, and will provide workshops and any other necessary ancillary facility.

2. The Course of Action:

Financing: To provide a \$7.7 million loan to meet the foreign exchange cost of the ropeway project.

Engineering: The Interstate Equipment Corporation of Elizabeth, New Jersey, has the contract to construct this facility, including engineering design work and fabrication or procurement of all necessary equipment,

machinery and materials to perform the erection services. The Coal Board stated that Interstate's proposal, while not the lowest bid submitted, was "technically superior" to British and German offers received. Also, the U.S. firm will complete the installation of the ropeway within thirty months after the date of signed contract.

Cost Estimate: The estimated cost of the project is as follows:

Item	Estimated Cost (\$ million)		
	Foreign Exchange	Local Currency	Total
	\$	\$	\$
Dredges and Pipeline equipment	0.9	0.7	1.6
Stockpile and Sand Storage Facility	0.5	0.4	0.9
Ropeway	5.6	4.0	9.6
Handling system for Storage at Bunker Sites; Loading Equipment for Mines Transport	0.3	0.3	0.6
Spare parts	0.3	0.3	0.6
Tools	0.1	0.1	0.2
Total	\$ 7.7	\$ 5.8	13.5

3. The Progress to Date:

AID Loan Agreement No. 081 providing \$7.7 million was signed on October 21, 1963.

Agreement with the Interstate Equipment Corporation for the construction of Ropeway "F" was signed on February 28, 1964. Except for some preliminary work there was no physical progress as of June 30, 1964.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY -- AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED					
E-1a	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-22-210-269				4. TITLE Ramgarh Coal Washery								
	5. U.S. FUNDING:	BEGIN FY 1965		END FY 1965		6. PRIOR REFERENCES											
	PHYSICAL WORK:	1965		1969													
7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		a.	b.	c.	d.	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. 1/ LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
		APPROPRIATION TITLE	LOAN OR GRANT	TOTAL	CONTRACT 1/	(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	
I. THRU ACTUAL YEAR FY _____		A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR															
		GROSS OBLIGATIONS (ACTUAL YEAR)															
		B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR															
		EXPENDITURES (ACTUAL YEAR)															
		C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
II. OPERATIONAL YEAR (EST.) FY 1965		DL	L*	8,000	-	-	-	-	-	-	8,000	-	-	-	-	-	
		DL	L	200	-	-	-	-	-	-	200	-	-	-	-	-	
		DL	L	7,800	-	-	-	-	-	-	7,800	-	-	-	-	-	
III. BUDGET YEAR (EST.) FY 1966		DL	L	-	-	-	-	-	-	-	-	-	-	-	-	-	
		DL	L	2,000	-	-	-	-	-	-	2,000	-	-	-	-	-	
		DL	L	5,800	-	-	-	-	-	-	5,800	-	-	-	-	-	
IV. PLANNING YR. (EST.) FY 1967		DL	L	-	-	-	-	-	-	-	-	-	-	-	2,800	-	
V. ALL SUBSEQUENT YEARS (EST.)		DL	L	-	-	-	-	-	-	-	-	-	-	-	3,000	-	
VI. CUMULATIVE TOTAL ALL YEARS (EST.)		DL	L	8,000	-	-	-	-	-	-	8,000	-	-	-	8,000	-	

## REMARKS:

- 1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

Refers to L.A.S. Annex on Minerals under preparation.

\* No loan number assigned as yet.

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AID 10204 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-210-269	Ramgarh Coal Washery
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1. The Activity Target:

This project encompasses the development of an open cast and underground coal mine with ancillary coal washing plant at Ramgarh in Bihar State.

From a total production of 1.5 million tons of raw coal 1,050,000 tons of coking coal, having a 15 percent ash content, will be produced. This will provide furnace feed for the coke ovens of the expanding Durgapur Steel Plant. In addition, 300,000 tons of 34 percent ash thermal coal will be provided as a source of energy for electric power at the Patratu thermal power station.

Development of the Ramgarh mine and washery will assist in India's attempt to reach a targeted increase in annual production of 42 million tons during the Third Five Year Plan. It now appears that production will fall short of this goal by eight to nine million tons. The washery also will assist India in carrying out her policy of stretching the country's barely adequate coking coal reserves by washing inferior grades of coal and removing impurities to make satisfactory coke oven feed.

The following sources of washed coal will be available by the end of Third Five Year Plan with capacities as shown:

Washery	Washed Coal (Million tons)
1. Jamdoba	1.0
2. West Bokaro	0.50
3. Lodna	0.23
4. Kargali	1.55
5. Durgapur	0.90
6. Dugda I	1.44
7. Bhojudih I	0.84
8. Patherdih	1.30
Total ..	<u>7.76</u>

It will be noted that this gives a washed coal capacity of 7.76 million tons. Anticipated steel plant requirement for washed coal by the end of the Third Five Year Plan (1965-66) is 10.92 million tons. Thus 3.2 million tons of prime coking coal must be mined and fed directly to the furnace, in addition to washed coal even if all the washeries work at full capacity.

At the end of the Fourth Five Year Plan the following washeries will be in operation or under construction.

Washery	Washed Coal (Million tons)
1. Jamdoba	1.0
2. West Bokaro	0.50
3. Lodna	0.23
4. Kargali I	1.55
5. Kargali II	0.40
6. Durgapur	0.90
7. Dugda I	1.44
8. Dugda II	1.20
9. Bhojudih I	0.84
10. Bhojudih II	0.56
11. Patherdih	1.30
12. Kathara	1.50
13. Durgapur Steel Plant Washery	0.67
Total ..	<u>12.09</u>

In addition the following coal washeries are being planned by the Government of India, for completion during the Fourth Five Year Plan.

Washery	Constructing Agency	Input	Output of washed coal.
1. Sudamdih	Heavy Engineering Corporation	2.16	1.04
2. Monadh	" "	2.10	0.52
3. Govindpur	" "	2.25	0.88
4. Pundi	" "	1.50	0.90
5. Sawang	" "	0.75	0.50
6. Chagnala	Indian Iron & Steel Co.	1.50	1.05
7. Ramgarh	A.I.B.	1.50	1.05
8. Ramgarh II and III	(Undecided)	2.00	0.63
			<u>6.87</u>

Accordingly, against an anticipated demand by steel plants and coke ovens totalling 23.57 million tons there will be available a projected total capacity of washed coking coal of 18.96 million tons.

Thus 4.61 million tons of prime coking coal will still be required even if all present and planned washeries work at full capacity.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-210-269	Ramgarh Coal Washery
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2. The Course of Action:

It is proposed to provide during FY 65 an A.I.D. dollar development loan of \$8.0 million to the National Coal Development Corporation (NCDC) for foreign exchange costs for the development of the Ramgarh coal mine and its ancillary washery.

3. The Progress to Date:

The loan application was approved in October 1964, on the basis of the feasibility study of the project prepared by an American Engineering firm.

PROJECT DATA SUMMARY -- AID DOLLAR COSTS

E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA		3. PROJECT NO. 386-26-210-271				4. TITLE Bolani Ores							
	5. U.S. FUNDING:		BEGIN FY 1965	END FY 1965	6. PRIOR REFERENCES						7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS			
	PHYSICAL WORK:		1966	1968	e. PERSONNEL SERVICES		f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS			
			a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	(1) U.S. AGENCIES		(2) CONTRACT		(1) DIRECT AND U.S. AGENCIES		(2) CONTRACT			
						(1) U.S. AGENCIES		(2) CONTRACT		(1) DIRECT AND U.S. AGENCIES		(2) CONTRACT				
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT		
I. THRU ACTUAL YEAR FY _____	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR															
	GROSS OBLIGATIONS (ACTUAL YEAR)															
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR															
EXPENDITURES (ACTUAL YEAR)																
C. UNLIQUIDATED OBLIGATIONS END OF YEAR																
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS		DL*	L	5,000	-	-	-	-	-	5,000	-	-	-		
	B. EXPENDITURES															
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L	5,000	-	-	-	-	-	5,000	-	-	-	-	
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS															
	B. EXPENDITURES		DL	L	1,000	-	-	-	-	-	1,000	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L	4,000	-	-	-	-	-	4,000	-	-	-	-	
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/		DL	L	-	-	-	-	-	-	-	-	-	3,000	-	
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/		DL	L	-	-	-	-	-	-	-	-	-	1,000	-	
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/		DL	L	5,000	-	-	-	-	-	5,000	-	-	-	5,000	-

REMARKS:

1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

Refers to IAS Annex on Minerals under preparation.

\* Loan # not yet assigned.

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-26-210-271	Bolani Ores
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1. The Activity Target:

To provide foreign exchange for procurement of equipment required to increase the annual production at the iron ore mines of Bolani Ores Ltd., from a gross total of two million tons to four million tons. Of the four million tons, three million, two million of run of mine ore and one million of beneficiated fines for sinter feed, will be shipped to the Durgapur Steel Plant as furnace feed for that Plant's expanded capacity to produce 1.8 million tons of steel annually. Bolani Ores, Ltd., is located in the Bara Jamda area of northern Orissa; its expansion requires mechanized open cast mining equipment and a beneficiation plant capable of obtaining one million tons of beneficiated fines from a total of two million tons of fine ore. The beneficiation equipment consists of a crushing, screening and conveyor system, washing plant and ancillary civil and utility equipment.

India possesses a vast reserve of iron ore whose exploitation so far has been by mining the lump ore and wasting the fines. The provision of sintering capacity at Durgapur and a beneficiation plant at Bolani will permit utilization of approximately half of the fines generated in the mining process. The rest, all low-grade material, can be wasted without injustice to India's raw-material position. The provision of this iron ore to Durgapur will be in line with the policy of developing this potential steel making and foreign exchange earning resource of India. (See Project 386-22-210-209, Orissa Iron Ore).

2. The Course of Action:

To make an A.I.D. dollar development loan of \$5.0 million in FY 1965.

3. The Progress to Date:

An application for a loan has been received; its review indicated the advisability of additional beneficiation tests to establish the limits of uniformity of mill feed of the beneficiation plant. When the tests are completed the final decision on the loan will be made.

AID 1020-2 (2-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED					
E-10	1. DATA CURRENT AS OF: 1 November, 1964		2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-22-210-284				4. TITLE Khetri Copper Project							
	5. U.S. FUNDING:		BEGIN FY 1965		END FY 1965		6. PRIOR REFERENCES										
	PHYSICAL WORK:		1966		1967												
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT <sup>1/</sup>	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. <sup>1/</sup> LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
						(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	
						AID	PASA										
I. THRU ACTUAL YEAR FY _____	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR																
	GROSS OBLIGATIONS (ACTUAL YEAR)																
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR																
	EXPENDITURES (ACTUAL YEAR)																
C. UNLIQUIDATED OBLIGATIONS END OF YEAR																	
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS		DL	L	21,000	-	-	-	-	-	21,000	-	-	-	-	-	
	B. EXPENDITURES		DL	L	-	-	-	-	-	-	-	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L	21,000	-	-	-	-	-	21,000	-	-	-	-	-	-
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS																
	B. EXPENDITURES		DL	L	4,000	-	-	-	-	-	4,000	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L	17,000	-	-	-	-	-	17,000	-	-	-	-	-	-
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS <sup>2/</sup>		DL	L	-	-	-	-	-	-	-	-	-	-	4,000	-	
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>		DL	L	-	-	-	-	-	-	-	-	-	-	13,000	-	
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>		DL	L	21,000	-	-	-	-	-	21,000	-	-	-	21,000	-	

## REMARKS:

<sup>1/</sup> This is a memorandum (non-add) column.

Refers to LAS Annex on Minerals, under preparation.

<sup>2/</sup> Show estimated expenditures in column i.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	36-22-210-284	Khetri Copper Project
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1. The Activity Target.

This proposed loan is to finance the foreign exchange costs of mining equipment, milling, refining, and by-product recovery equipment for the Khetri Copper Project in the district of Jhunjhunu in Rajasthan.

In this project some 50 million tons of 1 percent copper ore have been outlined to a mining depth of 2,500 feet on the Madhan-Kudhan section of the Khetri Copper belt. Exploration by diamond drilling in the neighbouring Kolihan section of the belt which has been recently added to the project shows its grade of 2 percent copper ore is higher than the Madhan-Kudhan section. The reserve in Kolihan however, is believed to be considerably smaller. From these deposits it is planned to produce 21,000 metric tons of copper, 75-78 thousand ounces of gold and 63,350 ounces of silver annually. In addition possible production of a sulphur by-product for the fertilizer industry is being studied; the results should be available in three months.

The Khetri Copper belt in Rajasthan has been mined in small local, near surface operation for nearly 2000 years. Current studies were undertaken first by the Geological Survey of India, then by the Indian Bureau of Mines, and now by the National Mineral Development Corporation (which has the responsibility for mining and refining the copper ore). The Western Knapp Engineering Company, an American firm, has prepared a project report of the Madhan-Kudhan section of the area.

Currently the only copper produced in India is from the Mozabani mines in the southern district of Bihar, which in 1963 produced 9,852 metric tons valued at 0.4 million dollars. However, the demand for copper has been increasing rapidly as a result of industrialization and defense requirements.

In the year ending March 31, 1964, India imported 72,665 metric tons valued at \$52.5 million. Accordingly the Khetri Copper Project may be regarded as highly valuable as a reducer of India's foreign exchange requirements.

2. The Course of Action.

To make an A.I.D. dollar development loan of \$21 million. (The amount cannot be stated precisely until the sulphur by-product plant design is finalized.)

3. The Progress to Date.

Additional exploration by diamond drilling and underground workings to provide details on the configuration of ore deposits is under way, jointly approved by NMDC and A.I.D. In the meantime final plant design changes are being studied by NMDC and Western Knapp Co., to improve gold and silver recoveries while providing for sulphur off-take for much-needed fertilizer manufacture. All the information should be available by June or July 1965.

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PROJECT DATA SUMMARY — AID DOLLAR COSTS

E-1a

1. DATA CURRENT AS OF:  
1 November 1964

2. COOPERATING COUNTRY  
INDIA

3. PROJECT NO.  
386-24-230-286

4. TITLE

Operation Hard Rock -  
(Program of Mineral Discovery and  
Development)

5. U.S. FUNDING:  
PHYSICAL WORK:  
BEGIN FY 1965  
END FY 1965  
1966 1968

6. PRIOR REFERENCES

7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)	a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES		f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS				
					(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT		
					AID	PASA											
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR																
	GROSS OBLIGATIONS (ACTUAL YEAR)																
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR																
	EXPENDITURES (ACTUAL YEAR)																
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	DL	L	3,500	3,500	-	-	2,000	-	-	-	1,500	-	-			
	B. EXPENDITURES	DL	L	500	500	-	-	500	-	-	-	-	-	-			
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L	3,000	3,000	-	-	1,500	-	-	-	1,500	-	-			
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS																
	B. EXPENDITURES	DL	L	2,000	2,000	-	-	1,500	-	-	-	500	-	-			
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L	1,000	1,000	-	-	-	-	-	-	1,000	-	-			
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/	DL	L	-	-	-	-	-	-	-	-	-	-	1,000			
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/																
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	DL	L	3,500	3,500	-	-	2,000	-	-	-	1,500	-	3,500			

REMARKS:

- 1/ This is a memorandum (non-add) column.
- 2/ Show estimated expenditures in column i.

Refers to LAS Annex. on Minerals under preparation

AID 1020-4 (7-54)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-24-230-286	Operation Hard Rock - (Program of Mineral Discovery and Development)
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### 1. The Activity Target

To establish an organization within the GOI to conduct, before FY 1968, 90,000 miles of airborne minerals survey and 50,000 feet of diamond drilling in the favorable areas indicated by airborne and ground survey instruments with the assistance of U.S. contract teams and equipment.

In 1960 India spent more than \$75 million of scarce foreign exchange for the import of base metals (copper, zinc, lead, tin and nickel). Of this, nearly \$42 million was spent for copper alone. By 1971, given a reasonable set of assumptions about the demand of industry for these metals, the import bill will be nearly \$200 million per year. If Indian industry is to produce at anything near its capacity, very large amounts of foreign exchange, including U.S. and other aid funds, must be used in the years ahead to purchase these vital imports.

The alternative course under this project seeks to provide innovations that may lead to the quick discovery within India of large economic deposits of non-ferrous ores. There are two main reasons to believe this is possible. First, geologic conditions in India are similar to those in other areas of the world where vast amounts of high grade ores were discovered recently. Second, most of those discoveries were made through the use of modern airborne and ground survey teams using the latest electro-magnetic and magnetic geophysical instruments.

Within India lie two highly promising Precambrian geosynclinal structures. One, called the Satpura geosyncline, extends from a few miles north of Goa on the west coast to some 120 miles west of Calcutta, closely paralleling the coast line; the other, the Aravalli geosyncline, extends from Cambay north of Bombay to Delhi. Both are sources of important mineral deposits. Despite this and that the rock types in these geosynclines closely correspond to the formations found in the Lake Superior and Ungava geosynclines of the United States and Canada, only a few new economic deposits have been found in recent years. India is not and is not using modern methods, organization, or equipment to explore one of the world's most favorable economic geological environments.

The interested Ministries of the GOI now are aware of the possibilities and intend to create an inter-Ministry organization capable of conducting an effective "crash" exploration program. They want U.S. technical assistance, and will request the U.S. A.I.D. Mission to approve a \$3.5 million loan to provide the required services.

### 2. The Course of Action

The target is to be reached by assisting the GOI Department of Mines, Ministry of Steel & Mines, in:

- developing a special task force to conduct a program of aerial surveying, ground geophysical and geological exploration and mining development;
- surveying geophysically favorable Precambrian geosynclinal structures from the air to locate small areas suitable for further geological investigation; and
- drilling favorable prospecting areas, evaluating ore minerals found, and preparing mining development plans for economically feasible deposits.

Only a few new economic deposits have been found in recent years. This is due to the assignment of new metallic mineral development to the Geological Survey of India and Indian Bureau of Mines, whose normal functions are mapping and research. Their present staffing patterns are not suited to the type of streamlined mineral prospecting required to bring new deposits into actual production prior to 1971. Because of the lead time between finding a mineral deposit and its full scale production, it is necessary to consider discovery now, and development soon, of the base metals required for 1970.

It is proposed that a loan of \$3.5 million be provided in FY 1965 to finance the foreign exchange costs of (1) contractual services of a U.S. team of mineral survey engineers for a period of 2 years; (2) aero-geophysical survey totalling 90,000 line miles airborne traverse; (3) 50,000 ft. of diamond drilling; (4) laboratory equipment, trucks and other exploration equipment.

Description: This activity proposes a rapid program of airborne mineral discovery in the Satpura and Aravalli geosynclines, and subsequent development. Favorable prospecting areas within these geosynclines, selected by an exploration advisory committee, will be surveyed geophysically and pin-pointed from the air by aeromagnetic, electro-magnetic and radiometric methods. These areas will be examined by exploration field teams, whose composition and equipment will be tailored to fit the type of mineral expected in the prospecting area. A map showing the geosynclines is attached.

Organization: It is planned that the U.S. contractor selected will have overall responsibilities for the project, under the supervision of the Indian Coordinator and a Deputy Coordinator. In order to familiarize Indian ore scientists with the latest methods of exploration and rapid field application in finding economic deposits, an Indian counterpart will

be appointed for each key position to be occupied by American experts in Operation Hard Rock. Upon completion of the "crash" exploration program the trained Indian personnel will return to the various concerned GOI agencies. A chart of the proposed organization is attached.

Duration: It is expected that this operation will be completed in approximately two years from the time of flying the first aerial traverse. By then fully competent Indian technicians should be able to assume full responsibilities for further exploration.

Engineering: Tenders will be invited in the U.S.A. for the aerogeophysical survey, totalling 90,000 line miles airborne traverse, and contracts will be awarded by the GOI with the approval of AID. The latest type of magnetic and electro-magnetic equipment will be specified and aeroplanes of configuration adapted to the survey stipulated. Diamond drilling equipment will be of the latest type capable of 80% core recovery in fine grained friable iron formations by the use of bottom discharge bits and specially prepared drilling muds.

### 3. Progress to Date

The Ministry of Steel & Mines has approved the project plan and has forwarded it with favorable comments to the Ministry of Finance for consideration and necessary action. The Mission expects an application for the loan within two months.

### 4. Funding Requirements

#### U.S. A.I.D. Development Loan

##### Cost Estimate:

##### Dollars

1. Contractual services & 90,000 line miles airborne traverse with maps.	..	\$ 2,000,000
*2. Diamond drilling 50,000 ft. @ \$20.00/ft.	..	\$ 1,000,000
3. One metallurgical & chemical laboratory	..	\$ 250,000
4. Trucks with living quarters, magnetometers and other field exploration equip.	..	\$ 135,000
5. Contingencies	..	\$ 115,000
<b>Total:</b>		<b>\$ 3,500,000</b>

##### G.O.I. Obligation

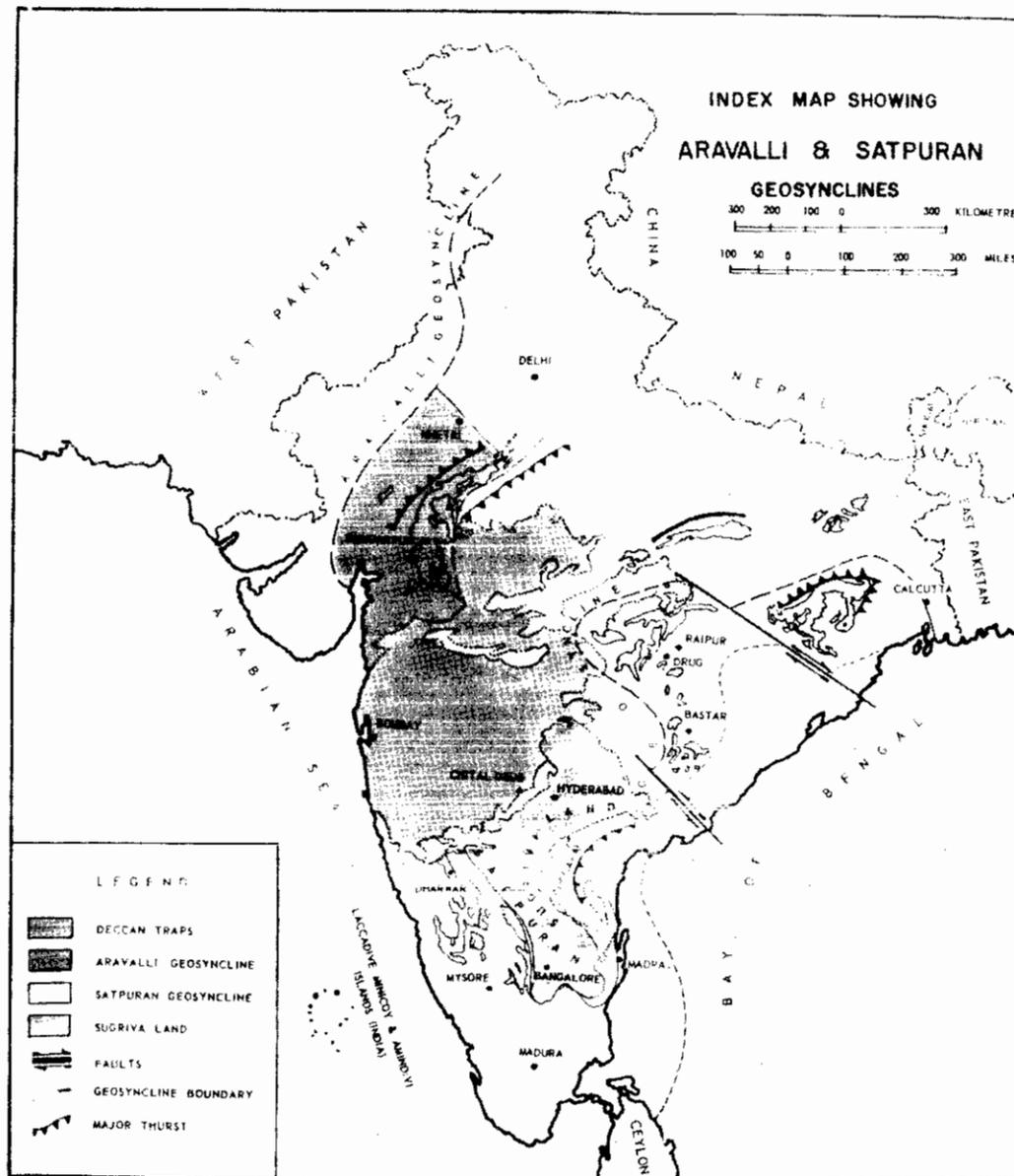
##### Cost Estimate:

##### Rupees

1. Salaries and Allowances	Rs. 2,000,000
2. Equipment -	
a. Vehicles	615,000
b. Survey & Design	72,820
c. Camp & Office	184,200
**3. Operation cost	432,000
4. Contingencies	45,000
5. Clearing Charges (Indian Customs)	460,000
<b>Total:</b>	<b>Rs. 3,809,020</b>
	<b>(equiv. \$795,639)</b>

\* For equipment, technician salaries and other dollar costs.

\*\* Includes rupee costs of diamond drilling.

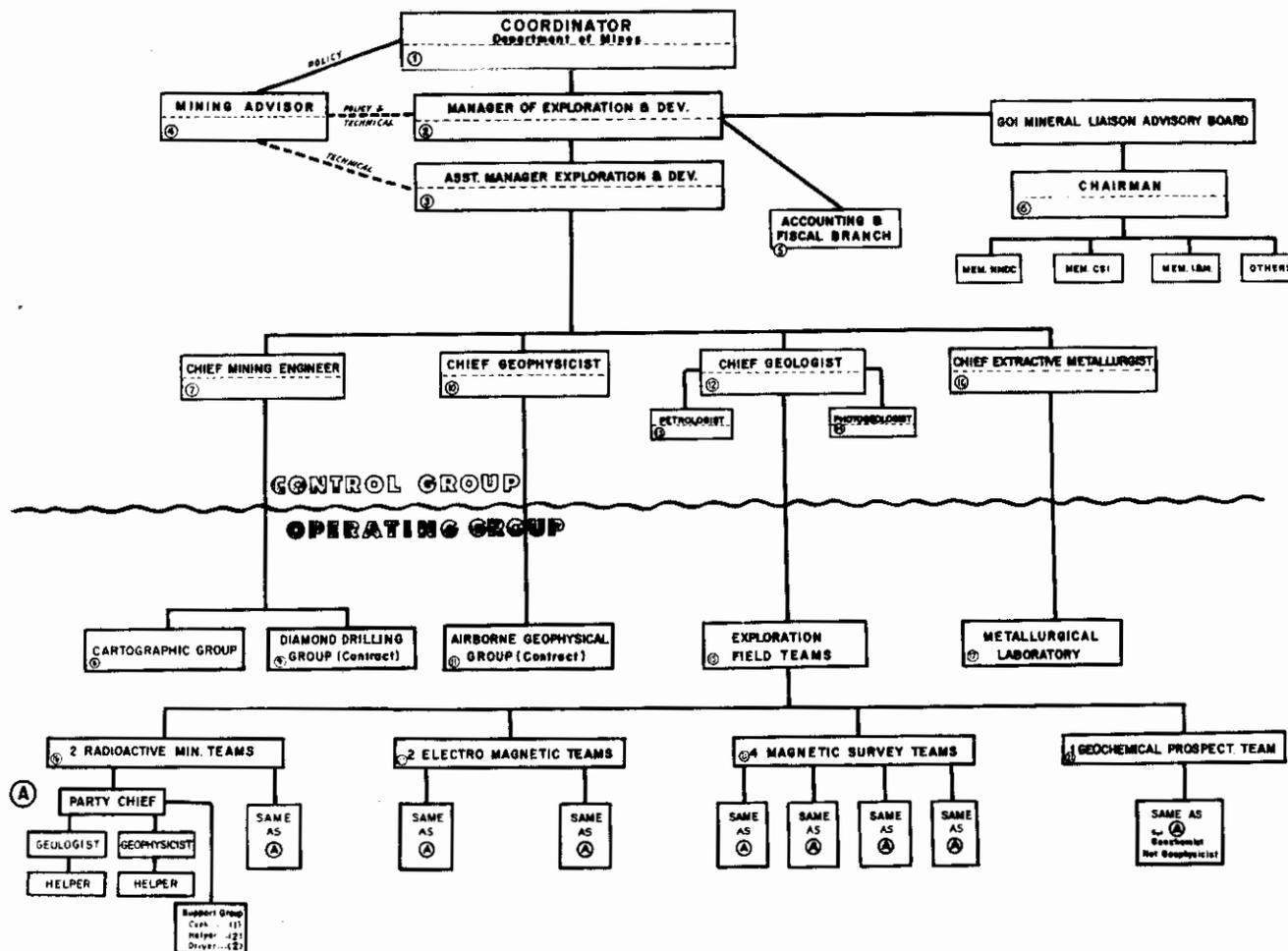


1 November 1964

INDIA

UNCLASSIFIED

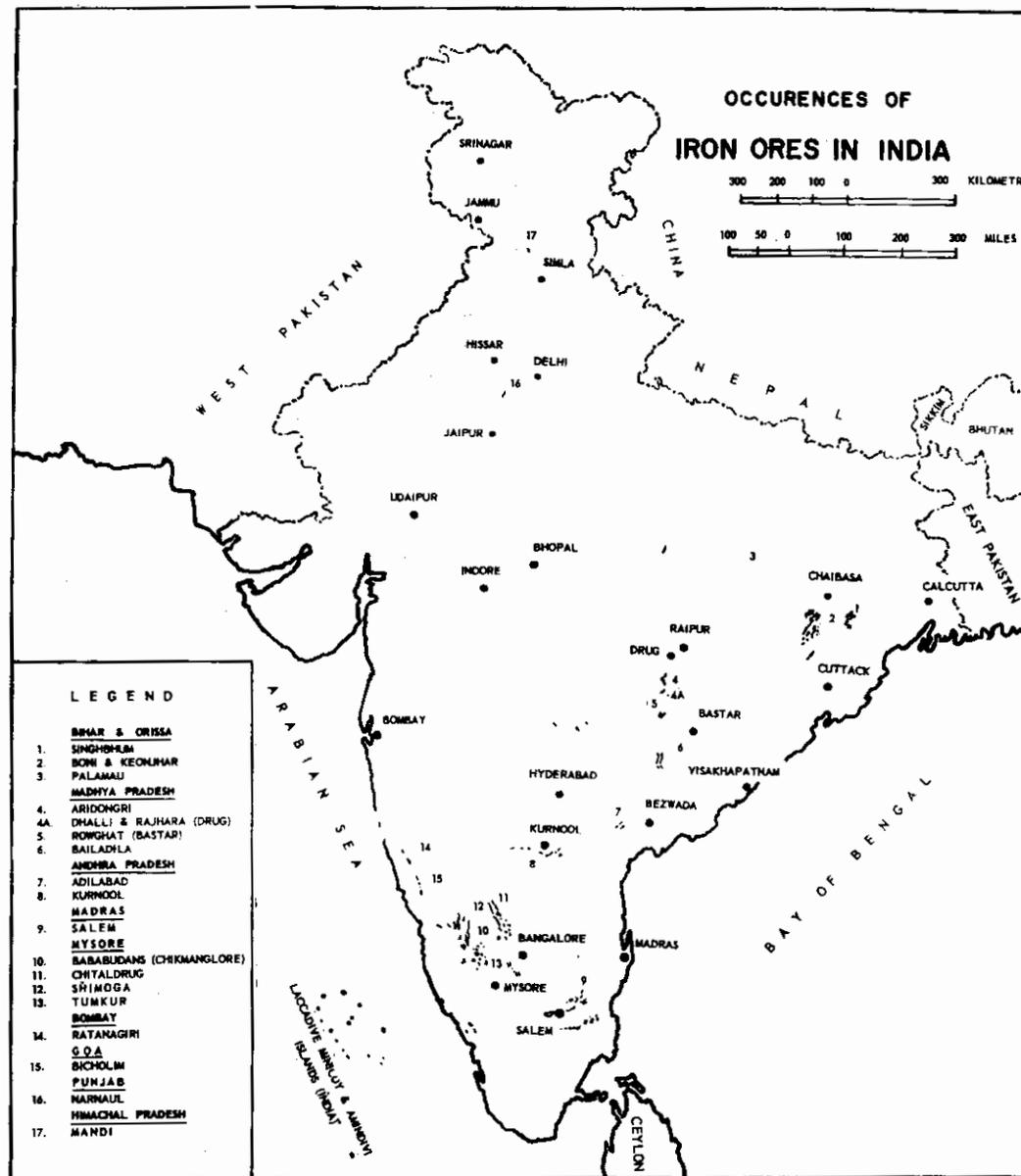
386-24-230-286

**ORGANIZATION OF TASK FORCE****"OPERATION HARD ROCK"**

1 November 1964

INDIA

UNCLASSIFIED



PROJECT DATA SUMMARY — AID DOLLAR COSTS

1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA		3. PROJECT NO. 386-26-920-2/6		4. TITLE National Small Industries Corporation										
		5. BEGIN FY 1961		END FY 1961		6. PRIOR REFERENCES		7. PHYSICAL WORK: 1961		1965						
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES		f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	DL	L*	10,000	---	---	---	---	---	---	10,000	---	---	---	---	
	GROSS OBLIGATIONS (ACTUAL YEAR)	DL	L	---	---	---	---	---	---	---	---	---	---	---	---	
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	DL	L*	7,946	---	---	---	---	---	---	7,946	---	---	---	---	
	EXPENDITURES (ACTUAL YEAR)	DL	L*	4,243	---	---	---	---	---	---	4,243	---	---	---	---	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L*	2,054	---	---	---	---	---	---	2,054	---	---	---	---	
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS															
	B. EXPENDITURES	DL	L*	2,054	---	---	---	---	---	---	2,054	---	---	---	---	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
III. BUDGET YEAR (EST.) FY _____	A. GROSS OBLIGATIONS															
	B. EXPENDITURES															
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
IV. PLANNING YR. (EST.) FY _____	GROSS OBLIGATIONS 2/															
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	DL	L*	10,000	---	---	---	---	---	---	10,000	---	---	---	---	

REMARKS:

- 1/ This is a memorandum (non-add) column.
- 2/ Show estimated expenditures in column i.
- \* Loan DLF -144

Refers to Annexe 11 of LAS

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-26-920-246	National Small Industries Corporation
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NATIONAL SMALL INDUSTRIES CORPORATION

Activity Target

This loan provided part of the foreign exchange requirements for a hire-purchase (installment) program geared to assist private small scale industrial enterprises.

The National Small Industries Corporation, a GOI corporation, established in 1955, provides several services to small scale enterprises, among them the provision of capital equipment on installment credit in a scheme operating since 1956. For this type of credit, NSIC requires a down payment of 20 percent, with repayment of the balance over seven years, after which the entrepreneur assumes title to the equipment. Credit in this category is limited to enterprises whose fixed capital is less than \$210,000. At present, NSIC has no other sources of foreign exchange funds; rupee financing is provided to the NSIC entirely by the GOI.

A loan application for \$25 million to provide additional foreign exchange for the hire-purchase program has been submitted to AID/W. However AID and GOI have become increasingly concerned about reports that much of the small-scale industrial capacity is unutilized, due to lack of raw materials, and about the need for improvement in NSIC's administration. Until better methods are adopted to ensure adequate allocation of raw materials to small industry already established there is little purpose in supporting expansion of this sector and thus encourage under-utilization.

The Mission expects to complete an audit of NSIC's activities by the end of October 1964; the position that AID should take regarding future loans to this institution should be clearer then.

Progress To Date

The entire amount of Loan 144 (\$10 million) has been programmed by NSIC to over 1,000 entrepreneurs; actual disbursement approximates \$8 million. (See Development Loan Paper DLF-LC/P-230 for full details concerning this project.)

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO. AH-2

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED					
E-1a	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY			3. PROJECT NO.				4. TITLE							
	1 November 1964		INDIA							Goal: Town-Centered Small Scale Industries							
	b.		BEGIN FY		END FY		6. PRIOR REFERENCES										
	U.S. FUNDING:		1956		1961												
PHYSICAL WORK:		1957		1965													
7.		a.	b.	c.	d.	e.			f.		g.		h.		i. 1/		
AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		APPROPRIATION TITLE	LOAN OR GRANT	TOTAL	CONTRACT 1/	PERSONNEL SERVICES			PARTICIPANTS		COMMODITIES		OTHER COSTS		LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
						(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	
		AID	PASA														
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		TG G	807 a/	384	-	-	248	8	44	415	1	-	91			
			DL I*	10,000	-	-	-	-	-	-	10,000	-	-	-			
	GROSS OBLIGATIONS (ACTUAL YEAR)		TG G	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			DL I*	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		TG G	807	384	-	-	248	8	44	415	1	-	91	60 a/	-	
			DL I*	7,946	-	-	-	-	-	-	7,946	-	-	-	-	-	
	EXPENDITURES (ACTUAL YEAR)		TG G	-	-	-	-	-	-	-	-	-	-	-	-	-	
			DL I*	4,243	-	-	-	-	-	-	4,243	-	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TG G	-	-	-	-	-	-	-	-	-	-	-	-	-	
			DL I*	2,054	-	-	-	-	-	-	2,054	-	-	-	-	-	
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS																
	B. EXPENDITURES		DL I*	2,054	-	-	-	-	-	-	2,054	-	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR																
III. BUDGET YEAR (EST.) FY _____	A. GROSS OBLIGATIONS																
	B. EXPENDITURES																
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR																
IV. PLANNING YR. (EST.) FY _____	GROSS OBLIGATIONS 2/																
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/																
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/		TG G	807 a/	384	-	-	248	8	44	415	1	-	91	423	384	
			DL I*	10,000	-	-	-	-	-	-	10,000	-	-	-	10,000	-	

## REMARKS:

- 1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

Refers to LAS Annex 11.

\* DIF Loan # 144.

a/ Completed Projects.

AID 1020-3 (7-64)		PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES							SECURITY CLASSIFICATION UNCLASSIFIED						
E-1b		1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. Funding		BEG. FY	END FY	4. PROJECT NO.		5. TITLE			
		1 November 1964		INDIA		Phys. Work						Goal: Town Centered Small Scale Industries			
7. OBLIGATED AND DISBURSED		a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
		(1)	(2)	(3)	(1)		(2)		(1)	(2)	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
		TYPE	SOURCE	LOAN GRANT	DOLLAR EQUIVALENTS (000) 1/		LOCAL CURRENCY UNITS (000)		OBLIGATED	DISBURSED	(a)	(b)	(a)	(b)	
					(a)	(b)	(a)	(b)			U.S. PERS.	NON-U.S. PERS.	OBLIGATED	DISBURSED	
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G a/		60		289		-	131	-		158	
	FA ACT	(ii) TRUST FUND	Govt. Rev.	- a/	9	9	45	45	-	-	-	-	45	45	
		(iii) OTHER LC	Sec. 402	G a/	50	50	238	238	-	-	207	-	31	31	
		B. P.L. 480 LC													
	TOTAL ACTUAL FY	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
		FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC													
		B. P.L. 480 LC													
II OPERATIONAL YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
		B. P.L. 480 LC													
III BUDGET YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
		B. P.L. 480 LC													
IV PLANNING YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
		B. P.L. 480 LC													
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/													
	FA ACT	(ii) TRUST FUND													
		(iii) OTHER LC													
		B. P.L. 480 LC													
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G a/		60		289		-	131	-		158	
	FA ACT	(ii) TRUST FUND	Govt. Rev.	- a/	9	9	45	45	-	-	-	-	45	45	
		(iii) OTHER LC	Sec. 402	G a/	50	50	238	238	-	-	207	-	31	31	
		B. P.L. 480 LC													

REMARKS:  
1/ Exchange Rate: \$1 = Rs. 4.7876 a/ closed projects.

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c		PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES			BEG. FY	END FY	4. PROJECT NO.						
		1 November 1964			INDIA			PARTICIPANT TRAINING					Goal: Town-Centered Small Scale Industries									
I PROJECT PERSONNEL	A. MAN YEARS	a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
	U.S.	-	-	10.0*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.0
	Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. ON BOARD	U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II. PARTICIPANTS PROGRAMMED	A. U.S.	1*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
	B. THIRD CTRY.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

REMARKS: \* Data for closed projects addressed to this goal.

1/ End of Fiscal Year

AID FORM 10-112 (7-62)	DATE PREPARED	COOPERATING COUNTRY	SECURITY CLASSIFICATION	MULTI-YEAR LISTING							Goal:	E-4
	1 Nov. 1964	INDIA	UNCLASSIFIED								Town-centered Small Scale Industries	
Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year FY 1964	Operational Year FY 1965	Budget FY 1966	Budget +1 FY 1967	Budget +2 FY 1968	Budget +3 FY 1969	Budget +4 FY 1970	All Subsequent Years	Total All Years
386-26-920-246	National Small Industries Corporation	DL	10,000	-	-	-	-	-	-	-	-	10,000
		DG										
		SA										
		480										
		L/C										
		Coop. C.										
		Other										
	Total: AID Activities, Town-Centered Small Scale Industries	DL	10,000	-	-	-	-	-	-	-	-	10,000
		DG										
		SA										
		480										
		L/C										
		Coop. C.										
		Other										
		DL										
		DG										
		SA										
		480										
		L/C										
		Coop. C.										
		Other										
		DL										
		DG										
		SA										
		480										
		L/C										
		Coop. C.										
		Other										

SECURITY CLASSIFICATION

UNCLASSIFIED

## PROJECT DATA SUMMARY — AID DOLLAR COSTS

SECURITY CLASSIFICATION  
UNCLASSIFIED

E-1a

1. DATA CURRENT AS OF: 1 November, 1964		2. COOPERATING COUNTRY INDIA		3. PROJECT NO.		4. TITLE Goal: Management and Administration	
5. U.S. FUNDING:		BEGIN FY 1956		END FY 1971		6. PRIOR REFERENCES	
PHYSICAL WORK:		1956		1971			

7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)	e. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES		f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS				
					(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT		
					AID	DATA											
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	4382*	1774	294	-	1020	1997	118	305	7	12	629			
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	685	205	21	-	141	420	10	39	4	-	50			
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	3384	1311	277	-	737	1540	101	243	-	13	473	458	-	
	EXPENDITURES (ACTUAL YEAR)	TC	G	651	278	3	-	159	355	21	13	-	2	98	-	-	
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	1458	706	22	172	458	558	18	-	-	-	230			
	B. EXPENDITURES	TC	G	1071	444	10	37	268	750	23	31	2	(1)	151	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	1385	725	29	135	473	465	12	31	5	-	235			
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TC	G	1933	978	90	154	660	711	48	-	10	-	260			
	B. EXPENDITURES	TC	G	961	453	40	49	296	412	17	7	5	-	135	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	2357	1250	79	240	837	764	43	24	10	-	360			
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/	TC	G	1621	748	90	154	540	629	18	-	-	-	190	570	636	
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	1197	660	141	38	600	358	-	-	-	-	60	1947	2022	
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	10591*	4866	637	518	3278	4253	202	305	17	12	1369	3725	4866	

## REMARKS:

- 1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

\*Includes closed project  
DG \$163

AID 1020-3 (7-64)		PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES								SECURITY CLASSIFICATION UNCLASSIFIED				
E-1b		1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA		3. FUNDING BEG. FY 1956 END FY 1971 Phys. Work 1956 1971		4. PROJECT NO.		5. TITLE Goal: Management and Administration				
7. OBLIGATED AND DISBURSED		a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
		(1) TYPE	(2) SOURCE	(3) LOAN FOR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
					(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G		458		2198			259			1,939
		(ii) TRUST FUND	Govt Revenue	-	39	37	185	180	-	-	-	-	185	180
		(iii) OTHER LC	Sec 402	G	1962	1581	9394	7568	-	-	1206	58	7392	6,304
		B. P.L. 480 LC	Sec 104(e)	G	154	154	739	739	739	739	-	-	-	-
TOTAL ACTUAL FY 64	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G		-		-			-			-
		(ii) TRUST FUND	Govt Revenue	-	4	3	15	13	-	-	-	-	15	13
		(iii) OTHER LC	Sec 402	G	270	286	1294	1368	-	-	349	15	874	1,004
		B. P.L. 480 LC	Sec 104(e)	G	154	154	739	739	739	739	-	-	-	-
II OPERATIONAL YEAR (EST.) FY 65	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G		-		-			-			-
		(ii) TRUST FUND	Govt Revenue	-	18	19	90	93	-	-	-	-	90	93
		(iii) OTHER LC	Sec 402	G	928	499	4442	2390	-	-	829	13	2474	1,548
		B. P.L. 480 LC												
III BUDGET YEAR (EST.) FY 66	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G		-		-			-			-
		(ii) TRUST FUND	Govt Revenue	-	37	37	178	178	-	-	-	-	178	178
		(iii) OTHER LC	Sec 402	G	753	690	3607	3304	-	-	712	-	2349	2,592
		B. P.L. 480 LC												
IV PLANNING YEAR (EST.) FY 67	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G		-		-			-			-
		(ii) TRUST FUND	Govt Revenue	-	33	33	159	159	-	-	-	-	159	159
		(iii) OTHER LC	Sec 402	G	753	530	3607	2540	-	-	814	-	2368	1,726
		B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G		-		-			-			-
		(ii) TRUST FUND	Govt Revenue	-	44	45	212	214	-	-	-	-	212	214
		(iii) OTHER LC	Sec 402	G	1263	2359	6046	11294	-	-	6432	-	2449	4,862
		B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G		458*		2198			259			1,939
		(ii) TRUST FUND	Govt Revenue	-	171*	171	824	824	-	-	-	-	824	824
		(iii) OTHER LC	Sec 402	G	5659	5659	27096	27096	-	-	9993	71	17032	17,032
		B. P.L. 480 LC	Sec 104(e)	G	154	154	739	739	739	739	-	-	-	-

REMARKS:  
1/ Exchange Rate: \$1 = Rs. 4.7876  
2/ The total dollar equivalent amounts are the same as in Col. I of Table E-1a

\*Includes closed projects - Trust Fund \$3  
L/C charged to \$ A/C \$21

E-1c		PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS								1. DATA CURRENT AS OF: 1 November, 1964		2. COOPERATING CTRY. INDIA		3. PERSONNEL SERVICES PARTICIPANT TRAINING		BEG. FY 1956 END FY 1971		4. PROJECT NO. Goal: Management and Administration					
		a. CUM. THRU ACTUAL FY			b. ACTUAL FY 64			c. OPERATIONAL FY 65			d. BUDGET FY 66			e. PLANNING FY 67			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	18.5**	-	57.6	4.6	-	16.1	1.5	.5	11.8	2	6.5	23.3	4	7	23	7	7.2	31	33.0	21.2	146.7
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B. ON BOARD	U.S.				1	-	14	1	14	10	4	8	18	4	7	21							
	Non U.S.				-	-	-	-	-	-	-	-	-	-	-	-							
II. PARTICIPANTS PROGRAMMED	A. U.S.		802***	-	2	113	-	2	189	-	10	199	-	10	171	-	10	195	-	-	1,556	-	32
	B. THIRD CTRY.		-	-	-	-	-	-	5	-	-	10	-	-	10	-	-	40	-	-	65	-	-

REMARKS:  
1/ End of Fiscal Year  
\*\*Includes .2 for closed projects addressed to this goal  
\*\*\* -do- 5.0 do

AID FORM 10-112 (7-62)	DATE PREPARED	COOPERATING COUNTRY	SECURITY CLASSIFICATION		MULTI-YEAR LISTING		Goal: Management and Administration					E-4	
	1 November 1964	INDIA	UNCLASSIFIED										
Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year FY 1964	Operational Year FY 1965	Budget FY 1966	Budget +1 FY 1967	Budget +2 FY 1968	Budget +3 FY 1969	Budget +4 FY 1970	All Subsequent Years	Total All Years	
386-15-270-115	National Productivity Council	DL	-	-	-	-	-	-	-	-	-	-	
		DG	3,425	299	-	-	-	-	-	-	-	3,425	
		SA	-	-	-	-	-	-	-	-	-	-	
		480	154	154	-	-	-	-	-	-	-	154	
		L/C	1,681	123	-	-	-	-	-	-	-	-	1,681
		Coop. C.	-	-	-	-	-	-	-	-	-	-	-
386-11-720-170	Government Operations	DL	-	-	-	-	-	-	-	-	-	-	
		DG	334	175	360	563	393	63	40	-	-	1,753	
		SA	-	-	-	-	-	-	-	-	-	-	
		480	-	-	-	-	-	-	-	-	-	-	
		L/C	163	99	287	280	280	258	190	-	-	1,458	
		Coop. C.	-	-	-	-	-	-	-	-	-	-	
386-11-720-242	Top Management Control of Economic Enterprises	DL	-	-	-	-	-	-	-	-	-	-	
		DG	369	184	451	554	554	114	113	-	-	2,155	
		SA	-	-	-	-	-	-	-	-	-	-	
		480	-	-	-	-	-	-	-	-	-	-	
		L/C	87	33	164	223	223	58	57	-	-	812	
		Coop. C.	-	-	-	-	-	-	-	-	-	-	
386-11-720-243	Executive Training and Development	DL	-	-	-	-	-	-	-	-	-	-	
		DG	91	27	647	816	674	344	344	180	79	3,095	
		SA	-	-	-	-	-	-	-	-	-	-	
		480	-	-	-	-	-	-	-	-	-	-	
		L/C	31	15	477	250	250	300	300	60	40	1,708	
		Coop. C.	-	-	-	-	-	-	-	-	-	-	
Total: AID Activities, Management and Administration		DL	-	-	-	-	-	-	-	-	-	-	
		DG	4,219	685	1,458	1,933	1,621	521	497	100	79	10,428	
		SA	-	-	-	-	-	-	-	-	-	-	
		480	154	154	-	-	-	-	-	-	-	154	
		L/C	1,962	270	928	753	753	616	547	60	40	5,659	
		Coop. C.	-	-	-	-	-	-	-	-	-	-	

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE AI-3

AID 1020-2 (8-84)		PROJECT DATA SUMMARY — AID DOLLAR COSTS											SECURITY CLASSIFICATION UNCLASSIFIED			
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-15-270-115				4. TITLE National Productivity Council						
	5. U.S. FUNDING:		BEGIN FY 1958		END FY 1964		6. PRIOR REFERENCES									
	PHYSICAL WORK:		1959		1965											
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		e. APPROPRIATION TITLE	b. LCAN OR GRANT	c. TOTAL	d. CONTRACT <sup>1/</sup>	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	3,425	1,413	137	-	786	1,635	108	239	-	1	519		
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	299	24	5	-	24	260	-	10	-	-	-		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	3,009	1,304	133	-	730	1,354	101	217	-	1	473	437	-
	EXPENDITURES (ACTUAL YEAR)	TC	G	532	271	1	-	152	254	21	6	-	-	98	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	-	-	-	-	-	-	-	-	-	-	-		
	B. EXPENDITURES	TC	G	416	109	4	-	56	281	7	22	-	-	46	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	-	-	-	-	-	-	-	-	-	-	-		
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS															
	B. EXPENDITURES															
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS <sup>2/</sup>															
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>	TC	G	3,425	1,413	137	-	786	1,635	108	239	-	1	519	437	-

## REMARKS:

- <sup>1/</sup> This is a memorandum (non-add) column.  
<sup>2/</sup> Show estimated expenditures in column i.

AID 1020-3 (7-64)		PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES							SECURITY CLASSIFICATION UNCLASSIFIED					
E-1b		1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA		3. BEG. FY Funding 1957 1964 Phys. Work 1958 1965		4. PROJECT NO. 386-15-270-115		5. TITLE National Productivity Council				
7. OBLIGATED AND DISBURSED		e. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
		(1) TYPE		(3) JORN FOR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
					(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G		437		2,093		-	210	-		1,883
	FA ACT	(ii) TRUST FUND				35	34	166	163	-	-	-	166	163
		(iii) OTHER LC		G	1,681	1,480	8,050	7,086	-	-	1,064	58	6,669	5,964
		B. P.L. 480 LC		G	154	154	739	739	739	739	-	-	-	-
		A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G		-		-	-	-	-	-	-
TOTAL ACTUAL FY 1964	FA ACT	(ii) TRUST FUND				3	3	12	12	-	-	-	12	12
		(iii) OTHER LC		G	123	211	587	1,011	-	-	269	15	526	727
		B. P.L. 480 LC		G	154	154	739	739	739	739	-	-	-	-
		A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G		-		-	-	-	-	-	-
		FA ACT	(ii) TRUST FUND				4	5	22	25	-	-	22	25
II OPERATIONAL YEAR (EST.)		(iii) OTHER LC		G		201	-	964	-	-	246	13	-	705
		B. P.L. 480 LC		G		-	-	-	-	-	-	-	-	-
	FY 1965													
III BUDGET YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
FY 1966		B. P.L. 480 LC												
	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
IV PLANNING YEAR (EST.)		(iii) OTHER LC												
		B. P.L. 480 LC												
	FY 1967													
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC												
VI TOTAL ALL YEARS (EST.)		B. P.L. 480 LC												
	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G		437		2,093		-	210	-		1,883
	FA ACT	(ii) TRUST FUND				39	39	188	188	-	-	-	188	188
	(iii) OTHER LC		G	1,681	1,681	8,050	8,050	-	-	1,310	71	6,669	6,669	
	B. P.L. 480 LC		G	154	154	739	739	739	739	-	-	-	-	

## REMARKS:

1/ Exchange Rate: \$1 = Rs.4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c		PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS				1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING CTRY. INDIA		3. PERSONNEL SERVICES 1959 1965 PARTICIPANT TRAINING 1958 1965		4. PROJECT NO. 386-15-270-115						
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		a. CUM. THRU ACTUAL FY		b. ACTUAL FY 1964		c. OPERATIONAL FY 1965		d. BUDGET FY 1966		e. PLANNING FY 1967		f. ALL SUBSEQUENT FYs		g. TOTAL ALL YEARS				
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract		
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	8	-	45.8	3	-	-	-	-	-	-	-	-	-	8	-	49.2
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. ON 1/ BOARD	U.S.	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-
	Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II. PARTICIPANTS PROGRAMMED	A. U.S.	709	-	-	72	-	-	-	-	-	-	-	-	-	-	709	-	-
	B. THIRD CTRY.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## REMARKS:

1/ End of Fiscal Year

SECURITY CLASSIFICATION

UNCLASSIFIED

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AID 1020-3 (7-64)		PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES							SECURITY CLASSIFICATION UNCLASSIFIED								
E-1b		1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA		3. BEG. FY 1957 END FY 1964 Phys. Work 1958 1965		4. PROJECT NO. 386-15-270-115		5. TITLE National Productivity Council							
7. OBLIGATED AND DISBURSED		g. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)						
		(1) TYPE		(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED		(2) DISBURSED		(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
						(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED	OBLIGATED	DISBURSED	(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED		
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		Govt. Rev.	G		437		2,093			210	-		1,883		
	FA ACT	(ii) TRUST FUND		Govt. Rev.	-	35	34	166	163	-	-	-	-	166	163		
		(iii) OTHER LC		Sec. 402	G	1,681	1,480	8,050	7,086	-	-	1,064	58	6,669	5,964		
		B. P.L. 480 LC		Sec. 104(e)	G	154	154	739	739	739	739	-	-	-	-	-	
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		Govt. Rev.	G												
	FA ACT	(ii) TRUST FUND		Govt. Rev.	-	3	3	12	12	-	-	-	-	12	12		
		(iii) OTHER LC		Sec. 402	G	123	211	587	1,011	-	-	269	15	526	727		
		B. P.L. 480 LC		Sec. 104(e)	G	154	154	739	739	739	739	-	-	-	-	-	
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		Govt. Rev.	G												
	FA ACT	(ii) TRUST FUND		Govt. Rev.	-	4	5	22	25	-	-	-	-	22	25		
		(iii) OTHER LC		Sec. 402	G	-	201	-	964	-	-	246	13	-	705		
		B. P.L. 480 LC		Sec. 104(e)	G	-	-	-	-	-	-	-	-	-	-	-	
III BUDGET YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/			G												
	FA ACT	(ii) TRUST FUND			-												
		(iii) OTHER LC			G												
		B. P.L. 480 LC			G												
IV PLANNING YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/			G												
	FA ACT	(ii) TRUST FUND			-												
		(iii) OTHER LC			G												
		B. P.L. 480 LC			G												
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/			G												
	FA ACT	(ii) TRUST FUND			-												
		(iii) OTHER LC			G												
		B. P.L. 480 LC			G												
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		Govt. Rev.	G		437		2,093			210	-		1,883		
	FA ACT	(ii) TRUST FUND		Govt. Rev.	-	39	39	188	188	-	-	-	-	188	188		
		(iii) OTHER LC		Sec. 402	G	1,681	1,681	8,050	8,050	-	-	1,310	71	6,669	6,669		
		B. P.L. 480 LC		Sec. 104(e)	G	154	154	739	739	739	739	-	-	-	-	-	

## REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c		PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF: 1 November 1964			2. COOPERATING CTRY. INDIA			3. PERSONNEL SERVICES PARTICIPANT TRAINING		BEG. FY 1959 END FY 1965		4. PROJECT NO. 386-15-270-115							
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		g. CUM. THRU ACTUAL FY			b. ACTUAL FY 64			c. OPERATIONAL FY 65			d. BUDGET FY 66			e. PLANNING FY 67			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	8	-	45.8	3	-	9.6	-	-	3.6	-	-	-	-	-	-	-	-	8	-	49.4
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B. ON BOARD	U.S.	-	-	-	-	-	9.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II. PARTICIPANTS PROGRAMMED	A. U.S.	709	-	-	72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	709	-	-
	B. THIRD CTRY.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## REMARKS:

1/ End of Fiscal Year

SECURITY CLASSIFICATION

UNCLASSIFIED

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AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-270-115	National Productivity Council
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### 1. The Activity Target

The general target was to assist in establishment of a national organization to operate a productivity program to promote improvement of industrial efficiency. Specific targets were to: (a) generate a practical interest in increasing industrial output, improving quality and reducing costs; (b) stimulate and improve the abilities of approximately 300 middle and upper level technicians and managers from industry and government through U.S. training; (c) provide within-India training and advisory assistance; and (d) disseminate information on productivity methods used in highly industrialized countries.

### 2. The Course of Action

It was decided that a National Productivity Council (NPC) should be established as a semi-autonomous body of employers, workers and government representatives, to stimulate an increased awareness of the benefits of increased productivity in industry; that with headquarters in New Delhi, the NPC should consist of six Regional Directorates in important towns and Local Productivity Councils in 46 industrial centers; and that technical and administrative staff and necessary equipment and supplies should be provided.

It was planned that a technical information service would disseminate technical information and productivity materials, such as films, productivity exhibits, technical publications and journals, pamphlets, books, etc; and that Indian managers, executives, technicians, and trade union leaders would be U.S. trained in industrial engineering, industrial relations, production management, and industrial management, including marketing. Within-India training courses in techniques of productivity for plant managers, technicians and labor leaders also would be conducted by U.S. direct-hire and contract technicians, who would train an NPC counterpart specialist staff, and contribute to the overall objective through speeches, consultation, conferences and seminars.

It was proposed that:

A technical information specialist and two industrial management advisors, all U.S. direct-hire, assist NPC in setting up and operating technical information services and conduct within-India training courses for junior and middle management executives and technical personnel;

sixteen contract technicians organize and conduct training courses in management, industrial engineering and foundry practices in different cities;

three short-term contract consultants survey and make recommendations on the automobile ancillary industry;

a top management seminar team of four active senior executives from American industry visit India each year for five years, beginning 1960, to exchange management experience and information with Indian executives;

about 300 Indian technicians, plant managers, and labor leaders be U.S. trained in the fields of industrial management, industrial engineering and industrial relations;

43 productivity teams averaging nine men each visit the U.S., Europe and Asia on seven-week observational and reporting tours; and

commodities including a complete off-set printing press, audio-visual aids, office equipment, vehicles, productivity exhibits, safety equipment, films and filmstrips, books and periodicals, etc, be procured in support of the NPC's activities.

### 3. Progress to Date

This activity was started in FY 1958 and was completed with FY 1964 funding. U.S. technician services will be phased out by December 1964 and all project activity will be completed by the end of FY 1965.

Six years after its establishment, the NPC represents a satisfactory instrument for its purpose, with headquarters in New Delhi, Regional Directorates in Bombay, Calcutta, Madras, Bangalore, Kanpur and Ludhiana; and Local Productivity Councils in 46 industrial centers. The primary task of creating a viable productivity organization is now regarded as successfully completed. The NPC is a functioning organization directed and operated by responsible and experienced Indian personnel. Its programs have played a major role in fostering a widespread appreciation of the importance of productivity in Indian industry. The training and other programs of NPC have equipped a large number of Indian managers, technologists and technicians with the techniques and practices of better management and higher productivity. However, a great deal still remains to be done.

NPC's task of creating greater productivity consciousness at all levels of industry has proved to be one of the lesser problems. The more stubborn obstacle is the limitation of management in adopting and employing improved methods of operation which specialists of NPC and A.I.D. have brought to their attention. Though this limitation is partly inherent in the present state of the economy, it does reflect persistence of certain attitudes of long standing. NPC has to continue its efforts now with greater vigor to bring about favorable changes in these attitudes. The task is not yet over; with better appreciation of the concepts the real task has now begun.

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Development in this new national institution was remarkably swift. NPC provides a suitable base for continuation of an Indian productivity effort. The project was originally planned for financing in Fiscal Years 1958-61, but three additional years of assistance were later deemed advisable, in order to establish the new institution more firmly. There is no doubt that more assistance would be beneficial; however, the NPC now can be expected to continue to grow and improve its original program without further U.S. assistance. Further aid to Indian industry in the field of industrial productivity improvement would be desirable. Such assistance could be provided through NPC, which is now a viable institution. The NPC project has demonstrated that U.S. A.I.D. assistance was effectively used to establish an institution promoting industrial efficiency in India. With the U.S. assistance so far received NPC has now become a well-established institution and is in a position to make more efficient and effective use of any further U.S. assistance - if and when planned in the field of industrial productivity improvement. FY 1964 was the last year of funding.

Progress within each principal project element is discussed here:

Three direct-hire technicians completed their initial 2-year assignments in 1961, and the Industrial Management Advisor departed India October 16, 1963, after completion of his second 2-year tour.

Four GIPM-recruited top management seminar teams conducted sixteen 4-day NPC-sponsored seminars in Delhi, Bombay, Calcutta and Madras in 1960, 1961, 1962 and 1963; one more team will visit India early in 1965.

The three Automobile Ancillary short-term consultants provided nine man months of technical services to the Development Wing of the Government of India under a contract with the George Fry and Associates and completed their assignment in May 1961.

Under the George Fry Contract the Foundry technician completed his initial assignment of 12 months with the Development Wing of the GOI in October 1961. Under an individual contract the Foundry technician provided 36 man months of technical services to the Development Commissioner, Small Scale Industries, GOI.

Four hundred forty three man months of U.S. technical services have been provided through FY 1964 under a contract with the George Fry and Associates. In all 114 training programs, each averaging eight weeks, were conducted, for a total of 2032 trainees. NPC specialists were assigned as counterparts to U.S. technicians to develop training programs and to create the necessary skills within the country to present those programs on a continuing basis. In addition the U.S. technicians conducted 659 seminars with the participation of 41,158 industrial personnel of various levels.

In addition to the lecture-oriented courses, U.S. technicians carried out 3 integrated multi-purpose training programs and 9 assignments under the Productivity Survey and Implementation Service. The term "Integrated Multi-purpose Training Program" refers to those training activities which are geared essentially to a single organization. "Productivity Survey and Implementation Service" includes survey of specific operational problems in a particular plant and implementation of the resultant recommendations.

It will be not be out of place to make a particular mention here of the "Integrated Multi-purpose Training Program" carried out at Hindustan Aircraft Limited (H.A.L.), Bangalore, a GOI undertaking engaged in the production of aircraft. When the Chinese invasion made it necessary for H.A.L. to increase aircraft production quickly, it was immediately evident that production could not be increased drastically without more skilled workers. H.A.L.'s regular apprentice training program takes three years to produce a useful man. George Fry technicians used a Ford Training School approach and concentrated on single skill training, the kind of attack the U.S. made on industrial training during World War II. The results were excellent: the U.S. technician and his NPC associate organized a program that turned out over 600 superior operators every four months. Another feature of the program was the use of regular factory work as training projects. The completed work produced by the trainees went right into factory inspection along with that from the regular production departments.

Indian technicians in a separate program conducted 891 training courses in which 14,991 trainees participated, and undertook 14 assignments under the Productivity Survey and Implementation Services.

To date 43 productivity teams comprised of 411 individuals have been sent to U.S.A. and other countries for an average of 7 weeks for observation and reporting. The returned members are disseminating their increased knowledge through reports, lectures, seminars and radio talks.

Two hundred ninety eight long-term individual participants with an average training period of 6 to 9 months will have received training in U.S. in industrial management, industrial relations, industrial engineering and production management before the end of FY 1965. Up to FY 1964 242 participants had received their training; 56 were funded in FY 1964, some of whom have left and others of whom will be leaving in the coming months.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-270-115	National Productivity Council
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The returned participants who are practising managers are making a significant contribution to productivity improvement through direct utilization of the additional training in their own firms and organizations, and pass on their experience to others through productivity councils, management associations, professional organizations, universities, etc.

A comprehensive evaluation of this program and the returned participants was made last in 1961. Since then NPC has conducted several evaluations using questionnaires and meetings with returned participants. In early 1963 NPC sent questionnaires to the then returned participants seeking to elicit information about improvements made by them in their factories and their other activities in the dissemination of their new knowledge. At the same time their employers were queried to ascertain the attitudes and competence developed in the participants as a result of the training abroad.

157 replies had been received when the evaluation was made. The 157 participants are employed by industries with a total labor force of 1,043,875. In many cases the participants were not back on the job for enough time after training to make perceptible improvements. Many, however, reported their introduction of new techniques and projects in the plants after return that had resulted in higher production, better quality, or reduction of waste.

It is often difficult in a large organization for the individual participant to take credit for significant changes and improvements. Also, the request for an evaluation by each participant of his own effectiveness is likely to be somewhat misleading. For this reason the participant's employer was also requested to gauge the effectiveness of the training. A summary of the employers' replies is given below:

- 92% replied that the training benefited the participant.
- 87% replied that there had been a noticeable change in the participant's outlook as a result of the training.
- 75% replied that there had been a noticeable change in his competence.
- 75% replied that he now dealt more effectively with others.

46% reported specific improvements in plant operations made by the participant since his return.

70% reported that the participant was working on improvements that showed promise.

The questionnaire also revealed that the participants were disseminating their new knowledge to others.

70 participants addressed a total of 180 meetings.

66 participants participated in a total of 120 seminars and conferences.

56 participants contributed a total of 71 papers, articles and letters to periodicals and journals.

A few have broadcast radio talks.

Most of the participants have reported giving free technical advice when requested and one was responsible for the establishment of a Local Productivity Council.

Commodities worth \$239,000 have been provided to NPC which includes office equipment, vehicles, off-set press, audio-visual and training aids, films, books and exhibits. NPC now has nearly 14,000 technical publications and 300 foreign periodicals. In its New Delhi, six regional libraries and 15 nucleus libraries in the LPCs; it has the largest technical film library in Southeast Asia.

In FY 1962 local currency funds (Sec. 402) (\$21,000 in rupees) were provided for local production of productivity films; 20 prints of the "Work Study Part I & II" film were produced and handed over to NPC recently in a public function.

In FY 1964, PL 480 Rupees equivalent to \$154,000 were provided to meet the local costs of a training program for 16 NPC staff industrial engineers. This program was successfully concluded and these trained industrial engineers have been absorbed into NPC and the LPCs to form a cadre of trained personnel for future development.

NPC also received assistance from France, U.S.S.R., Czechoslovakia and the Colombo Plan in training programs which included: Visits of five productivity teams to U.S.S.R. and Czechoslovakia; production management training for 23 participants in U.S.S.R. and 15 in Czechoslovakia; training for 19 in General Management and for 30 in Production Management in France; and 10 training opportunities in Work-Study and 10 in Production Management in the U.K. under the Colombo Plan.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED					
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-11-720-170				4. TITLE Government Operations							
	5. U.S. FUNDING:		BEGIN FY 1956		END FY 1969		6. PRIOR REFERENCES										
	PHYSICAL WORK:		1956		1971												
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES		f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS			
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		TC	G	334	96	64	-	72	150	10	23	-	1	14		
	GROSS OBLIGATIONS (ACTUAL YEAR)		TC	G	175	60	15	-	50	86	10	14	-	-	-		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		TC	G	133	-	51	-	-	67	-	13	-	2	-		
	EXPENDITURES (ACTUAL YEAR)		TC	G	40	-	1	-	-	30	-	7	-	2	-	-	-
C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC	G	201	96	13	-	72	83	10	10	-	(1)	14			
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS		TC	G	360*	10	22	162	10	166	-	-	-	-	-		
	B. EXPENDITURES		TC	G	168	72	6	27	48	62	10	2	-	(1)	14	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC	G	393	34	29	135	34	187	-	8	-	-	-		
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS		TC	G	563	160	66	154	100	183	30	-	10	-	20		
	B. EXPENDITURES		TC	G	209	50	16	49	34	93	8	1	3	-	5	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC	G	747	144	79	240	100	277	22	7	7	-	15		
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/		TC	G	393	-	66	154	-	173	-	-	-	-	-	206	144
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/		TC	G	103	-	44	38	-	21	-	-	-	-	-	893	-
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/		TC	G	1,753	266	262	508	182	693	40	23	10	1	34	1,487	266

## REMARKS:

1/ This is a memorandum (non-add) column. \*Includes a pending supplementary request of \$199,000.

2/ Show estimated expenditures in column i.

AID 1020-3 (7-64)		PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES							SECURITY CLASSIFICATION UNCLASSIFIED							
E-1b		1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA		3. BEG. FY Funding 1956 Phys. Work 1956		END FY 1969 1961		4. PROJECT NO. 386-11-720-170		5. TITLE Government Operations				
7. OBLIGATED AND DISBURSED		a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)					
		(1)	(2)	(3)	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1)	(2)	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER			
		TYPE	SOURCE	LOAN OR GRANT	(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED	OBLIGATED	DISBURSED	(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED		
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT	(ii) TRUST FUND														
		(iii) OTHER LC			Sec.402	G	163	70	779	331	-	-	117	-	459	214
	B. P.L. 480 LC															
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT	(ii) TRUST FUND														
		(iii) OTHER LC			Sec.402	G	99	44	474	206	-	-	55	-	204	151
	B. P.L. 480 LC															
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT	(ii) TRUST FUND			Govt Revenue	-	5	5	23	23	-	-	-	-	23	23
		(iii) OTHER LC			Sec.402	G	288*	103	1374	494	-	-	228	-	493	266
	B. P.L. 480 LC															
III BUDGET YEAR (EST.) FY 1966	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT	(ii) TRUST FUND			Govt Revenue	-	9	9	44	44	-	-	-	-	44	44
		(iii) OTHER LC			Sec.402	G	280	166	1342	797	-	-	231	-	1100	566
	B. P.L. 480 LC															
IV PLANNING YEAR (EST.) FY 1967	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT	(ii) TRUST FUND			Govt Revenue	-	7	7	33	33	-	-	-	-	33	33
		(iii) OTHER LC			Sec.402	G	280	132	1342	631	-	-	233	-	1100	398
	B. P.L. 480 LC															
V ALL SUBSEQUENT FYS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT	(ii) TRUST FUND			Govt Revenue	-	6	6	28	28	-	-	-	-	28	28
		(iii) OTHER LC			Sec.402	G	448	987	2144	4728	-	-	2525	-	495	2203
	B. P.L. 480 LC															
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/														
	FA ACT	(ii) TRUST FUND			Govt Revenue	-	27	27	128	128	-	-	-	-	128	128
		(iii) OTHER LC			Sec.402	G	1458	1458	6981	6981	-	-	3334	-	3647	3647
	B. P.L. 480 LC															

## REMARKS:

1/ Exchange Rate: \$1 = Rs.4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c		PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS							1. DATA CURRENT AS OF: 1 November, 1964		2. COOPERATING CTRY. INDIA		3. PERSONNEL SERVICES PARTICIPANT TRAINING		BEG. FY 1956 1956		END FY 1970 1971		4. PROJECT NO. 386-11-720-170				
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		a. CUM. THRU ACTUAL FY			b. ACTUAL FY <u>64</u>			c. OPERATIONAL FY <u>65</u>			d. BUDGET FY <u>66</u>			e. PLANNING FY <u>67</u>			f. ALL SUBSEQUENT FYS			g. TOTAL ALL YEARS			
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	10.3	-	5.6	1.4	-	.5	1.5	-	1	6.5	1	3	7	1	3	6	1	18.8	19.5	8.6	
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	B. ON 1/ BOARD	U.S.				1	-	-	1	14	-	3	8	1	3	7	1						
		Non U.S.																					
II. PARTICIPANTS PROGRAMMED	A. U.S.		36	-	2	22	-	2	66	-	2	74	-	2	58	-	2	55	-	-	289	-	8
	B. THIRD CTRY.																						

## REMARKS:

\*Includes a pending supplementary request of \$114,000.

1/ End of Fiscal Year

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-720-170	Government Operations
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### 1. The Activity Target

To support the basic approach of the GOI to build upon existing capabilities for administrative improvement by providing through FY 1969 USAID assistance to key sectors of governmental operations where results will be both immediate and long-range, and will permeate into other functions and organizations. These sectors are: (a) improved financial management in several key areas, e.g. taxation, budgeting, and financial control; (b) infusion of knowledge and experience for improved decision making through such advanced skills as cost/effectiveness analysis, operations research, management accounting, and survey research; (c) organization and procedural improvement at the Central, State and District levels of governments through enlarging capability in management analysis and work simplification and expanding the horizons and abilities of administrators, public safety personnel and district (local/rural government) collectors for more modern and effective administration by upgrading the caliber of these services.

India, at Independence in 1947, inherited an administrative structure and a civil service ill suited to the government's role as "the principal planner, energizer, promoter, and director of the accelerated development effort" (Lewis, Quiet Crisis). Since then, the tasks faced by public administration in India have increased enormously in magnitude and complexity. To provide a perspective -- India with its 460 million people is more populous than Latin America plus Africa. With its federal structure of government (of more than one million units and four million employees) and its variety of languages and cultures, India is more complex than would be an integrated Europe.

Since Independence, the reorientation of administrative responsibilities and the creation and maintenance of a variety of organizations and institutions for managing the great national effort fell upon a relatively few able and intelligent Indian civil servants. Many new organizations had to be set up, extensive resources had to be collected and a large number of persons had to be recruited, trained and organized for the purpose of carrying out administrative tasks. Therefore, the governmental efforts were directed toward building upon what already existed and no effort was made to bring about any radical changes in organization or administration. The approach was to modify, change and adapt as demanded by the situation in a way that would not upset the continued functioning of the existing set up. However, government organizations and procedures continued to be encrusted with traditional approaches and rules not appropriate to the needs of a developing economy. The

conclusion of one of India's senior administrators, who is currently a member of the Planning Commission with responsibility for development plan administration is: "Experience ... has tended to strengthen the view that in its structure, methods of functioning and capacity to meet requirements of rapid development, the administration has not been able to catch up, and the distance may be increasing rather than diminishing." The recent GOI Third Five-Year/<sup>Mid</sup>Term Appraisal reiterates the need for significant improvement in planning capabilities and decision making in management operational terms.

### 2. The Course of Action

#### U.S. Program for FY 1966

a) Financial Management: The principal emphasis in this area is in the field of income tax administration. Income taxes to a very substantial degree are unassessed and uncollected. The equivalent of 80% of a total year's individual and corporate taxes currently are in this category and thus unavailable as an Indian asset for supporting national development. In addition, a re-evaluation is indicated of the possibilities of using the tax structure as a positive instrument to support or encourage desirable actions. India has demonstrated its willingness to levy taxes of sufficient magnitude to support development programs and dampen inflation but taxation as an incentive has been inadequately explored. The special relationship of taxation to facilitating foreign collaboration in economic enterprises has only lately been recognized. However, tax assessment and collection as well as evasion continue to be major obstacles to effective administration and result in great losses to the government.

The scope of this necessary activity and the requirements of technical assistance were identified by a team of U.S. Internal Revenue (IRS) experts. This team made a study of Indian tax administration early in 1964 (March-April) and, following its recommendations and discussions with the GOI, the following assistance is proposed during FY 1966:

The continuance of the six-member IRS team as follows:

1 Team Leader and Advisor		
2 Advisors on Fraud and Evasion		
1 Advisor on Assessment		
1 Advisor on Collection		
1 Advisor on Training	\$134,000	\$eq. 29,900

The above assistance is in addition to the expected participant training of ten Indian income tax officers.

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Other assistance proposed in FY 1966 in the financial management area includes:

Two consultants to continue to advise the GOI on the regulation and operation of stock exchanges to make them more effective instruments for capital formation.

\$21,000 \$eq. 8,000

Participant training in the U.S. for five officials from the Ministry of Finance in national economic accounting, debt management, formation and flow of capital, Harvard's International Taxation Program, etc.

b) Improved Decision Making: Large sectors of planned development in India are dependent upon public knowledge and cooperation. Availability of facilities and technical knowledge in the GOI is not enough; the millions of Indians involved must have the will to do their parts. This will has been growing in India. However, the pace of this growth, as the Planning Commission has expressed it, "in an atmosphere of complaint and criticism" has caused concern in conferences, government papers and elsewhere. Yet the full nature and magnitude of the problem is not known.

For reliable results at minimum costs the most advanced technique for such study, developed in the United States, is called Survey Research. This involves depth interviewing of a carefully selected sample of the public by specially trained interviewers. The Indian Institute of Public Administration (IIPA), with USAID support, has begun to establish an Indian capability to conduct such studies on a rigorously scientific basis. The results might then be relied upon in designing development programs and improvements. Prior year funds have provided for one contract technician from the University of Michigan for 2 years and two participants in FY 1965 to get this under way. It is proposed to continue this assistance in FY 1966 by extending the present contract for an additional two years at a base cost of \$120,000 plus \$30,000 for participant training plus \$10,000 for equipment, for a total of \$160,000.

c) Organization and Procedure Improvement: During FY 1966 it is proposed to send to the U.S. eight participants at a cost of \$26,400 and \$equiv.14,000 from the Staff Inspection Unit of the Ministry of Finance for training in work simplification and management analysis. This would supplement the continued advisory services of the Mission's Local Government and Public Administration Advisors to the GOI concerned with local and central government management improvement. It is proposed also that the small beginning

made in FY 1963 with the training of one senior police officer from the Ministry of Home Affairs be expanded by sending twelve such officers to the U.S. for training in the International Police Academy and in specialized aspects of public safety. Training under this activity is not intended to cover traditional aspects of police administration. The emphasis would be training of top Indian police and other security officials in subjects such as examination of questioned documents, modern crime investigation and interrogation technique, national security, etc., and that U.S. training be provided for thirty nine young and upcoming district collectors. This activity, badly needed by the GOI, is directed toward training of top administrators at the district level, which is the main focus of local government in India. Fields of study will emphasize American rural and local administrative experiences in the integrated action between university, government and extension programs in the development and management of local agricultural programs. These participants also will be exposed to U.S. practices in rural credit, fertilizer distribution, and the governmental coordination of agricultural production programs, all of which have direct relevance to efforts of local government officials in building up India's primarily agricultural economy. Funding has been provided for this sphere of activity in FYs 65, 66 and 67 to cover at least one third of Indian District administrators. Continuance of this training will largely depend on its impact on the Indian District administration and other factors.

d) Summary of FY 1966 Program

Technicians

Direct Hire

1 Public Administration Advisor (Fred G. Crawford) who devotes special attention to this project but also is involved in Project #242 Top Management Control of Economic Enterprises and Project #243 Executive Training and Development; \$22,000 \$eq. 4,800

1 Public Administration Advisor (to be recruited) to meet the increased work load in government organization and management; \$24,000 \$eq. 6,400

1 Local Government Advisor (to be recruited) to furnish organizational and management advice to the centrally-administered Delhi "State" and to the States and district collectors of India; \$19,000 \$eq. 5,900

6 advisors from the United States Internal Revenue Service on tax administration; and \$134,000 \$eq. 29,900

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-720-170	Government Operations
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2 advisors on stock exchange control.  
\$21,000 \$eq. 8,000  
11 Total

Participants

10 from the Ministry of Finance in income tax administration;  
5 from the Ministry of Finance in financial management; \$81,000 \$eq.22,500  
8 from the Ministry of Finance in organization and procedure improvement; \$26,400 \$eq.12,000  
12 from the Ministry of Home Affairs in public safety; and  
39 from the various districts of India in district administration with emphasis on agricultural management. \$76,000 \$eq.76,500

74 Total

e) FY 1967 and Subsequent Years Course of Action: In the continually progressing and changing context of Indian development and its emerging needs, emphasis on meeting priority needs of the improved governmental management program will necessarily vary from year to year. USAID must maintain flexibility to be adequately responsive to those needs. Thus, while a broad basis for management action has been identified, implementation must be geared to changing circumstances. In general, the program for GOI-USAID collaboration for FYs 1967 to 1969 will consist of continuation of the elements selected for priority attention in FY 1966 with more emphasis expected on organizational improvement, survey research, financial management, and district administration.

f) GOI Participation: Increasing efforts have been made by the GOI since Independence to improve the organizational and operational efficiency of the government. The creation of a Special Reorganization Unit in the Ministry of Finance (supervised by the present Staff Inspection Unit), an O & M Division directly under the Central Cabinet, predecessor of the present Department of Administrative Reform in the Ministry of Home Affairs, and the establishment of O & M units in ministries and state governments show both interest and progress. Scores of Indians have received GOI training as a part of these efforts. The formation of a Committee of Secretaries and intensive study by commissions and individuals--both Indians and foreigners--of the status of public administration in the country during the last few years have resulted in enlarged recognition of the need for change. Parliament and its special committees have been examining many of these problems and recommending changes.

The Committee on Plan Projects of the Planning Commission has examined and recommended administrative changes to effect the implementation of the development programs. All of these are further evidences of the GOI awareness for the need for an improved organizational structure and a better public administration and the action programs that have been adopted toward realization of these goals. These self-generated efforts and their results exceed, by far, the modest USAID technical assistance program which helps support them.

In addition to the above, the GOI provides USAID technicians with office space and equipment, secretarial assistance, local costs including per diem, and to the participants the costs of within-India travel plus salaries and allowances while they are receiving training abroad.

g) Justification for Continued U.S. Assistance: Bringing about economic development in India, with its size, population diversities and traditionalism is a complex task and the administrative problems are formidable. As referred to earlier, much of the structure is in place and interest and progress has been demonstrated in a substantial streamlining of governmental operations. USAID assistance in the past has been effective to the extent of enabling a limited number of personnel to obtain knowledge of modern developments in work measurement, procedural simplification etc., and in effecting organizational and procedural simplification in some sectors.

The GOI has, as particularized in section 2(g), with USAID technical assistance, identified and is trying to overcome long-established deficiencies in public administration; especially in the financial, O & M, and policy decision areas, and, more recently, in the public safety and district administration areas. Each is crucial to accelerated national development. And, as progress occurs, intensified efforts will be called for.

This is not a short-term, quick payoff effort. Traditions and attitudes change but slowly. As stated earlier, a frontal attack on these problems is neither feasible nor necessary. But, before the GOI becomes completely self-sufficient in these efforts, continued U.S. assistance is required. This will take at least up to FY 1969 (the mid point of the Fourth Five-Year Plan). The USAID portion will be in aiding recognition of deficiencies, and overall guidance to eliminate those deficiencies through technicians and participant training. This should go a long way in promoting the U.S. interests of maintaining a stable and strong administrative machinery in India capable of sustaining the economic development process and the democratic and constitutional pattern of life.

SECURITY CLASSIFICATION

UNCLASSIFIED

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AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-720-170	Government Operations
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### 3. Progress to Date

At the date of this submission (1 November, 1964), the submission for FY 1965 had just been completed (September 30, 1964). Accordingly, this section is divided into two parts. The first part shows progress to the end of FY 1964. The second shows progress to the end of FY 1965 on the basis of the approval and implementation of both the FY 1965 submission and the FY 1965 supplemental submission.

1) Government operations, as a project, started in FY 1956, then faltered. It began again, as a continuing project, in FY 1959 with the assignment of a single Public Administration Advisor to the Special Reorganization Unit (SRU) of the Ministry of Finance. This advisor assisted in the establishment of a training program for organization and methods analysis. Training materials and courses of study were developed. Training in the technique of work study was provided to 129 officers from the Central ministries and state governments of the GOI, 9 officers from the government of Ceylon and one officer from the Government of Nepal. Also four O & M participants from the GOI were trained in the U.S.

By 1961 the Mission and AID/W decided that the scope of this did not begin to match the problems and that a Public Administration Division (later converted to a broadened Management Division) should be established to mount a more comprehensive program. This began in FY 1962 and the groundwork was laid for the scope of this project plus those now designated as "Top Management Control of Economic Enterprises" 386-11-720-242, and "Executive Training and Development" 386-11-720-243, which were established as separate projects at the start of FY 1965.

During FY 1963, in addition to the training work carried on in and within the SRU, ten participants were trained in the U.S.

In FY 1964, to assist the GOI in eliminating a heavy backlog in the assessment and collection of income taxes, a 3-man team from the U.S. Internal Revenue Service came to India for about 6 weeks. This team made a study of Indian income tax problems and recommended that further U.S. assistance be extended to assist in selected aspects of tax administration. USAID jointly with the GOI, and backstopped

by AID/W and the IRS, has developed a two-year program for implementation in FY 1965. Funds were obligated for the training of nine Indian income tax officers in the U.S. as recommended by the IRS team. Funds also were obligated for U.S. training programs in other aspects of financial management for six officers from the Ministry of Finance; and for organization and improvement programs for seven officers from the Planning Commission and GOI ministries.

ii) At the start of FY 1965 funds were requested under this project rather than Technical Support for the Public Administration Advisor. This was the result of a change in GOI policy. Funds also were requested for five IRS income tax advisors, two additional 6-months each stock exchange advisors, and one national sample survey advisor; and for the U.S. training of twenty-two participants. These activities are shown in greater detail on the tabular sheets which follow this narrative section.

In addition, a FY 1965 supplementary request was made to fund a sixth IRS income tax training advisor, a budget advisor, four administrative reform advisors, and two management improvement advisors to Delhi State; as well as U.S. training for an additional six income tax participants, eight management and financial management participants, and thirty district collectors.

### 4. Total Funding Requirements

	DG\$	Sec. 402 Rs. \$ (equiv.)	Total
Prior year funding through 6/30/64	\$ 334,000	\$ 163,000	\$ 497,000
Operational year (FY 1965) requirements	161,000	173,000	334,000
Supplementary (FY 1965) requirements	199,000	114,000	313,000
Budget Year (FY 1966) requirements	563,000	280,000	843,000
Planning Year (FY 1967) requirements	393,000	280,000	673,000
Subsequent years (FY 1968-69) requirements	103,000	448,000	551,000
	<u>\$1,753,000</u>	<u>\$1,458,000</u>	<u>\$3,211,000</u>

SECURITY CLASSIFICATION

UNCLASSIFIED

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The following is the breakdown of the total DG requirements:

Contract Technicians	\$ 182,000
Contract Participants	40,000
Contract Commodities	10,000
Other Contract Costs	34,000
Total Contract Cost	<u>266,000</u>
AID Technicians	262,000
PASA Technicians	508,000
Participant Training (Non-Contract)	693,000
Commodities (Non-Contract)	23,000
Other Costs	1,000
Total	<u><u>\$1,753,000</u></u>

5. Funding from other Sources: None

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-720-170	Government Operations
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Technicians (Located in New Delhi)

Title and Identification of Position	DH or PASA*	Name of Incumbent	Position Grade	Position number	ETA	Start of Funding for FY	Date of HL/RP/Transfer	Funding	
								U.S. \$	Rupee (\$ equiv.)
<u>FY 1966</u>									
a) <u>Project Management</u>									
Public Admin Advisor**	D	F. G. Crawford	R-2	496	2/64	7/1/65	2/16/66(RP)	22,000	4,800
b) <u>Financial Management</u>									
Tax Team Leader & Advisor	P	Under recruitment	R-2	None	1/65	7/1/65	1/2/67(TR)	22,000	4,800
Tax Fraud & Evasion Advisor	P	-do-	R-2	None	1/65	7/1/65	1/2/67(TR)	22,000	4,800
Tax Fraud & Evasion Advisor	P	-do-	R-2	None	1/65	7/1/65	1/2/67(TR)	22,000	4,800
Tax Assessment Advisor	P	-do-	R-2	None	1/65	7/1/65	1/2/67(TR)	22,000	4,800
Tax Collection Advisor	P	-do-	R-2	None	1/65	7/1/65	1/2/67(TR)	22,000	4,800
Tax Training Advisor	P	To be recruited	R-2	None	7/65	7/1/65	1/2/66(TR)	24,000	5,900
Stock Exchange Advisor (Rpl.)	P	-do-	\$75 p.d.	None	7/65	7/1/65	1/2/66(TR)	10,500	4,000
Stock Exchange Advisor (Rpl.)***	P	-do-	75 p.d.	None	1/66	1/2/66	6/30/66	10,500	4,000
c) <u>Organization and Procedure Improvement</u>									
Public Admin Advisor	D	-do-	R-2	None	7/65	7/1/65	7/1/67(RP)	24,000	6,400
Local Government Advisor	D	-do-	R-3	None	7/65	7/1/65	7/1/67(RP)	19,000	5,900
FY 1966 Funding								\$220,000	\$55,000

\*Including reimbursable detail from other Federal agencies

\*\*Although devoting special attention to this project, this advisor is also involved in Project 242 Top Management Control of Economic Enterprises and Project 243 Executive Training and Development

\*\*\*May be on contract

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-720-170	Government Operations
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Technicians (Located in New Delhi) - (Cont'd)

Title and Identification of Position	DH or PASA*	Name of Incumbent	Position Grade	Position No.	Start of Funding for FY	Date of HL/RP/Transfer	Funding	
							U.S. \$	Rupee (\$ equiv.)
					<u>FY 1967</u>			
<u>a) Project Management</u>								
Public Administration Advisor**	D	Fred G. Crawford	R-2	496	7/1/66	5/16/68(TR)	\$ 22,000	\$ 5,000
<u>b) Financial Management</u>								
Tax Team Leader and Advisor	P	Under recruitment	R-1	None	7/1/66	1/2/68(TR)	22,000	5,000
Tax Fraud and Evasion Advisor	P	-do-	-do-	-do-	-do-	-do-	22,000	5,000
Tax Fraud and Evasion Advisor	P	-do-	-do-	-do-	-do-	-do-	22,000	5,000
Tax Assessment Advisor	P	-do-	-do-	-do-	-do-	-do-	22,000	5,000
Tax Collection Advisor	P	-do-	-do-	-do-	-do-	-do-	22,000	5,000
Tax Training Advisor	P	-do-	-do-	-do-	-do-	-do-	22,000	5,000
Budget Advisor	P	To be recruited	R-2	-do-	- do-	7/1/68(TR)	22,000	5,000
<u>c) Organization and Procedure Improvement</u>								
Public Administration Advisor	D	To be recruited	R-2	-do-	-do-	7/1/67(HL)	22,000	5,000
Public Admin Adv (Local Govt)	D	-do-	R-2	-do-	-do-	-do-	22,000	5,000
					FY 1967 Funding		<u>\$220,000</u>	<u>\$50,000</u>

\*Including reimbursable detail from other Federal agencies

\*\*Although devoting special attention to this project, this advisor is also involved in Project 242 Top Management Control of Economic Enterprises and Project 243 Executive Training and Development

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-720-170	Government Operations
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Participants (Non-Contract)

<u>Brief Description of Training</u>	<u>No. of Participants</u>	<u>Duration of Training</u>	<u>Target Starting Date</u>	<u>Funding</u>	
				<u>U.S. \$</u>	<u>Rupees (\$ equiv.)</u>
<u>FY 1966</u>					
<u>a) Financial Management</u>					
Training in the U.S. in income tax administration, debt management, national economic accounting, Harvard's International Taxation Program, etc.	15	6 to 12 mos. each for a total of 150 months	Jan. 1966	\$ 81,000	\$ 22,500
<u>b) Improved Decision Making</u>					
Training in the U.S. in statistics, census sampling, cost/effectiveness, operations research, etc.	8	6 mos. each	Feb. 1966	26,400	12,000
<u>c) Organization and Procedure Improvement</u>					
Training in the U.S. in work simplification and management analysis; public safety; and district administration	51	2 to 6 mos. each for a total of 160 months	Dec. 1965	76,000	76,500
	<u>74</u>		FY 1966 Funding	<u>\$ 183,400</u>	<u>\$ 111,000</u>

(Continued)

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-720-170	Government Operations
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Participants (Non-Contract) - (Cont'd)

<u>Brief Description of Training</u>	<u>No. of Partici- pants</u>	<u>Duration of Training</u>	<u>Target Starting Date</u>	<u>Funding</u>	
				<u>U.S. \$</u>	<u>Rupee (\$ equiv.)</u>
<u>FY 1967</u>					
<b>a) <u>Financial Management</u></b>					
Training in the U.S. in income tax, national economic accounting, formation and flow of capital, debt management, attendance at Harvard's International Taxation Program, etc.	15	3 to 12 mos. each for a total of 48 months	Mar. 1967	\$ 71,300	\$ 32,000
<b>b) <u>Improved Decision Making</u></b>					
Training in the U.S. in statistics, cost/effectiveness, operations research, etc.	8	6 mos. each	Jan. 1967	21,400	14,000
<b>c) <u>Organization and Procedure Improvement</u></b>					
Training in the U.S. in work simplification and management analysis; public safety; and district administration.	35	2 to 6 mos. each for a total of 120 months	Feb. 1967	80,300	84,000
	<u>58</u>		<u>FY 1967 Funding</u>	<u>\$ 173,000</u>	<u>\$ 130,000</u>

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-720-170	Government Operations
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Contract No: AID/nesa-124  
Contractor: University of Michigan  
Original Contract Signed: August 18, 1964\*  
Latest Extension Signed: None\*  
Scheduled Termination Date: September 30, 1966  
Contract Year: From September to August

CONTRACT STAFF

Field Staff Position Title	Incumbent	Date of Arrival	Date of Departure	Annual Salary	Remarks
Survey Research Advisor	Donald C. Palz	9/10/64	9/10/65	\$15,000	
(FY 1966 Replacement)	To be recruited	8/10/65	8/10/66	Unknown	Want one month overlap
(FY 1967 Replacement)	To be recruited	7/10/66		Unknown	Want one month overlap
(FY 1968 Replacement)	To be recruited	6/10/67		Unknown	Want one month overlap

OFFICE STAFF

None in FY 1965; perhaps later

PARTICIPANTS

Type of Training	Number of Participants	Duration of Training	Starting Date	Remarks
Survey Research**	2**	6 to 12 months each	2/66 and each February for the next 3 years	Cost per participant \$5,000 or \$10,000 each for FYs 1966, 1967 and 1968. Rupee (\$ equiv.) tentatively 100,000 per year; furnished locally, outside the contract

COMMODITIES

Office Equipment

Cost in FY 1966 - \$10,000

\*To be extended for 2 years in FY 1966 at a tentative base cost of \$120,000 plus \$30,000 for participants and \$10,000 for equipment, for a total cost of \$160,000

\*\*Funded at a cost of \$5,000 each for FY 1965 outside the contract. Future year funding will be a part of the contract extension, which is included in the above tentative cost.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA		3. PROJECT NO. 386-11-720-242			4. TITLE Top Management Control of Economic Enterprises								
	5. U.S. FUNDING:		BEGIN FY 1963	END FY 1969	6. PRIOR REFERENCES 386-11-720-170											
	PHYSICAL WORK:		1963	1970												
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a.	b.	c.	d.	e. PERSONNEL SERVICES		f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
		APPROPRIATION TITLE	LOAN OR GRANT	TOTAL	CONTRACT 1/	(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	2/
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	369	236	-**	-	133	103	-	30	7	-	96		
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	184	102	-	-	48	67	-	15	4	-	50		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	26	-	-	-	-	26	-	-	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)	TC	G	26	-	-	-	-	26	-	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	343	236	-	-	133	77	-	30	7	-	96		
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	451*	198	-**	-	90	253	18	-	-	-	96		
	B. EXPENDITURES	TC	G	290	131	-	-	67	92	6	7	2	-	56	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	564	303	-	-	156	238	12	23	5	-	130		
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TC	G	554	198	-**	-	90	356	18	-	-	-	90		
	B. EXPENDITURES	TC	G	319	151	-	-	74	162	9	6	2	-	66	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	799	350	-	-	172	432	21	17	3	-	154		
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 3/	TC	G	554	198	-**	-	90	356	18	-	-	-	90	225	165
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 3/	TC	G	227	-	-**	-	-	227	-	-	-	-	-	807	383
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	2,155	830	-**	-	403	1,295	54	30	7	-	366	1,325	830

## REMARKS:

\*Includes a pending supplementary request of \$98,000.

\*\*One funded under Technical Support.

1/ This is a memorandum (non-add) column.

2/ Show estimated expenditures in column i.

Refers to Annex 16 of LAS.

SECURITY CLASSIFICATION UNCLASSIFIED

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PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

SECURITY CLASSIFICATION  
UNCLASSIFIED

E-1b

1. DATA CURRENT AS OF: November 1, 1964	2. COOPERATING COUNTRY INDIA	3. BEG. FY Funding 1963 Phys. Work 1963	END FY 1969 1970	4. PROJECT NO. 386-11-720-242	5. TITLE Top Management Control Of Economic Enterprises	6. PRIOR REFERENCES: 386-11-720-170
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7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED	
														A. (i) LC COSTS CHGD TO \$ ACCTS. 2/
I CUMULATIVE THRU ACTUAL YEAR	FA ACT	(ii) TRUST FUND		-	-	-	-	-	-	-	-	-	-	
		(iii) OTHER LC	Sec. 402	G	87	15	418	73	-	-	10	-	190	63
		B. P.L. 480 LC												
TOTAL ACTUAL FY 1964	FA ACT	(ii) TRUST FUND			-	-	-	-	-	-	-	-	*	-
		(iii) OTHER LC	Sec. 402	G	33	15	161	73	-	-	10	-	137	63
		B. P.L. 480 LC												
II OPERATIONAL YEAR (EST.)	FA ACT	(ii) TRUST FUND	Govt. Revenue	-	7	7	34	34	-	-	-	-	34	34
		(iii) OTHER LC	Sec. 402	G	164	128	785	613	-	-	148	-	675	465
		B. P.L. 480 LC												
III BUDGET YEAR (EST.)	FA ACT	(ii) TRUST FUND	Govt. Revenue	-	7	7	34	34	-	-	-	-	34	34
		(iii) OTHER LC	Sec. 402	G	223	184	1068	879	-	-	137	-	943	742
		B. P.L. 480 LC												
IV PLANNING YEAR (EST.)	FA ACT	(ii) TRUST FUND	Govt. Revenue	-	7	7	34	34	-	-	-	-	34	34
		(iii) OTHER LC	Sec. 402	G	223	206	1068	991	-	-	138	-	943	859
		B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	FA ACT	(ii) TRUST FUND												
		(iii) OTHER LC	Sec. 402	G	115	279	551	1334	-	-	161	-	551	1173
		B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	FA ACT	(ii) TRUST FUND	Govt. Revenue	-	21	21	102	102	-	-	-	-	102	102
		(iii) OTHER LC	Sec. 402	G	812	812	3890	3890	-	-	588	-	3302	3302
		B. P.L. 480 LC												

REMARKS: \*Including supplementary request of \$ equivalent 36,000.

1/ Exchange Rate: \$1 = 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING CTRY. INDIA	3. PERSONNEL SERVICES PARTICIPANT TRAINING	BEG. FY 1964 1963	END FY 1968 1970	4. PROJECT NO. 386-11-720-242
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5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY	b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS						
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract				
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	-	-	6	-	-	2	-	-	5	-	-	5	-	-	5	-	-	5	-	-	21
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B. ON BOARD	U.S.	-	-	-	-	-	5	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-	
	Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
II. PARTICIPANTS PROGRAMMED	A. U.S.	27	-	-	18	-	-	69	-	8	93	-	8	92	-	8	60	-	-	342	-	24	
	B. THIRD CTRY.																						

REMARKS:

1/ End of Fiscal Year

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-720-242	Top Management Control of Economic Enterprises
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### 1. The Activity Target

The long range objective of this project is the permanent enhancement of Indian management capability in economic enterprises by providing guidance, support and training in selected fields through FY 1969.

USAID efforts are directed toward assisting India in identifying and overcoming her major problems in the implementation and management of projects, both constitutional and operational. Initial USAID technical assistance in this area was provided in FY 1963 under the Government Operations project (No. 386-11-720-170). That assistance now is a part of this new (FY 1965), separate project.

It has the following specific targets: a) to evolve improved management systems, suitable for conditions in India, for programming and reporting on the performance of construction and operation projects to ensure that time schedules, cost estimates, flow of benefits and returns on investment conform to the development plan or improve upon it; and b) to provide U.S. participant training to a selection of key managers of major economic enterprises in the latest techniques of management including project planning, evaluation and control.

During the decade 1957-66 additional capital investment in the Indian economy is expected to be on the order of \$15 billion in development projects. A large part of this has and will come from AID. The national and state governments of India control about 150 major economic enterprises. Many of the construction projects have lagged behind schedules with resultant increases in costs and the loss of their planned contribution to economic development, while numerous completed capital facilities have been low in rates of production due to inexperienced or poorly organized management. The GOI has recognized that the prime cause of these delays has been managerial in nature: that the tasks involved were not planned with sufficient precision; that there was inadequate attention to the inter-relationships of time, quality, quantity and cost; and that reporting and follow-up was not adequate to keep abreast of what was happening, much less to predict what difficulties might arise in time to take preventive action. Of equal importance is the fact that key managers are inadequately trained. The GOI realizes that even a modest improvement in the implementation of the projects already under way would result in improved availability of such critical materials as fertilizer, steel, cement, machine tools, etc., with a resultant saving in scarce foreign exchange.

USAID has contributed more than \$5 billion, including PL 480 agricultural commodities, to the development of India. The task is to make the best possible use of the large U.S. grants and loans plus the substantial contributions of others and the much larger allocation of Indian resources. Full utilization of available resources is at least as important as further large injections of capital and foreign exchange. To achieve this goal there needs to be significant improvement in Indian capabilities in planning and decision making through more effective application of such managerial processes as organizing, planning, reporting, leading, motivating, measuring, and controlling. There has been an increase in high-level GOI interest in modern management and its specific relevance to the variety of projects undertaken in the economic enterprise sector.

India has undertaken a massive and rapid program of economic and social development for transforming her tradition-bound society into one more in keeping with the twentieth century. The basic social and economic infrastructure for this enormous task is largely lacking. Also, private entrepreneurial skill and capital is scarce and has shown limited interest in investing in capital projects entailing long periods before return of investment and realization of profit. In these circumstances, large-scale participation by government in industrial and commercial activity has been inevitable. This participation represents large investments of public funds for the production of goods and services vitally affecting the economic and social life of the country. Since management skills and experience are so pressingly needed for these undertakings, the GOI has established and encouraged the growth of training institutions for initial and mid-career training of managers of economic enterprises. Also, through the National Development Council, the GOI established in FY 1956 a Committee on Plan Projects to organize investigations and field inspections of important development projects at both the national and state levels through specially appointed teams with a view to evolving methods and techniques for raising levels of efficiency, achieving suitable forms of organization, methods, standards and techniques for achieving economy, avoiding waste and ensuring the efficient administration of projects. As a further measure of speeding managerial development, and with USAID assistance, India has been trying to overcome management deficiencies through U.S. participant training programs and the use of modern information systems for improving the basis and resulting quality of managerial decisions. This improvement takes the form of using modern management techniques such as PERT/CPM, operations research, cost/benefit analyses, etc., which have been developed for planning and scheduling involved projects and for the efficient management of complex undertakings. Rectification of managerial deficiencies in India is a slow but indispensable part of self-sustained economic growth.

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This growth is, in many ways, the most significant non-Communist experiment in Asia. The U.S. is far more than an interested observer in India's concerted effort to speed her economic expansion. Continued U.S. assistance in overcoming managerial deficiencies through technicians and participant training is vital for India's radical transformation by constitutional and democratic means.

## 2. The Course of Action

### U.S. Program for FY 1966

- a) Improved Systems of Effective Management Planning and Control in the Construction and Operation Phases of Projects: It is proposed that the extended contract with Management Systems Corporation be extended for another year to maintain the present level of five technicians plus eight participants from the Planning Commission and economic enterprise projects for directly related management training in the U.S. The technicians will complete an additional 10 installations of programming and management reporting systems in specified development projects besides the 10 originally contemplated for completion in FY 1965 and in addition will refine installations previously made, train Indians for effecting analogous and supporting systems, and explore new areas for application of reporting systems by the Indians themselves.
- b) U.S. Participant Training of Key Managers: It is proposed that 93 selected officials with top level responsibility for operations and comprehensive management be provided with U.S. training in high-level courses in management for 4 to 6 months, including opportunity to observe American enterprises that are similar to their own. These participants would come from economic enterprises in such fields as transportation, communication, industrial production, resource development, and others. Upon their return, they will guide and stimulate the creation and use of updated systems of management control in their own operations.

### c) Summary of FY 1966 Program

#### Technicians

#### Direct Hire

One Chief Management Advisor (Howard K. Hyde or his replacement) funded under Technical Support, who also has supervisory and management responsibility over Project #170 Government Operations and Project #243 Executive Training

and Development.

### Contract Services

Five technicians from Management Systems Corporation for an additional year each on management systems and reporting; and Eight contract participants from the Planning Commission and economic enterprises on management systems and reporting for about 14 weeks each;

at a total cost of \$198,000 (DG) and Section 402 rupees equivalent to \$84,000 (including participants \$12,000 and other local cost for contract \$46,000).

### Non-Contract Participants

93 for 4 to 6 months each for advanced management training from the transportation, communication, resource development and related fields at a total cost of \$356,000 (DG) and Section 402 rupees equivalent to \$139,000.

d) FY 1967 and Subsequent Years Course of Action: The development and installation of such modern programming and management reporting technique as PERT/CPM, properly tested and adapted for India, and the training of Indian personnel in the use of the systems takes time. The techniques are new even in the United States and in India there are cultural handicaps, especially failure to emphasize the importance of time, which inhibit the introduction of these modern systems. An extra benefit will be obtained from this portion of the project. As capability in network programming (PERT/CPM) is attained in India, it is expected that the pattern will be applied to all USAID capital projects and to some technical assistance projects to which it is applicable. The payoff on these investments will then be better controlled, enlarged and accelerated.

For rapid advance in exploiting such interest it is planned to send at least two executives from each of some 150 major Indian economic enterprises to the U.S. for training and observation tours to learn American management practices in government environments. Thus, management training for at least 300 selected participants is indicated.

e) GOI Participation: The principal present activity of the Planning Commission Committee on Plan Projects is the development and pilot installation of systems for programming and management reporting in large public sector enterprises. Thus in addition to providing the usual technician support, the Planning Commission more than matches the four USAID technicians assigned. Of course,

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salary and other rupee expenses of Indian participants sent to the United States for training in connection with this activity are covered by the GOI.

In addition, the Committee on Plan Projects has been expanded by setting up a full-time organization to provide display and presentation services to assure that the end product of the information and control system reaches the top officials of the GOI. Further, as new project studies are undertaken by the MSC team members, management personnel at each project are assigned to work with them in order to effect a transfer of skills and to implement the GOI commitment for action. The personnel assigned typically includes one high-level manager who is to assume responsibility for planning and control, and several technicians who will support systems and implementation. Thus on each project, the effort of two MSC team members for a temporary period is extended by 8 to 10 local participants on a continuing basis.

f) Justification for Continued U.S. Assistance: This project is young. However, the reception and cooperation which have been accorded it and the urgency of interest for moving forward in this area are encouraging. Managers who have gone to the United States for training have come back full of ideas and enthusiasm. First applications of some of the techniques involved have resulted in very substantial time savings and tightening of management control. Momentum is established and needs to be continued to obtain the desired results.

The magnitude of the dollar and rupee portion is shown clearly on the face sheet. With differing termination dates for each segment, the duration is not. Based upon the need for training 300 key managers from major undertakings in the U.S., with only 74 presently trained or programmed, this portion of the project should be completed in FY 1969 (the mid point of the fourth Five-Year Plan). Having regard to the problems involved and the scope of the activity, assistance in such management network systems as PERT/GPM and related management planning and monitoring technique, if maintained on the FY 1965 scale, may require continuance to FY 1967. Funding will be necessary for a year longer than there indicated (FY 1969 for participants and FY 1967 for U.S. technicians) in order to accommodate the last groups of participants and technicians.

### 3. Progress to Date

At the date of this submission (November 1, 1964), the submission for FY 1965 had just been completed (September 30, 1964). Accordingly, this section is divided into two parts. The first part shows progress to the end of FY 1964. The second shows progress to the end of FY 1965 on the basis of the approval and implementation of both the main and supplemental parts of the FY 1965 submission.

1) On the initial suggestion and with the assistance of the USAID Management Division, the GOI Planning Commission undertook in FY 1963 a carefully organized pilot study of 15 economic enterprise projects to develop scientific systems of programming and management reporting for identifying targets realistically and for ensuring their effective fulfillment according to time and cost schedules. A study group was set up and the Mission's Chief Management Advisor was appointed its advisor. Visits were made to most of the enterprises and background reports prepared. A preliminary network was developed for the Trombay Fertilizer Plant and reportedly was of material assistance there in identifying and help removing some of the bottlenecks. The system also was used to identify wheretime-saving could be made in the overhaul of major equipment. Downtimes of such equipment in the first two applications of the system in the Hindustan Steel Company have been reduced 63 and 30 percent. These initial applications — apparently, the first in India — demonstrated that with appropriate modifications, advanced American systems of PERT/GPM and management reporting can be applied effectively in India.

A contract was executed with Management Systems Corporation on April 30, 1964 to provide a team of four technicians for a total of 48 man-months to work with the Indian Planning Commission and important economic enterprise projects for the design, demonstration and development of updated systems of management information and control. A trainer-technician has also been funded for two years to train key Indian personnel in this area. During the few weeks that the first three members of the team were in India at the close of FY 1964, they held preliminary discussions with the officials of the Planning Commission and made initial field visits to two priority undertakings, the Heavy Electricals Ltd. at Bhopal and the Trombay Fertilizers at Bombay. Equipment has been ordered to establish and equip a Central Control Room in the Planning Commission for cabinet ministers, members of the Commission and others concerned to view the progress

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of implementation of individual projects or the overall implementation of India's Five-Year Plan. For this purpose as well as for the support of the technicians referred to above, equipment worth \$13,000 is being provided with FY 1963 funding plus an additional \$17,000 obligated with FY 1964 funds.

Carefully directed participant training in this area is of top priority. The diverse nature of these enterprises make it difficult to organize efficient training centers in India and hence the program of U.S. participant training for key managers was initiated in FY 1963. As of June 30, 1964, U.S. training for 27 participants had been funded. An additional 77 are proposed for funding in FY 1965, making a total as of the date of this submission of 104.

ii) It is expected that by June 30, 1965 the five technicians of the Management Systems Corporation will have completed their field visits and study for 10 out of the 15 priority economic enterprises selected by the Indian Planning Commission and USAID and also will have identified and documented information systems adapted to the several types of projects visited. On some of the projects like the Durgapur Fertilizer project of the Fertilizer Corporation of India Ltd. and the new expansion projects of FACT they also will have helped guide the project managers in constructing networks of operations and in reviewing progress from time to time with reference to physical performance and financial costs. These systems will then require an intensive effort for implementation, which in the initial stages, requires the services of these consultants who have had actual experience in the U.S. and would acquire intimate knowledge of the deficiencies of Indian management and also their remedies. In addition, the team members will have strengthened the capabilities of the Planning Commission's Committee on Plan Projects through project work, training services and continuing discussions on use of modern management techniques.

As of June 30, 1965 nearly 104 top and middle managers belonging to Indian railroads, ports, telegraphs, telephones, postal services and other major undertakings have been programmed for intensive training in the U.S. in managerial fields.

#### 4. Total Funding Requirements

	DG \$	Sec.402 Rs. (\$ equiv.)	Total
Prior year funding through 6/30/64	\$ 369,000	\$ 87,000	\$ 456,000
Operational Year (FY 1965) requirements	353,000	128,000	481,000
Supplementary (FY 1965) requirements	98,000	36,000	134,000
Budget Year (FY 1966) requirements	554,000	223,000	777,000
Planning Year (FY 1967) requirements	554,000	223,000	777,000
Subsequent Years (1968-1969) requirements	227,000	115,000	342,000
<b>Total</b>	<b>\$2,155,000</b>	<b>\$812,000</b>	<b>\$2,967,000</b>

The following is the breakdown of the total DG requirements:

Contract Technicians	\$ 403,000
Contract Participants	54,000
Contract Commodities	7,000
Other Contract Costs	366,000
<b>Total Contract Cost</b>	<b>\$ 830,000</b>
Participant Training (Non-Contract)	1,295,000
Commodities (Non-Contract)	30,000
<b>Total</b>	<b>\$2,155,000</b>

5. Funding from Other Sources is minor and there is no overlap or duplication with this project.

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Technicians (Located in New Delhi)

Title and Identification of Position	DH or PASA	Name of Incumbent	Position Grade	Position Number	Start of Funding for FY	Date of HL/RF/Transfer	Funding	
							U.S. \$	Rupee (\$ equiv.)
<u>FY 1966</u>								
Chief Management Advisor*	D	Howard K. Hyde	R-1	488	7/1/65	3/1/66(TR)		
Replacement	D	To be recruited	R-1		3/1/66	-		
					FY 1966 Funding		\$ -0-	\$ -0-

(Funded under Tech. Support)

FY 1967

Project Management

Chief Management Advisor Replacement	D	To be recruited	R-1		7/1/66	3/1/68(HL)		
					FY 1967 Funding		\$ -0-	\$ -0-

(Funded under Tech. Support)

\*Although devoting special attention to this project (assisted by J.N. Dutta, FSL-2) this advisor also has supervisory and management responsibility over project #170 Government Operations and Project #243 Executive Training and Development.

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Participants (Non-Contract)

<u>Brief Description of Training</u>	<u>No. of Participants</u>	<u>Duration of Training</u>	<u>Target Starting Date</u>	<u>Funding</u>	
				<u>U.S.</u> \$	<u>Rupees</u> (\$ equiv.)
<u>FY 1966</u>					
<u>Advanced Management Training and Observation Programs in the U.S. with Specialized Emphasis on:</u>  Transportation, communications, telephones, telegraphs, postal service, industrial production, resource development, etc.	93	4 to 6 months	Jan. 1966	\$356,000	\$139,000
			FY 1966 Funding	\$356,000	\$139,000

FY 1967

<u>Advanced Management Training and Observation Programs in the U.S. with Specialized Emphasis on:</u>  Transportation, communications, telephones, telegraphs, postal service, industrial production, resource development, etc.	93	4 to 6 months	Jan. 1967	\$356,000	\$139,000
			FY 1967 Funding	\$356,000	\$139,000

Participants (Currently being trained or programmed for the future)

<u>Type of Training</u>	<u>Number of Participants</u>	<u>Duration of Training</u>	<u>Starting Date</u>
Management Programming and Reporting	8	14 weeks	January 1966 and another eight in January 1967

Commodities (Currently on order or programmed for the future)

(None)

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Contract Number: AID/Nesa-91  
Contractor: Management Systems Corporation  
Original Contract Signed: April 30, 1964  
Latest Extension Signed: None, but an extension for one year each is proposed for funding in FY 1965 and FY 1966\*  
Presently Scheduled Termination: October 31, 1965  
Contract Year: From May to April

CONTRACT STAFF

<u>Field Staff Position Title</u>	<u>Incumbent</u>	<u>Date of arrival</u>	<u>Date of departure</u>	<u>Annual Salary**</u>	<u>Remarks</u>
Chief of Party	John L. McCarty, Jr.	6/17/64	6/17/65		
Management Advisor	John F. Tynan	5/27/64	5/27/65		
Management Advisor	Peter D. Bowden	5/27/64	5/27/65		
Management Advisor	Richard E. Schmidt	7/3/64	7/3/65		
Management Trainer	(Vacant)	ASAP	Unknown		Recruit ASAP
(Replacement for some or all of the above)		5/27/65	7/3/67		

OFFICE STAFF

None

\*The cost of this extension is tentatively estimated basic cost of \$180,000, plus \$18,000 for participants, for a total of \$198,000.

\*\*Salaries are individually negotiated and are available in AID/W and USAID/I. In general, after adjustment for difference in taxes etc., they fall in the R-2 range.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November, 1964		2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-11-720-243				4. TITLE Executive Training and Development						
	5. U.S. FUNDING:		BEGIN FY 1963		END FY 1971	6. PRIOR REFERENCES 386-11-720-170										
	PHYSICAL WORK:		1963		1971											
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. 1/ LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		TC	G	91	29	1	-	29	61	-	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)		TC	G	27	19	1	-	19	7	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		TC	G	53	7	1	-	7	45	-	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)		TC	G	53	7	1	-	7	45	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC	G	38	22	-	-	22	16	-	-	-	-	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS		TC	G	647*	498	-	10	358	139	-	-	-	140	-	-
	B. EXPENDITURES		TC	G	257	132	-	10	97	115	-	-	-	35	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC	G	428	388	-	-	283	40	-	-	-	105	-	-
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS		TC	G	816	620	24	-	470	172	-	-	-	150	-	-
	B. EXPENDITURES		TC	G	433	252	24	-	188	157	-	-	-	64	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC	G	811	756	-	-	565	55	-	-	-	191	-	-
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/		TC	G	674	550	24	-	450	100	-	-	-	100	139	327
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/		TC	G	867	660	97	-	600	110	-	-	-	60	247	1639
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/		TC	G	3,095	2,357	146	10	1,907	582	-	-	-	450	738	2357

## REMARKS:

\*Includes supplementary request of \$530,000. Refers to Annex 16 of IAS.

1/ This is a memorandum (non-odd) column.

2/ Show estimated expenditures in column i.

AID 1020-3 (7-64)	PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES										SECURITY CLASSIFICATION UNCLASSIFIED					
E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		END FY		4. PROJECT NO.		5. TITLE					
	1 November 1964		INDIA		Funding 1963 1971		1963 1971		386-11-720-243		Executive Training and Development					
													6. PRIOR REFERENCES:		386-11-720-170	
7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)						
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER				
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED			
I CUMULATIVE THRU ACTUAL YEAR	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/															
	FA ACT	(ii) TRUST FUND		1	-	3	1	-	-	-	-	3	1			
		(iii) OTHER LC	Sec. 402	31	16	147	78	-	-	15	-	74	63			
	B. P.L. 480 LC															
TOTAL ACTUAL FY 1964	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/															
	FA ACT	(ii) TRUST FUND		1	-	3	1	-	-	-	-	3	1			
		(iii) OTHER LC	Sec. 402	15	16	72	78	-	-	15	-	7	63			
	B. P.L. 480 LC															
II OPERATIONAL YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/															
	FA ACT	(ii) TRUST FUND		2	2	11	11	-	-	-	-	11	11			
		(iii) OTHER LC	Sec. 402	477*	67	2,283	319	-	-	207	-	1,306	112			
	B. P.L. 480 LC															
III BUDGET YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/															
	FA ACT	(ii) TRUST FUND		21	21	100	100	-	-	-	-	100	100			
		(iii) OTHER LC	Sec. 402	250	340	1,197	1,628	-	-	344	-	306	1,284			
	B. P.L. 480 LC															
IV PLANNING YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/															
	FA ACT	(ii) TRUST FUND		19	19	92	92	-	-	-	-	92	92			
		(iii) OTHER LC	Sec. 402	250	192	1,197	918	-	-	449	-	325	469			
	B. P.L. 480 LC															
V ALL SUBSEQUENT FYs (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/															
	FA ACT	(ii) TRUST FUND		38	39	184	186	-	-	-	-	184	186			
		(iii) OTHER LC	Sec. 402	700	1,093	3,351	5,232	-	-	3,746	-	1,403	1,486			
	B. P.L. 480 LC															
VI TOTAL ALL YEARS (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/															
	FA ACT	(ii) TRUST FUND		81	81	390	390	-	-	-	-	390	390			
		(iii) OTHER LC	Sec. 402	1,708	1,708	8,175	8,175	-	-	4,761	-	3,414	3,414			
	B. P.L. 480 LC															

## REMARKS:

1/ Exchange Rate: \$1 = 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:		2. COOPERATING CTRY.		3. PERSONNEL SERVICES		BEG. FY		END FY		4. PROJECT NO.								
				1 November 1964		INDIA		PARTICIPANT TRAINING		1963 1971		1963 1971		386-11-720-243								
I PROJECT PERSONNEL	a. CUM. THRU ACTUAL FY			b. ACTUAL FY 64			c. OPERATIONAL FY 65			d. BUDGET FY 66			e. PLANNING FY 67			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract				
A. MAN YEARS	U.S.	-	-	.2	.2	-	-	-	.5	3.2	1	-	17.3	1	-	17	4	1.2	30	6	1.7	67.7
	Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B. ON BOARD	U.S.	-	-	-	-	-	-	-	5	1	-	12.0	1	-	20	-	-	-	-	-	-	-
	Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II. PARTICIPANTS PROGRAMMED	A. U.S.	25	-	-	1	-	-	54	-	-	32.0	-	-	20	-	-	80	-	-	211	-	-
	B. THIRD CTRY.	-	-	-	-	-	-	5	-	-	10	-	-	10	-	-	40	-	-	65	-	-

## REMARKS:

\*Includes supplementary Sec. 402 request of \$236,000.

1/ End of Fiscal Year

SECURITY CLASSIFICATION

UNCLASSIFIED

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### 1. The Activity Target

USAID efforts in conjunction with those of GOI agencies named below, will be directed toward improving Indian managerial competency and performance through: (a) training the faculty and providing technician support through FY 1971 in specialized fields for updating inservice training programs of the Indian Institute of Public Administration (IIPA), the Administrative Staff College (ASC), the National Academy of Administration (NAA), the Indian Institutes of Management (IIM), and training of at least two officials from each of the 16 constituent states of the Indian Union in modern training methodology, assistance to improve organization and programs of professional management associations and management consultants; and (b) assisting the establishment of at least five university centers for advanced management studies to serve as demonstration models for enlarged use of university resources for management training. This will be accomplished through training of faculty, technician support, and library facilities. It is expected to continue through FY 1971.

For India the results of technology, industrialization, improved agricultural methods, better public health, literacy and higher skills all depend upon a corps of administrators with sure grasp of what is necessary in planning and managing this national effort of rapid economic development. Independent India inherited from the British a civil service well trained and experienced in the traditional functions of government. However, the civil service was established during a period when peace-keeping and revenue collecting were the prime functions and major reliance properly was on hiring persons with a general education. The skills developed were picked up on the job or by observation and association with older civil servants.

The changing role of administrators in a large developing economy with active participation of the government in industrial mobilization, and the desire to evolve a system of administration decentralized as far as the village level, threw up enormous problems. These required, among other things, a large scale expansion of civil service, management of construction and operation of economic enterprise projects, reorientation of aims of administrative leadership, and the development of necessary expertise and specialized skills in officials who have to deal with complex tasks of development. Frequent transfer of personnel was adopted as a policy in order to meet as well as possible the heavy demand for the limited talent mainly available only from the existing civil service.

Whether it is in the management of the civil service, managing various action programs, or providing principal staff services, the top personnel in charge are hardly ever chosen because of expert knowledge in the field. Nor

is enough of an attempt made to change attitudes and methods of operation through appropriate training and reorientation programs. There is as yet little professionalism in the services manning a variety of development tasks.

Training programs for management personnel continue to be traditional in nature. There is very little effort to modernize management concepts and practices through mid-career training. University teaching of management (public administration and business management) is mostly theoretical. Typically the curricula for commerce education thus emphasize applied economics, accounting, commercial law and the like. Public administration teaching, having derived from traditional law and political science courses, commonly emphasizes legal and structural aspects. In neither commerce nor public administration teaching in the universities has there been much impact yet of the western approaches that have provided so much insight into the management process. The empirical approach with its use of actual case studies, behaviorist analysis which recognizes the "non-rational" as well as the rational aspects of behavior in human systems, and scientific decision making with its blending of traditional-functional, empirical and behavioristic approaches plus information theory, mathematical techniques, and the like, utilized through application of the scientific method to human organizations -- the relevance of all these is only beginning to be recognized and reflected in the training of faculty, the design of curricula, and the provision of training materials. There remain the barriers of traditionalism and inertia. Perhaps even more serious is the rarity of contact and confidence between the universities and their potential clientele for management graduates -- business and government.

Although Indian management can and should draw heavily on the accumulated experience of other developed nations with new management practices, it can by no means import ready-made solutions to its problems. Many aspects of these are peculiar to the cultural environment in which they have developed and even those which do have parallels abroad are not necessarily best resolved here by precisely those means most effective elsewhere. Further, the magnitude of outside assistance to the effort to achieve the above is far beyond that which can be financed or staffed by USAID. Hence the approach being followed is to develop Indian capability in carefully selected fields, with USAID technicians helping pinpoint the deficiencies, indicating desired measures for improvement and directing a much larger Indian effort. Most of the activity will be through the training of trainers and others who are in a position to effect the more extensive effort to identify and implement the needed changes.

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## 2. The Course of Action

The following programs for FY 1966 funding are proposed:

a) One Executive Development Advisor (for 2 years) to assist the Chief Management Advisor in implementing the U.S. assistance programs under this project. (\$23,900 \$ equiv.7,400)

### b) In-service Training Programs:

One Training Advisor (for 12 months) on in-service training to be assigned to a selected State Government Training School for upgrading in-service training programs. (\$22,000 \$ equiv.12,200)

Ten short-term advisors in specialized fields of management for various executive development programs of GOI; within-India training courses/seminars for management teachers etc. (\$133,000 \$ equiv.37,000)

Ten participants to study in-service training programs for civil service personnel at U.S. universities and other centres of training. These participants will be drawn from existing or proposed State Administrative Training Schools. (\$38,000 \$ equiv.15,000)

Six participants to study organization and programs of professional management associations and similar bodies. These participants will be drawn from the all India and local management associations and other professional bodies. (\$30,000 \$ equiv.9,000)

### c) Developing University Resources:

Six visiting professors of management two years each to assist selected five universities for upgrading management education. These professors will provide technical advice for the establishment of modern curricula, teaching methods and facilities for teaching management in five Indian universities. (\$465,000 \$ equiv.130,000)

Sixteen teachers of management to study modern trends in management teaching (curriculum and teaching methodology and research). (\$104,000 \$ equiv.24,000)

In addition USAID will encourage the conduct of special programs organized in India and also third country participants, designed to expose management teachers and senior executives to the latest research, experiments, innovations, and demonstrations of approaches for improving the management teaching and decision making. USAID support will consist

of providing necessary leadership in organizing such conferences at various centers in India under the auspices of various institutions responsible to promote better management. (\$ equiv.16,000)

### d) Summary of FY 1966 Program

#### Technicians

##### Direct Hire

One Executive Development Advisor (2 years)

##### Contract Services

One Training Advisor on in-service training program (1 year)

Six visiting professors of management for upgrading university management teaching (2 years each)

Ten short-term consultants in specialized fields of management for various executive development programs.

18 Total

#### Non-Contract Participants

Ten participants to study in-service training programs for government personnel

Six participants to study organization and programs of professional management associations and similar bodies

Sixteen teachers of management to study modern trends in management teaching.

32 Total

#### Third Country Participant Training

Beginning in FY 65, in addition to sending Indian participants

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to the U.S. for training, plans are being developed for increased use of Indian capabilities in certain recognized fields of management like Development Administration, Planning, Community Development, Business Management etc. to provide training for nationals in the neighbouring Asian and African countries. Much of the Indian capability has been developed through experience gained in the planning and implementation process of economic development programs. U.S. assistance in this effort has contributed significantly to develop training capabilities in several fields in addition to participating directly in the economic development process. India has a broader base than some of the less developed neighboring countries and it would be advantageous to promote and further develop India as a regional source for training AID participants from these less developed countries in spheres where India has shown marked advancement with minimum cost.

Therefore, during FY 65 provision for 5 participants was included and in FY 66 and subsequent years 10 participants each year.

●) FY 1967 and Subsequent Years Course of Action: Availability of trained managerial personnel both for the industrial and governmental sector in India will be a key factor in the process of economic development during the next few years. The need for long-range planning for the development of managerial talent has been recognized by the GOI only recently. USAID assistance for the process of building up institutions and capabilities will follow the pattern of the FY 1966 programs through FY 1971 until substantial capabilities are developed in the institutions mentioned earlier for mid-career training of executives through intensive training programs in the U.S.A. for selected faculty members, training administrators, and university professors; technicians support to stimulate new methods for teaching management and review of course content, and to promote intensive in-service training programs.

During FY 1967 thru 1969 it is proposed to continue the services of 4-6 Visiting Professors of Management to be obtained through a contract with a consortium of leading U.S. universities for helping to establish at five selected Indian universities modern curricula, methods and facilities for teaching management; in addition provide additional technician support to update in-service training programs of State administrative training schools; and continue the present level of participant training and short-term consultant services to training institutions and other agencies identified earlier in the narrative.

f) GOI Participation: The establishment of the National Academy of Administration; supporting the establishment of the Indian Institute of Public Administration, the Administrative Staff College and the Indian Institutes of Management at Ahmedabad and Calcutta to provide post-graduate teaching and mid-career training for top and middle level executives from government and business and to conduct research, are indicative of the extent of GOI participation in an attempt to solve the deficiency of managerial talent. Recently the GOI has encouraged the state governments to establish training schools for the personnel of the states to provide pre-entry and mid-career training. Five states have already set up such institutions and the others are either in process or in the planning stage. Many universities have begun teaching programs at the post-graduate level in public administration and business administration, although the teaching at present is largely theoretical.

In addition, the GOI has contributed to the maintenance of technicians and consultants on mutually agreed terms under the Technical Cooperation Agreement. The GOI provides necessary support facilities for these technicians. Participants' salaries during the period of their training and their within-India travel and other costs are also borne by the GOI.

g) Justification for Continued U.S. Assistance: The limited U.S. assistance in this area in the past has proved to be highly effective. The Public Administration Center at Lucknow University which USAID helped to establish has over the period of its short existence proved to be effective in promoting better state government training programs. Faculty members trained in the U.S. are used by the state government for consultation and research on problems of administration. The first participant-directors of state training schools and university instructors of business management have just returned. They have many new ideas for their programs and enthusiasm for carrying them out.

Assistance to other institutions such as the IIPA, NAA, ASC, the All India Management Association, etc. is meant primarily to develop their capabilities for the mid-career training of executives and introducing modern management concepts. In order to obtain the maximum benefit from the overall assistance the U.S. is rendering

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to Indian development, continued USAID assistance in this area until the approaches and concepts mentioned above are effectively implanted into appropriate Indian institutions, is essential. It is currently estimated that the present Course of Action maintained through FY 1971 will achieve this goal.

### 3. Progress to Date

At the date of this submission (November 1, 1964), the submission for FY 1965 had just been completed (September 30, 1964). Accordingly, this section is divided into two parts. The first part shows progress to the end of FY 1964. The second shows progress to the end of FY 1965 on the basis of the approval and implementation of both the FY 1965 submission and the FY 1965 supplemental submission.

i) Under the Mission's Education Division and before the institution of the Management Division, USAID provided a consultant for three months and training for four faculty members for the establishment of a Public Administration Center at the University of Lucknow. Books and periodicals worth \$35,000 were also supplied. The consultant assisted in the development of courses of study and the organization of the Center. However, full activity of the Center was delayed until the return of the participants in 1959. Since July 1959, when the Center started regular work, in addition to conducting post-graduate programs in public administration, it has established a close link with the training programs of the state government. The Center conducts courses and provides research and advice to the state government. Government officials participate in the teaching programs of the Center. The state government also has plans to start a training school for its officials with the collaboration of the Center.

In FY 1963 under the Government Operations project, USAID resumed this activity by providing the following assistance: (a) training in the U.S. and Europe for 10 participants from universities and state government training establishments, who have only very recently returned to India; (b) supported participation by 10 top level managers in the IMPACT II program; and (c) provided the services of a consultant for 3 months to the IIPA to organize seminars for government officials on modern developments in management at New Delhi and in state capitals. The seminars, numbering over 50, were attended by senior officials from the state and central governments, universities and the business community, and contributed to enlarge their understanding of the role of management and their mutual responsibilities to achieve common objectives.

During FY 1964 services of a short-term consultant were provided on organization and management to the IIPA for two months to conduct short-term courses on the subject for officials from the GOI and business. In all the consultant conducted about ten seminars at various state capitals in India and a discussion series for middle level GOI officials at New Delhi. He conducted a seminar for public sector managers at Hindustan Steel Limited staff training school, Ranchi, and for private sector businessmen at New Delhi under the auspices of Delhi Management Association. In addition funds were obligated to provide: (a) the services of a technician to IIPA on government management with special reference to federal-state relations for 12 months; and (b) training for a university management teacher in the U.S.

The original arrangements with the GOI were for a higher level of activity during this year. However, it was later decided to give temporary priority to the training of managers of economic enterprises in view of the national emergency caused by the Chinese incursion and the deficiencies noted in this area during the Mid-Term Appraisal of the Third Five-Year Plan. The GOI, however, recognizes the need to provide a comprehensive approach to management education and training. The GOI participation outlined in paragraph 2 (f) above is indicative of this interest.

ii) As of June 30, 1965, the Mission expects that this project will have made the following additional progress:

In terms of U.S. personnel services the technician in government management funded in FY 1964 to be assigned to the IIPA should be on board and have developed the IIPA in-service training programs for government personnel. The visiting professor in municipal government funded in FY 1965 to be assigned to the IIPA is expected to be on board and to have provided advice for the consolidation of the Institute's programs for training municipal government officials. The short-term consultants (fourteen) will have assisted the IIPA in organizing several intensive short courses on specialized fields of management for government and economic enterprise executives at various centers in India. The short-term consultant on management teaching will have provided advice to a GOI committee on management education to develop a comprehensive program for improved management teaching in Indian universities.

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In order to improve the effectiveness of in-service training programs for executives, the introduction of new techniques in training and management teaching and the development of university resources (in addition to the participants trained or funded through June 30, 1964), an additional 44 participants will have been programmed. Also a team of 10 management consultants will be funded for studying U.S. practices in management consultancy.

4. Total Funding Requirements

	DG \$	Sec.402 (\$ equiv.)	Total
Prior Year Funding through FY 1964	\$ 91,000	\$ 31,000	\$ 122,000
Operational Year (FY 1965) requirements	117,000	241,000	358,000
Supplementary (FY 1965) requirements	530,000	236,000	766,000
Budget Year (FY 1966) requirements	816,000	250,000	1,066,000
Planning Year (FY 1967) requirements	674,000	250,000	924,000
Subsequent Years (FY 1968-71) requirements	867,000	700,000	1,567,000
	<u>\$3,095,000</u>	<u>\$1,708,000</u>	<u>\$4,803,000</u>

B.F.	\$2,357,000
AID Technicians	146,000
PASA Technicians	10,000
Participant Training (Non-Contract)	582,000
Commodities (Non-Contract)	-
Other Costs	-
	<u>\$3,095,000</u>

5. Funding from other Sources

The Ford Foundation has made grants totalling \$1,050,000 to the IIPA for specified purposes other than those listed above; \$1,081,000 to establish institutes of management at Calcutta and Ahmedabad separately from the university structure; and \$434,000 to the Ministry of Scientific Research and Cultural Affairs for similar purposes. No part of this duplicates the USAID assistance programmed above.

The following is the breakdown of the total DG requirements:

Contract Technicians	\$1,907,000
Contract Participants	-
Contract Commodities	-
Other Contract Costs	450,000
	<u>\$2,357,000</u>

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Technicians (Located in New Delhi)

Title and Identification of Position	DH or PASA	Name of Incumbent	Posi- tion Grade	Posi- tion No.	Start of Funding for FY	Date of HI/RTP/ Transfer	Funding	
							U.S. \$	Rupee (\$ equiv.)
							\$	\$
					<u>FY 1966</u>			
Chief Management Advisor*	D	H.K. Hyde	R-1	488	7/1/65	3/1/66(TR)		(Funded under Tech. Support)
Replacement*	D	To be recruited	R-1	488	3/1/66	3/1/68(RP)		(Funded under Tech. Support)
Executive Development Advisor	D	To be recruited	R-2	None	7/1/65	7/1/67(HL)	23,900	7,400
						FY 1966 Funding	<u>\$23,900</u>	<u>\$7,400</u>
					<u>FY 1967</u>			
Chief Management Advisor (Replacement)	D	To be recruited	R-2	488	7/1/66	3/1/68(HL)		(Funded under Tech. Support)
Executive Development Advisor	D	To be recruited	R-2	None	7/1/66	7/1/67(HL)	23,900	7,400
						FY 1967 Funding	<u>\$23,900</u>	<u>\$7,400</u>

\*Although devoting special attention to this project (assisted by K.S.V.R. Krishnan, FSL-4) this advisor has supervisory and management responsibility over Project 170 Government Operations and Project 242 Top Management Control of Economic Enterprises.

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Participants (Non-Contract)

<u>Brief Description of Training</u>	<u>No. of Participants</u>	<u>Duration of Training</u>	<u>Target Starting Date</u>	<u>Funding</u>	
				<u>U.S. \$</u>	<u>Rupee (\$ equiv.)</u>
<u>FY 1966</u>					
To study in the U.S. modern trends in management teaching (curriculum and methodology and research for teachers of management	16	12 mos.	Sept. 1965	\$ 104,000	\$ 24,000
To study U.S. in-service training programs for civil service state and center	10	6 mos.	Mar. 1966	38,000	15,000
To study organization and programs of professional U.S. management associations and bodies	6	3 to 6 mos.	May 1965	30,000	9,000
			FY 1966 Funding	<u>\$ 172,000</u>	<u>\$ 48,000</u>
<u>FY 1967</u>					
To study U.S. in-service training programs for government personnel at U.S. universities and other centers of training for Directors and Senior Instructors of training institutions - States, center and others	10	6 mos.	April 1967	\$ 38,000	\$ 15,000
To study modern trends in management teaching in the U.S. for management teachers from universities of public administration and business management	10	12 mos.	Sept. 1966	62,000	15,000
			FY 1967 Funding	<u>\$ 100,000</u>	<u>\$ 30,000</u>



AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-720-243	Executive Training And Development
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Contracts - To be negotiated and executed

<u>CONTRACT STAFF</u>	<u>Incumbent</u>	<u>Date of arrival</u>	<u>Date of departure</u>	<u>Rate of Annual Salary</u>	<u>Remarks</u>
<u>FY 1967</u>					
Six visiting professors on management	Contract to be negotiated	7/65	7/70	\$26,000	The intention is to fund the contract for an additional year to June 30, 1969 with FY 1967 funds. \$256,000 \$equiv. 65,000
Four visiting professors on city management (local govt.)	Contract to be negotiated	7/65	7/67	26,000	Funding for the period July 1, 1965 - June 30, 1966 provided in FY 1965 supplementary budget. Funding for an additional 12 months of service is provided here. \$110,000 \$equiv. 48,000
One advisor on inservice training for civil service	Contract to be negotiated	9/65	9/67	18,000	Funding for the period September 30, 1965- August 31, 1966 provided within FY 1965 supplementary budget. Funding for an additional 12 months of services is provided here. \$22,000 \$equiv. 12,200
One advisor for in-service training of civil service personnel	Contract to be negotiated	9/65	9/67	18,000	Funding for the period September 30, 1965- August 31, 1966 provided in FY 1966. Funding for an additional 12 months of services is provided here. \$22,000 \$equiv. 13,000
Ten short-term specialist consultants for various special executive development	Contract to be negotiated	Varied ETAs with FY		75 p.d. 100 p.d.	\$140,000 \$equiv. 37,000
				FY 1967 Funding	<u>\$550,000</u> <u>\$equiv. 175,200</u>

PROJECT DATA SUMMARY — AID DOLLAR COSTS

E-1a

1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA		3. PROJECT NO. 386-15-410-109				4. TITLE Trade Union Development									
																5. U.S. FUNDING:	
B. BEGIN FY 1961		END FY 1969		PHYSICAL WORK:		1961		1970									
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	c. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
						(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	
						AID	PASA										
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	47	20	6	-	20	17	-	4	-	-	-	-	-	
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	34	20	-	-	20	14	-	-	-	-	-	-	-	
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	13	-	5	-	-	4	-	4	-	-	-	-	-	
	EXPENDITURES (ACTUAL YEAR)	TC	G	1	-	(1)	-	-	2	7	-	-	-	-	-	-	
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	29	-	14	-	-	15	-	-	-	-	-	-	-	
	B. EXPENDITURES	TC	G	46	80	14	-	20	12	-	-	-	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	17	-	1	-	-	16	-	-	-	-	-	-	-	
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TC	G	29	-	14	-	-	15	-	-	-	-	-	-	-	
	B. EXPENDITURES	TC	G	28	-	14	-	-	14	-	-	-	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	18	-	1	-	-	17	-	-	-	-	-	-	-	
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/	TC	G	29	-	14	-	-	15	-	-	-	-	-	28	-	
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	58	-	28	-	-	30	-	-	-	-	-	77	-	
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	192	20	76	-	20	92	-	4	-	-	-	172	20	

REMARKS:

1/ This is a memorandum (non-odd) column.

2/ Show estimated expenditures in column i.

Refers to Annex 22 of IAS

PROJECT DATA SUMMARY — AID DOLLAR COSTS

1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA				3. PROJECT NO.				4. TITLE Goal: Labor						
		BEGIN FY 1960		END FY 1969		6. PRIOR REFERENCES										
		U.S. FUNDING: 1960		1970												
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a.	b.	c.	d.	e. PERSONNEL SERVICES		f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
		APPROPRIATION TITLE	LOAN OR GRANT	TOTAL	CONTRACT 1/	(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	2,460*	663	223	-	394	468	55	1,091	59	15	155		
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	94	28	-	-	28	57	-	9	-	-	-		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	1,994*	288	223	-	160	410	25	1,058	34	15	69	77*	-
	EXPENDITURES (ACTUAL YEAR)	TC	G	209	153	-	-	85	44	13	12	18	-	37	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	466	375	-	-	234	58	30	33	25	-	86		
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	123	-	14	22	-	87	-	-	-	-	-		
	B. EXPENDITURES	TC	G	254	134	13	22	88	68	9	17	11	-	26	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	335	241	1	-	146	77	21	16	14	-	60		
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TC	G	125	-	14	24	-	87	-	-	-	-	-		
	B. EXPENDITURES	TC	G	373	241	14	24	146	78	21	16	14	-	60	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	87	-	1	-	-	86	-	-	-	-	-		
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 3/	TC	G	110	-	14	9	-	87	-	-	-	-	-	105	-
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 3/	TC	G	202	-	28	-	-	174	-	-	-	-	-	294	-
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	3,020	663	293	55	394	903	55	1,091	59	15	155	2,357	663

REMARKS:

1/ This is a memorandum (non-add) column.

2/ Show estimated expenditures in column i.

\* Includes/closed projects: I/c charged to \$ Account = \$77  
TC = \$1233

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

E-1b

1. DATA CURRENT AS OF: November 1964	2. COOPERATING COUNTRY INDIA	3. Funding 1960 1960	BEG. FY 1960	END FY 1969	4. PROJECT NO.	5. TITLE Goal: Labor	6. PRIOR REFERENCES:
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7. OBLIGATED AND DISBURSED	g. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(e) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	Govt. Revenue	G	77	375	-	-	115	-	-	-	260	
	(ii) TRUST FUNDS	Sec. 402	G	23*	108	-	-	-	-	-	108	100	
	(iii) OTHER LC	Sec. 402	G	432*	243	2,065	1,162	437	33	1,038	692		
	B. P.L. 480 LC	Sec. 104(e)	G	57,231	57,231	274,000	274,000	-	-	-	-	-	
TOTAL ACTUAL FY 1964	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	Govt. Revenue	G	-	3	-	-	-	-	-	3	1	
	(ii) TRUST FUNDS	Sec. 402	G	55	136	263	648	312	24	182	312		
	(iii) OTHER LC	Sec. 402	G	38,432	41,692	184,000	199,606	-	-	-	-	-	
	B. P.L. 480 LC	Sec. 104(e)	G										
II OPERATIONAL YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	Govt. Revenue	G	10	48	-	-	-	-	-	48	49	
	(ii) TRUST FUNDS	Sec. 402	G	434	418	2,078	1,999	253	14	2,018	1,732		
	(iii) OTHER LC	Sec. 402	G	16,355	16,355	78,300	78,300	-	-	-	-	-	
	B. P.L. 480 LC	Sec. 104(e)	G										
III BUDGET YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	Govt. Revenue	G	12	59	-	-	-	-	-	59	65	
	(ii) TRUST FUNDS	Sec. 402	G	432	498	2,068	2,382	347	22	2,017	2,013		
	(iii) OTHER LC	Sec. 402	G										
	B. P.L. 480 LC												
IV PLANNING YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	Govt. Revenue	G	2	11	-	-	-	-	-	11	11	
	(ii) TRUST FUNDS	Sec. 402	G	432	425	2,068	2,032	58	-	2,012	1,974		
	(iii) OTHER LC	Sec. 402	G										
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	Govt. Revenue	G	2	12	-	-	-	-	-	11	12	
	(ii) TRUST FUNDS	Sec. 402	G	563	709	2,696	3,400	74	-	2,652	3,326		
	(iii) OTHER LC	Sec. 402	G										
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	Govt. Revenue	G	77	375	-	-	115	-	-	260		
	(ii) TRUST FUNDS	Sec. 402	G	49*	237	-	-	-	-	237	237		
	(iii) OTHER LC	Sec. 402	G	2,293	2,293	10,975	10,975	1,169	69	9,737	9,737		
	B. P.L. 480 LC	Sec. 104(e)	G	73,586	73,586	352,300	352,300	-	-	-	-	-	

REMARKS:  
 1/ Exchange Rate: \$1 = Rs. 4.7876  
 2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a  
 3/ Govt. Revenue = \$ 9  
 4/ L/c charged to \$ Account = \$77  
 5/ Sec. 402 = \$ 4  
 \* Includes for closed project

E-1c

PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS

1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING CTRY. INDIA	3. PERSONNEL SERVICES PARTICIPANT TRAINING	BEG. FY 1960	END FY 1970	4. PROJECT NO. Goal: Labor
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5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY	b. ACTUAL FY 1964			c. OPERATIONAL FY 1965			d. BUDGET FY 1966			e. PLANNING FY 1967			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS						
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract				
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	1.9	-	27.8	0.2	-	7	1	1	14.2	1	2	8.3	1	1	-	2	-	-	6.9	4	50.3
	Non U.S.																						
	B. ON 1/BOARD	U.S.			1	-	7	1	2	10	1	2	9	-	3	-							
	Non U.S.																						
II. PARTICIPANTS PROGRAMMED	A. U.S.		72	3/	20	15	-	3	22	3	-	22	3	-	40	6	-	178	15	20.0			
	B. THIRD CTRY.																						

REMARKS:  
 1/ Includes 1.0 for closed projects addressed to this goal  
 2/ Includes .6 for closed projects addressed to this goal  
 3/ Includes 10 for closed projects addressed to this goal  
 4/ End of Fiscal Year

AID FORM 10-112 (7-62)	DATE PREPARED	COOPERATING COUNTRY	SECURITY CLASSIFICATION	MULTI-YEAR LISTING				Goal : Labor				E-4	
	1 November 1964	INDIA	UNCLASSIFIED										
Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year FY 1964	Operational Year FY 1965	Budget FY 1966	Budget +1 FY 1967	Budget +2 FY 1968	Budget +3 FY 1969	Budget +4 FY 1970	All Subsequent Years	Total All Years	
386-15-410-109	Trade Union Development	DL	-	-	-	-	-	-	-	-	-	-	
		DG	47	34	29	29	29	29	29	-	-	192	
		SA	-	-	-	-	-	-	-	-	-	-	-
		480	-	-	-	-	-	-	-	-	-	-	-
		L/C	59	20	250	250	250	250	250	-	-	-	1,309
		Coop. C.	-	-	-	-	-	-	-	-	-	-	-
386-11-450-161	Labor Ministry Training	DL	-	-	-	-	-	-	-	-	-	-	
		DG	205	60	94	96	81	72	72	-	-	620	
		SA	-	-	-	-	-	-	-	-	-	-	-
		480	-	-	-	-	-	-	-	-	-	-	-
		L/C	89	24	184	182	182	32	31	-	-	-	700
		Coop. C.	-	-	-	-	-	-	-	-	-	-	-
386-11-420-179	Bombay Central Training Institute for Craftsmen and Instructors	DL	-	-	-	-	-	-	-	-	-	-	
		DG	975	-	-	-	-	-	-	-	-	-	975
		SA	-	-	-	-	-	-	-	-	-	-	-
		480	-	-	-	-	-	-	-	-	-	-	-
		L/C	280	11	-	-	-	-	-	-	-	-	280
		Coop. C.	-	-	-	-	-	-	-	-	-	-	-
386-31-420-214	Craftsmen Training	DL	-	-	-	-	-	-	-	-	-	-	
		DG	-	-	-	-	-	-	-	-	-	-	-
		SA	-	-	-	-	-	-	-	-	-	-	-
		480	57,231	38,432	16,355	-	-	-	-	-	-	-	73,586
		L/C	-	-	-	-	-	-	-	-	-	-	-
		Coop. C.	-	-	-	-	-	-	-	-	-	-	-
Total: AID Activities, Labor		DL	-	-	-	-	-	-	-	-	-	-	
		DG	1,227	94	123	125	110	101	101	-	-	1,787	
		SA	-	-	-	-	-	-	-	-	-	-	-
		480	57,231	38,432	16,355	-	-	-	-	-	-	-	73,586
		L/C	428	55	434	432	432	282	281	-	-	-	2,289
		Coop. C.	-	-	-	-	-	-	-	-	-	-	-

SECURITY CLASSIFICATION  
UNCLASSIFIED

PAGE AJ-3

BEST AVAILABLE

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED			
E-1a	1. DATA CURRENT AS OF: November 1964		2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-15-410-109			4. TITLE Trade Union Development						
	5. U.S. FUNDING:		BEGIN FY 1961	END FY 1969	6. PRIOR REFERENCES										
	PHYSICAL WORK:		1961	1970											
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a.	b.	c.	d.	e.		f.		g.		h.		i.	
		APPROPRIATION TITLE	LOAN OR GRANT	TOTAL	CONTRACT 1/	PERSONNEL SERVICES		PARTICIPANTS		COMMODITIES		OTHER COSTS		LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2)		(1) DIRECT AND U.S. AGENCIES		(2)		(1) DIRECT AND U.S. AGENCIES	
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	CONTRACT	CONTRACT	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	47	20	6	-	20	17	-	4	-	-	-	
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	34	20	-	-	20	14	-	-	-	-	-	
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	13	-	5	-	-	4	-	4	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)	TC	G	1	-	(1)	-	-	2	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	34	20	1	-	20	15	-	-	-	-	-	
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	29	-	14	-	-	15	-	-	-	-	-	
	B. EXPENDITURES	TC	G	46	20	14	-	20	12	-	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	17	-	1	-	-	16	-	-	-	-	-	
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TC	G	29	-	14	-	-	15	-	-	-	-	-	
	B. EXPENDITURES	TC	G	28	-	14	-	-	14	-	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	18	-	1	-	-	17	-	-	-	-	-	
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/	TC	G	29	-	14	-	-	12	-	-	-	-	28	-
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	28	-	28	-	-	30	-	-	-	-	77	-
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	192	20	76	-	20	92	-	4	-	-	172	20

## REMARKS:

1/ This is a memorandum (non-add) column.

2/ Show estimated expenditures in column i.

Refers to Annex 22 of IAS

SECURITY CLASSIFICATION UNCLASSIFIED

PAGE NO. AJ-4 (Revised)

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		END FY		4. PROJECT NO.		5. TITLE			
	1 November 1964		INDIA		Funding	1961	1969	1961	1970	386-15-410-109		Trade Union Development		
7. OBLIGATED AND DISBURSED	c. FUNDS			E. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER Parts and Other		
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED	
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	-	-	-	-	-	-	-	-	-	
	FA ACT	(ii) TRUST FUND Govt. Revenue	-	-	-	2	1	-	-	-	-	2	1	
		(iii) OTHER LC Sec. 402	G	59	40	282	192	-	-	2	-	237	190	
	B. P.L. 480 LC													
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	-	-	-	-	-	-	-	-	-	
	FA ACT	(ii) TRUST FUND Govt. Revenue	-	-	-	2	1	-	-	-	-	2	1	
		(iii) OTHER LC Sec. 402	G	20	23	98	108	-	-	-	-	55	108	
	B. P.L. 480 LC													
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	-	-	-	-	-	-	-	-	-	
	FA ACT	(ii) TRUST FUND Govt. Revenue	-	-	-	1	-	-	-	-	-	-	1	
		(iii) OTHER LC Sec. 402	G	250	185	1197	884	-	-	29	-	1175	855	
	B. P.L. 480 LC													
III BUDGET YEAR (EST.) FY 1966	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	-	-	-	-	-	-	-	-	-	
	FA ACT	(ii) TRUST FUND Govt. Revenue	-	-	-	-	-	-	-	-	-	-	-	
		(iii) OTHER LC Sec. 402	G	250	231	1197	1105	-	-	26	-	1175	1079	
	B. P.L. 480 LC													
IV PLANNING YEAR (EST.) FY 1967	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	-	-	-	-	-	-	-	-	-	
	FA ACT	(ii) TRUST FUND Govt. Revenue	-	-	-	-	-	-	-	-	-	-	-	
		(iii) OTHER LC Sec. 402	G	250	245	1197	1171	-	-	24	-	1175	1147	
	B. P.L. 480 LC													
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	-	-	-	-	-	-	-	-	-	
	FA ACT	(ii) TRUST FUND Govt. Revenue	-	-	-	-	-	-	-	-	-	-	-	
		(iii) OTHER LC Sec. 402	G	500	608	2394	2915	-	-	74	-	2350	2841	
	B. P.L. 480 LC													
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	-	-	-	-	-	-	-	-	-	
	FA ACT	(ii) TRUST FUND Govt. Revenue	-	-	-	2	2	-	-	-	-	2	2	
		(iii) OTHER LC Sec. 402	G	1309	1309	6267	6267	-	-	155	-	6112	6112	
	B. P.L. 480 LC													

REMARKS:

1/ Exchange Rate: \$1 =

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS		1. DATA CURRENT AS OF:		2. COOPERATING CTRY.		3. PERSONNEL SERVICES PARTICIPANT TRAINING		BEG. FY		END FY		4. PROJECT NO.								
	PERSONNEL AND PARTICIPANTS		1 November 1964		INDIA		PERSONNEL SERVICES PARTICIPANT TRAINING		1963	1970	1961	1970	386-15-410-109								
I PROJECT PERSONNEL	a. CUM. THRU ACTUAL FY			b. ACTUAL FY 1964			c. OPERATIONAL FY 1965			d. BUDGET FY 1966			e. PLANNING FY 1967			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
A. MAN YEARS	U.S.	9	7	2	-	-	1	-	1.2	1	-	-	1	-	-	2	-	-	5.9	-	1.2
	Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B. ON 1 BOARD	U.S.	-	-	1	-	-	1	-	1	-	-	1	-	-	-	-	-	-	-	-	-
	Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II. PARTICIPANTS PROGRAMMED	A. U.S.	4	-	-	2	-	4	-	4	-	-	4	-	-	-	4	-	-	20	-	-
	B. THIRD CTRY.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

REMARKS:

1/ End of Fiscal Year

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-410-109	Trade Union Development
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### The Activity Target

This activity aims at the development of free and democratic trade unions that can assist in establishing and maintaining in India a sound industrial, economic and social base and that can influence the success and viability of developmental projects in all sectors. This target is sought to be achieved by:

- (a) Developing capable, well-trained and responsible leadership in free and democratic trade unions through the promotion of the GOI's Workers' Education Program, and
- (b) Strengthening the development of the Workers' Education Wing of the Indian Adult Education Association.

Operating within the framework of India's social, economic, educational and political context, as specifically described in the Labor portion of the IAS, a sound and industrial relations climate is necessary if the country is to achieve its economic and social objectives by democratic processes. This will require strong, free and democratic trade unions with the capacity to communicate with and service their membership effectively, participate in manpower programs, develop collective bargaining relationships and to be able to play their full role in a modern and constantly changing industrial relations system.

Because of the problems of trade union autonomy, factionalism and the immensity of the country itself, more than one method and more than one organization are necessary for overall progress in this activity; no single organization is acceptable to all trade unions. Even with this approach the progress will be un-even. At this time an opportunity exists to make dramatic strides towards IAS objectives in certain priority areas; through local currency financing, and a judicious use of dollar funds the U.S. and GOI objectives can be achieved in areas to which this project has addressed itself.

The GOI's Workers' Education program is intended to generate trade union consciousness, to emphasize the purpose and functions of trade unions, and to promote the development of harmonious union-management relationships. The program, under which it is hoped to train 300,000 workers during the Third Plan period, helps in the development of mature, responsible and reasonable workers to that they will be capable of adapting the purposes and functions of the trade union movement to the country's economic pressures. This large-scale program is run in cooperation with the employers and the trade unions from all parts of the country, but it suffers from lack of suitably trained teaching personnel and certain critically important audio-visual teaching aids.

The Indian Adult Education Association, a private, non-political and non-profit organization, has a program to develop and strengthen its Workers' Education wing with the objective of inculcating independent thinking and leadership amongst the work force in the country. In doing so, it is handicapped by its limited resources and the difficulty of recruiting qualified staff.

### Course of Action

U. S. assistance to this project for the attainment of the activity targets is as follows:

Three to six months' training for each of four participants in workers' education and related subjects, plus observation of U.S. labor movement concepts and practices in the U.S., in the years through FY 1964.

It is expected that six 6-month participants will be trained in FY 1965 and four 6-month participants each year thereafter during the life of the project; upon their return they will promote generally the GOI Workers' Education program.

It is proposed further that one workers' education consultant (Audio-Visual Specialist) for nine months and one Trade Union Engineering Consultant for nine months will be provided, as advisors to the GOI Central Board for Workers' Education and to assist in improving its teaching techniques.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-410-109	Trade Union Development
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The proposed A.I.D. assistance in FY 1965 is as follows:

(a) One direct-hire non-GOI requested technician: Thomas L. O'Connor - FSR4, Labor Education Advisor, who arrived on May 1, 1964, to advise and assist in the planning and implementation of this project. (Before his arrival, the project received only part-time service from labor division direct-hire technicians and consultants.) The IAS and the new activity reflected in the rupee contracts for service mentioned below, account for the extension of this project's termination date from FY 1966 to FY 1969.

(b) Consultant Services:

Consultants funded in FY 1964 already under recruitment are:

ONE - Audio-Visual Aids expert for nine months to assist the GOI Central Board of Workers' Education to develop a communication media division

ONE - Industrial Engineering expert for six months to conduct training courses for industrial relations institutes and trade unions.

(c) Participant Training:

SIX - GOI Workers' Education Officers to receive six months training in the United States primarily in workers' education teacher training, use of audio-visual aids and adult education techniques as well as study and observation of U.S. industrial relations practices, labor movement concepts, Federal Mediation Service, and how collective bargaining operates.

To make the best use of limited resources and to apply these resources to areas where they will have the most impact, this project will have priorities of action in areas of trade union activity, such as ports and docks; transportation and engineering trades.

Further, emphasis will be placed in selected areas with a concentration of industrial complexes and possibilities of initiating the course of action, example: the States of Maharashtra, Gujarat, Bihar, Orissa, West Bengal and Madras.

In line with these priorities, it is intended to provide research materials, develop teaching aids and conduct training programs, demonstration projects, seminars, workshops, and to make feasibility studies directly with trade unions. Local currency contracts with workers' education organizations, industrial relations institutes, universities and other organizations will assist in formation of viable units that develop training materials and training programs and carry on this work after the USAID assistance is withdrawn.

The participant training program for GOI Workers' Education Officers will provide technical training which is not available in India. The participants who have returned are trying to adapt and introduce the teaching techniques observed during their training in the U.S., which should result in easier and faster instruction of the worker-teachers and workers.

The GOI's recognition of the importance of Workers' Education schemes is reflected in the increased budget allocations and targets set under the Fourth Plan. (Please see table under Progress to Date).

The head office of the Central Board for Workers' Education, Nagpur, is preparing new curricula for use in the workers' education programs, laying emphasis on the audio-visual techniques of teaching.

Progress to Date

Since the project's start in 1961 the following USAID assistance has been provided:

Participants. Two participants (one trade union leader; one workers' education specialist) were sent to the U.S. for six weeks each, to attend the Michigan State University Conference on Educational Institutions and International Labor in March 1962.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-410-109	Trade Union Development
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Two GOI Workers' Education Officers are undergoing training in the United States in workers' education schemes for six months each, under FY 1964 funding.

Commodities. Audio-visual aids were provided to selected Workers' Education Centers, and books were given to the Indian National Trade Union Congress and the Hind Mazdoor Sabha. Cost \$4,500. One film was produced in India.

#### Technicians

The part-time services of one Labor Education Advisor were provided from February 7, 1961, to April 6, 1963; an American Workers' Education Consultant employed under contract from January 20, 1964, to July 31, 1964. The present Labor Education Advisor arrived at post on May 1, 1964. In addition, two Labor Division Chiefs spent part of their time on this project.

#### Consultants.

One Trade Union Engineering Consultant was assigned to the GOI from January 24 through April 2, 1963.

The consultant and technicians provided under this project have prepared work manuals for union staff members and have conducted demonstration workshops and seminars on Communications Techniques, Community Services Programs, Workers' Education Teacher Training, Work Study, Labor Productivity, Correspondence Courses, Public Speaking and Motivation Techniques. They also assist in rupee financed projects with Lucknow University, Indian Adult Education Association, and the Xavier Labour Relations Institute.

In progress of publication are manuals for handling grievances, charts on labor legislation for workers, arbitration manuals, credit union and workers' housing manuals, as well as labor press and young trade union members activities. These activities have helped to increase the capacity and improve the quality of Indian workers' education schemes.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-410-109	Trade Union Development
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PROGRESS OF THE GOI CENTRAL BOARD FOR WORKERS EDUCATION

	<u>Third Plan Target 1961</u>	<u>As of 4/1/61</u>	<u>As of 4/1/62</u>	<u>As of 4/1/63</u>	<u>As of 10/15/63</u>	<u>As of 7/31/64</u>	<u>Projections in IVth Plan 1966 - 1971</u>
Regional Centers	28	12	13	14	21	23	40
Sub-Regional Centers	-	-	2	7	18	22	No estimate available
Education Officers:							
a. Beard Employees	166	66	85	85	124	172	200
b. Union Employees	133	33	50	50	76	88	200
Worker Teachers	7,500	1,041	1,858	2,832	3,500	4,588	9,960
Workers Trained	300,000	9,092	24,537	52,281	80,000	145,131	565,000
Unit-Level Classes	-	363	718	1,193	1,565	2,120	No estimate available

As seen by the chart above, the GOI is paying increased attention to workers education in India. During the Fourth Plan (1966-71) the GOI plans to spend Rs. 50 million (equivalent to U.S. \$10.5 million) to further implement and expand this program, for which they require assistance in curriculum development, teacher training, and development of their audio-visual and research centers.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-410-109	Trade Union Development
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The growing institutional effort reflected in the above table represents significant social and consequently economic progress. India cannot hope to attain in the near future the level of literacy which will permit its workers to educate themselves and organize trade unions to be conducted for the maximum good of the working classes and the community as a whole. Lack of education constitutes a serious impediment to the individual's effective participation in a democracy, and the country cannot afford to wait until education reaches the working classes. The very success of the Five Year Plans depends upon the understanding and enthusiasm with which the work force adjusts itself to the changing economic pressures and responds to the need for increased production within the country.

As a result of the GOI's awareness of the importance of Workers' Education the Central Board for Workers' Education was set up in 1958 as a semi-autonomous body with representatives from trade unions, employers, education institutions and the Government. Its primary functions are to

- (a) lay down policy;
- (b) administer, allocate funds to, inspect and coordinate workers' education programs;
- (c) arrange for the provision of educational material;
- (d) establish standards for the programs and their teachers;
- (e) encourage the establishment of educational departments within the national trade unions; and
- (f) stimulate and promote the development of Workers' Education.

The minimum government control over the Board is limited primarily to ensuring that public funds are spent for the proper purposes.

The Board's Education Program is divided into three phases:

(a) Top level training of a hard core of Education Officers or Teacher-Administrators for employment by the Board for posting to the several regional centers; they have responsibility for training selected workers in 3-month, full-time training courses. These Education Officers are of post-graduate level recruited in open competition, and before assignment to their jobs they are given training for six months. Nominees of recognized trade unions are also admitted to training courses, with the aim that they will undertake workers' education programs in their own unions, with the help of the Board.

(b) The training of workers nominated by trade unions (and known as "Worker-Teachers") is to be a continuous process, with each center turning out from 75 to 100 trained worker-teachers each year from its 3-month courses.

(c) On completion of the training, the Worker-Teachers return to their own factories and there conduct programs for the workers in those areas, generally outside working hours.

Regular refresher courses are organized by the Board for the education officers and the worker-teachers.

As of July 31, 1964, the Board had conducted five training courses for Education Officers. In all the training programs effort is made to employ direct and advanced methods of education; and the principal methods of teaching include group discussions, debates, seminars, role-playing, audio visual aids and related teaching devices.

The training of worker-teachers by the Education Officers is conducted at the Regional Center (permanent) and at the Sub-Regional Centers, specifically established for the purpose and run for only the duration of the course. The regional language is used.

The number of regional centers has increased from 12 at the beginning of the Third Plan to 23 as of July 1964; there are now 22 sub-regional centers. During the same period the number of Education Officers has gone up from 99 to 260, and the number of worker-teachers and workers trained at unit-level classes has increased from 1,041 and 9,092 to 4,588 and 145,131 respectively.

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-410-109	Trade Union Development
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The Third Plan target is to train 300,000 workers out of a total industrial work force of seven to eight million was too modest to effect any significant impact. Also, while there has been substantial increase in the number of Regional Centers for training of worker-teachers, the progress in training unit-level workers is far below Third Plan targets. Further, improvement in the quality of workers' training is severely handicapped by the lack of technical aids. Even the target of training 300,000 workers does not include the successive exposures needed to new ideas; training for a single period is hardly sufficient to indoctrinate a novice in democratic practices.

GOI's activities in this field have been assisted by the Colombo Plan, which provided two 3-month fellowships at the Asian Labor Education Center (ALEC) Manila; and by the International Labor Organization (ILO) which provided two fellowships for observation tours in Geneva and England and three for such tours in Denmark.

Funding Requirements

Total Requirements

Beginning from FY 1961 and as of June 30, 1964, A.I.D. had obligated a total of \$47,000 of DG and the equivalent of \$59,000 in Sec. 402 rupees. The project is expected to continue through FY 1969. During this period it is proposed to provide each year:

- (i) The services of a direct-hire technician on Technical Support activity; and
- (ii) training to six GOI workers education officers in the U.S. for six months each.

The following two consultants funded in FY 1964 are expected to be on board during FY 1965:

- (i) Workers Education Consultant - 9 months
- (ii) Trade Union Engineering Consultant - 6 months

Funding requirements each year in FY 1965 and 1966 will be \$28,600 and Sec. 402 \$250,000 equivalent in rupees. (Out of this amount Sec. 402 \$239,000 equivalent will be used each year to finance the cost of workshops, seminars, research activity, printing of publications and educational material and the production of films.) During the entire life of the project from FY 1961 to FY 1969 U.S. assistance is expected to total \$192,000 of DG and \$1,309,000 equivalent of Sec. 402 rupees.

The GOI meets the salaries of the participants and pays for their intra-India transportation and expenses incidental to their departure. The GOI expenditure on this scheme totalled Rs. 1,300,000 (equivalent to about \$271,540) during 1961-62; Rs. 1,810,000 (equivalent to \$378,060) during 1962-63; and Rs. 2,900,000 (the equivalent of \$605,731) in 1963-64. The budget allocation for the GOI financial year 1964-65 is Rs. 3,500,000 (\$731,055).

Operations and Budget Year Requirements

Operational Year Requirements

Project Funds

<u>Participants</u>	<u>\$</u>	<u>\$ Equivalent of Sec. 402 Rupees</u>
FOUR - GOI workers' education officers - 6 months each	14,400	6,000
<u>Technicians</u>		
ONE - project manager (Thomas L.O'Connor -FSR-4)	14,200	4,500
<u>Other</u>		
Workshops, Seminars, Research, publications and films, etc.	-	239,000
<b>Total:</b>	<b>28,600</b>	<b>249,500</b>

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-410-109	Trade Union Development
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Budget Year FY 1966

                   \$                    \$ equivalent of  
                                      Sec. 402 Rupees

Project Funds

Same as for FY 1965    28,600    249,500

AID 1020-2 (8-64)		PROJECT DATA SUMMARY -- AID DOLLAR COSTS											SECURITY CLASSIFICATION UNCLASSIFIED			
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-11-450-161				4. TITLE Labor Ministry Training						
	b.		BEGIN FY 1960		END FY 1969		6. PRIOR REFERENCES									
	U.S. FUNDING:		1960		1970											
7.		PHYSICAL WORK:		1960		1970										
AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES		f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. 1/ LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
						(1) U.S. AGENCIES		(2)	(1) U.S. AGENCIES	(2)	(1) DIRECT AND U.S. AGENCIES	(2)	(1) DIRECT AND U.S. AGENCIES	(2)	(1) DIRECT AND U.S. AGENCIES	(2)
						AID	PASA	CONTRACT	CONTRACT	CONTRACT	CONTRACT	CONTRACT	CONTRACT			
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	205	8	-	-	8	188	-	9	-	-	-	-	
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	60	8	-	-	8	43	-	9	-	-	-	-	
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	144	-	1	-	-	143	-	-	-	-	95	-	
	EXPENDITURES (ACTUAL YEAR)	TC	G	43	-	1	-	-	42	-	-	-	-	-	-	
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	94	-	-	22	-	72	-	-	-	-	-	-	
	B. EXPENDITURES			94	8	(1)	22	8	56	-	9	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR			61	-	-	-	-	61	-	-	-	-	-	-	
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TC	G	96	-	-	24	-	72	-	-	-	-	-	-	
	B. EXPENDITURES			88	-	-	24	-	64	-	-	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR			69	-	-	-	-	69	-	-	-	-	-	-	
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/	TC	G	81	-	-	9	-	72	-	-	-	-	77	-	
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	144	-	-	-	-	144	-	-	-	-	217	-	
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	620	8	-	55	8	548	-	9	-	-	612	8	

REMARKS:

- 1/ This is a memorandum (non-odd) column.
- 2/ Show estimated expenditures in column i.

Refers to Annex 22 of IAS

AID 1020-3 (7-64)	PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES							SECURITY CLASSIFICATION UNCLASSIFIED							
	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	3. BEG. FY 1960	END FY 1969	4. PROJECT NO. 386-11-450-161	5. TITLE Labor Ministry Training									
E-1b	7. OBLIGATED AND DISBURSED		e. FUNDS				b. TOTALS		c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
			(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
					(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED	OBLIGATED	DISBURSED	(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED	
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	-	-	-	-	-	-	-	-	-	-	
	FA ACT	(ii) TRUST FUND Govt. Revenue	-	-	-	1	-	-	-	-	-	-	1	-	
		(iii) OTHER LC Sec. 402	G	89	66	427	317	-	-	-	-	-	427	317	
		B. P.L. 480 LC													
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	-	-	-	-	-	-	-	-	-	-	
	FA ACT	(ii) TRUST FUND Govt. Revenue	-	-	-	1	-	-	-	-	-	-	1	-	
		(iii) OTHER LC Sec. 402	G	24	18	114	84	-	-	-	-	-	114	84	
		B. P.L. 480 LC													
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	-	-	-	-	-	-	-	-	-	-	
	FA ACT	(ii) TRUST FUND Govt. Revenue	-	1	1	5	5	-	-	-	-	-	5	5	
		(iii) OTHER LC Sec. 402	G	184	176	881	841	-	-	38	-	-	843	803	
		B. P.L. 480 LC													
III BUDGET YEAR (EST.) FY 1966	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	-	-	-	-	-	-	-	-	-	-	
	FA ACT	(ii) TRUST FUND Govt. Revenue	-	2	2	11	11	-	-	-	-	-	11	11	
		(iii) OTHER LC Sec. 402	G	182	177	871	848	-	-	29	-	-	842	819	
		B. P.L. 480 LC													
IV PLANNING YEAR (EST.) FY 1967	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	-	-	-	-	-	-	-	-	-	-	
	FA ACT	(ii) TRUST FUND Govt. Revenue	-	2	2	11	11	-	-	-	-	-	11	11	
		(iii) OTHER LC Sec. 402	G	182	180	871	861	-	-	34	-	-	837	827	
		B. P.L. 480 LC													
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	-	-	-	-	-	-	-	-	-	-	
	FA ACT	(ii) TRUST FUND Govt. Revenue	-	2	2	11	12	-	-	-	-	-	11	12	
		(iii) OTHER LC Sec. 402	G	63	101	302	485	-	-	-	-	-	302	485	
		B. P.L. 480 LC													
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	-	-	-	-	-	-	-	-	-	-	
	FA ACT	(ii) TRUST FUND Govt. Revenue	-	7	7	39	39	-	-	-	-	-	39	39	
		(iii) OTHER LC Sec. 402	G	700	700	3352	3352	-	-	101	-	-	3251	3251	
		B. P.L. 480 LC													

REMARKS:  
 1/ Exchange Rate: \$1 = 4.7876  
 2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING CTRY. INDIA	3. PERSONNEL SERVICES PARTICIPANT TRAINING	BEG. FY 1965	END FY 1970	4. PROJECT NO. 386-11-450-161															
	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			6. CUM. THRU ACTUAL FY			b. ACTUAL FY 1964			c. OPERATIONAL FY 1965			d. BUDGET FY 1966			e. PLANNING FY 1967			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract		
				-	-	-	-	-	-	-	1	5	-	2	-	-	1	-	-	-	-	-	-	-
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. ON BOARD	U.S.	-	-	-	-	-	-	2	1	-	2	-	-	2	-	-	-	-	-	-	-	-	-
		Non U.S.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II. PARTICIPANTS PROGRAMMED	A. U.S.	-	58	-	13	-	-	18	3	-	18	3	-	18	3	-	36	6	-	148	15	-	-	
	B. THIRD CTRY.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

REMARKS:  
 1/ End of Fiscal Year

AND 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-450-161	Labor Ministry Training
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### The Activity Target

This activity provides assistance to the GOI Ministry of Labor and Employment, to

- (i) strengthen the Directorate General of Employment and Training through upgrading the operating efficiency and broadening the outlook of senior labor officials by acquainting them with modern techniques in employment market information, labor statistics development, manpower planning, apprenticeship training and others;
- (ii) promote incentives for the attainment of superior levels of proficiency in industrial skills;
- (iii) provide to mines and industrial safety labor officials exposure to modern safety and accident prevention techniques; and
- (iv) assist the Industrial Training Institute (under the Chief Labor Commissioner, Delhi) to improve the training it provides for arbitrators, mediators, conciliators and wage and hour inspectors from the Central and State Ministries of Labor.

The rate of growth and development of India's industrial economy is dependent upon the availability of skilled and trained persons in appropriate numbers at the required time, furthermore, the need for skilled workers has been accentuated by the state of emergency.

At the end of 1963 there were 283 Industrial Training Institutes in the country, with a seating capacity of 78,200 students and teaching 29 engineering and 22 non-engineering trades. While this is a commendable effort and one that is being expanded, the fact remains that a considerable number of the ITI graduates are unable to find employment, primarily because their skills are generally at a level lower than that demanded by the industrial employers. The GOI is aware of this condition and efforts are being made to upgrade the level of proficiency of each trainee so that really skilled workers are available to meet industrial requirements.

It is estimated that there will be twelve million unemployed persons in India at the end of the Third Five Year Plan, March 31, 1966, and that of them one million will be high school and university graduates. These vast numbers of idle persons do not contribute to the economic progress of the country and create various socio-political problems. Also, as of December 31, 1963, there were 100,000 unfilled jobs, revealing shortages of professional and technical personnel as well as of craftsmen and production process workers.

India needs accurate manpower statistical data and effective employment counselling and guidance facilities to help channel idle manpower into gainful occupations and recruit personnel for available jobs.

Another hindrance to full manpower utilization is that Indian employers and employees generally do not know how to resolve the labor disputes that arise in the process of establishing social democracy in India. Existing universities do not provide training programs in industrial relations. Teaching is confined to the letter and intent of law, and no training is given in the vital techniques of implementing modern labor legislation in a country which has inherited western laws but does not have the western background.

This lack of knowledge contributes to unnecessary hostility; it also contributes to disruption of planned industrial production. It is estimated that strikes cause an average annual loss of 600,000 man-days. In addition, countless man-hours are lost through in-plant disputes which do not result in strikes but do substantially interfere with production.

The methods heretofore employed for resolution of industrial disputes have been found inadequate by employers, Indian trade unions and government representatives involved. Therefore, a more functional process for settling industrial dispute is essential to the development of India's economy.

Finally, with the acceleration of industrialization, the rate of accidents in shops and mines has gone up sharply. Thus to keep accidents at a minimum, it is necessary to generate the consciousness of need for adequate safety measures.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-450-161	Labor Ministry Training
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Starting in FY 1960 this project has provided assistance to the Ministry of Labor and Employment in the areas mentioned above. The returned participants uniformly have exhibited zeal and enthusiasm in their approach and a continuing desire to adapt to and implement under local conditions the knowledge gained during their training abroad. A corps of trained administrators is being created in the GOI which is beginning to develop and grow to permit successful manning of programs for training in industrial skills, better employment counselling practices, the harmonious conduct of industrial relations, and safer industrial practices.

One top-level GOI official who visited the U.S. in 1960 as a participant, was favorably impressed by the Apprentice Training Schemes operated through private industry in the U.S.; in 1961 the GOI passed the Apprentice Act, which lays down programs of training within industry. Another senior GOI official, also a participant, went to the U.S. in FY 1961 to observe industrial conciliation practices; upon his return he was successful in having his Government sanction the establishment of an Industrial Relations Institute, modelled largely after those he had seen in the U.S. The Institute, now operating in New Delhi, is the first of its kind in the country; it will offer training in industrial conciliation practices not only to India nationals, but also to selected candidates from the neighboring countries.

Assistance under this project has been well utilized in the past. The future assistance will complete the second and more significant phase of activity.

#### The Course of Action

This project started in FY 1960 is expected to carry on until FY 1969 to achieve the original targets. It is proposed for FY 1965 and each subsequent year to provide, in cooperation with the Directorate General of Employment and Training and the Chief Labor Commissioner, participant training to 21 participants, as follows:

#### Directorate General of Employment and Training

National winners in the All-India Skill Competition, for 6 months each	6
Fifth Manpower Seminar, for 3 months each	2
Employment and Training for 6 months each	10

#### Chief Labor Commission

Industrial Conciliation Machinery(PASA), for 6 months each	3
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It is proposed further to provide the services of one technician (FSR-3, ETA January 1965) and one consultant (10 months, ETA January 1965) to the Chief Labor Commissioner under a PASA arrangement, 16 months of consultant services to the Directorate General of Employment and Training, and commodities (including 102 tool kits and 204 books, and demonstration materials).

#### Progress to Date

#### Participants

As of June 30, 1964, an average of six months' U.S. training was financed for each of 58 participants, of whom 47 have returned to their jobs and 11 are still in the U.S. The training was in such fields as Employment Market Information, Industrial Safety and Hygiene, Vocational Guidance, Apprenticeship Training, Industrial Relations Machinery, Manpower Seminars, Occupational Research and Analysis, Placement of Physically Handicapped and Scientific Personnel, etc. The returned participants are generally well placed and are doing useful work in their respective areas of activity.

Of the total group, five were sent in each of FYs 1952 and 1954; their experience was the basis for planning the present project.

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-450-161	Labor Ministry Training
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A program of intensive participant follow-up is being formulated by the Labor Division. In addition to personal contacts and presentation of publications, plans are being made to form an Advisory Committee composed of former participants for each field of training given, to advise GOI department heads in that area.

#### Contract Consultants

One six-month Arbitration, Mediation and Conciliation Consultant, funded in FY 1964, is expected to arrive in India in January 1965 to work closely with the Deputy Chief Labor Commissioner (Training) in installing in-service training programs and the promulgation of locally prepared text material at the GOI Industrial Relations Institute.

#### Commodities

Books, films, filmstrips and audio-visual aids worth \$9,000 in support of the activity of the consultant and the Institute were financed in FY 1964. Deliveries are expected to begin December 1964, to coincide with the arrival of the consultant.

The GOI has received other assistance in these fields from the International Labor Organization, which provided 48 months of services by seven consultants and may provide 12 months of such services in 1965; from the Colombo Plan, as six months' training in England for each of five GOI Labor Officers; and from the Ford Foundation. There is no conflict between or overlap of assistance from the several sources.

#### Funding Requirements

##### Total Requirements

As of June 30, 1964 AID had obligated since FY 1960 a total of \$205,000 of DG and \$89,000 equivalent of Sec. 402 rupees to:

- (i) train 58 participants.
- (ii) provide the 6-month contract services of an Arbitration Mediation and Conciliation Consultant, and

(iii) supply \$9,000 worth of commodities for the Industrial Relations Institute, New Delhi.

The following assistance will be provided in FY 1965; it sets the pattern for assistance in future years.

#### Operational Year FY 1965\*

##### Project Funds

##### I Participants

(Directorate General of Employment and Training)

<u>Participants</u>	<u>\$</u>	<u>\$ equivalent of Sec. 402 Rupees</u>
A. (Direct A.I.D.)		
a. 6 - skill winners for six months each	21,600	9,000
b. 10 - Apprenticeship participants for six months each	36,000	15,000
c. 2 - Fifth Manpower Seminar participants for three months each	4,080	3,000
B. (PASA)		
a. 3 - Industrial Relations Machinery participants for six months each	10,800	4,500
	<u>72,480</u>	<u>31,500</u>

\* \$29,000 provided in the FY 1965 budget is subject to approval by A.I.D./W of supplementary allotment.

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-450-161	Labor Ministry Training
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	\$	\$ equivalent of Sec. 402 Rupees
<u>Technicians</u>		
a. ONE - (PASA) Consultant for 10 months @ \$75/day ETA January 1965	10,350	4,060
b. ONE - (PASA) FSR-3 Technician ETA January 1965	<u>11,150</u>	<u>5,000</u>
	<u>21,500</u>	<u>9,060</u>
Total	<u>93,980</u>	<u>40,560</u>

Cumulative project costs through FY 1969 are estimated to be \$620,000 and Sec. 402 \$700,000 equivalent in rupees.

Budget Year FY 1966 and Subsequent Years

Participant program will continue at the FY 1965 level and FY 65 technicians will complete their assignment.

Other Local Costs

An additional amount of Sec. 402 \$144,000 equivalent of Rupees will be provided each year to pay for workshops, seminars, local translation and printing of publications, and the production of films.

Total Sec.402 \$184,000 equivalent of rupees.

In direct support of this project, the following assistance will be provided from Technical Support funds:

Commodities

a. 102 tool kits and 204 books	26,000	-
b. Miscellaneous labor commodities	2,000	-
c. <u>Demonstration</u> material in support of consultant services	1,000	-

Contract Consultants

d. 16 man-months of consultant services	<u>18,400</u>	<u>20,960</u>
Total:	<u>47,400</u>	<u>20,960</u>

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED					
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-11-420-179				4. TITLE Bombay Central Training Institute for Craftsmen and Instructors							
	5. U.S. FUNDING:		BEGIN FY 1960		END FY 1963		6. PRIOR REFERENCES										
	PHYSICAL WORK:		1960		1966												
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT <sup>1/</sup>	e. PERSONNEL SERVICES		f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS			
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		TC	G	975	635	-	-	366	-	55	340	59	-	155	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)		TC	G	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		TC	G	604	288	-	-	160	-	25	316	34	-	69	-	-
	EXPENDITURES (ACTUAL YEAR)		TC	G	165	153	-	-	85	-	13	12	18	-	37	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC	G	371	347	-	-	206	-	30	24	25	-	86	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS		TC	G	-	-	-	-	-	-	-	-	-	-	-	-	
	B. EXPENDITURES		TC	G	114	106	-	-	60	-	9	8	11	-	26	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC	G	257	241	-	-	146	-	21	16	14	-	60	-	-
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS		TC	G	-	-	-	-	-	-	-	-	-	-	-	-	
	B. EXPENDITURES		TC	G	257	241	-	-	146	-	21	16	14	-	60	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC	G	-	-	-	-	-	-	-	-	-	-	-	-	-
IV. PLANNING YR. (EST.) FY	GROSS OBLIGATIONS <sup>2/</sup>																
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>																
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>		TC	G	975	635	-	-	366	-	55	340	59	-	155	340	635

## REMARKS:

<sup>1/</sup> This is a memorandum (non-add) column.<sup>2/</sup> Show estimated expenditures in column i.

Refers to Annex 22 of IAS.

AID 1020-3 (7-64)		PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES							SECURITY CLASSIFICATION UNCLASSIFIED					
E-1b		1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA		3. Funding 1960 Phys. Work 1960	BEG. FY 1960	END FY 1963 1966	4. PROJECT NO. 386-11-420-179		5. TITLE Bombay Central Training Institute for Craftsmen and Instructors				
7. OBLIGATED AND DISBURSED		a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
		(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
					(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR		A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	G											
		FA ACT (ii) TRUST FUND	Govt. Rev.		14	13	66	60					66	60
		(iii) OTHER LC	Sec. 402	G	280	133	1,338	635			435	33	356	167
		B. P.L. 480 LC												
TOTAL ACTUAL FY 1964		A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	G											
		FA ACT (ii) TRUST FUND	Govt. Rev.											
		(iii) OTHER LC	Sec. 402	G	11	95	51	456			312	24	13	120
		B. P.L. 480 LC												
II OPERATIONAL YEAR (EST.)		A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
		FA ACT (ii) TRUST FUND	Govt. Rev.		9	9	43	43					43	43
		(iii) OTHER LC	Sec. 402	G		57		274			186	14		74
		B. P.L. 480 LC												
III BUDGET YEAR (EST.)		A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
		FA ACT (ii) TRUST FUND	Govt. Rev.		10	11	48	54					48	54
		(iii) OTHER LC	Sec. 402	G		90		429			292	22		115
		B. P.L. 480 LC												
IV PLANNING YEAR (EST.)		A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
		FA ACT (ii) TRUST FUND												
		(iii) OTHER LC												
		B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)		A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
		FA ACT (ii) TRUST FUND												
		(iii) OTHER LC												
		B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)		A. (i) LC COSTS CHGD TO \$ ACCTS. 2/												
		FA ACT (ii) TRUST FUND	Govt. Rev.		33	33	157	157					157	157
		(iii) OTHER LC	Sec. 402	G	280	280	1,338	1,338			913	69	356	356
		B. P.L. 480 LC												

## REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c		PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING CTRY. INDIA		3. PERSONNEL SERVICES PARTICIPANT TRAINING		BEG. FY 1960 1966		END FY 1966 1964		4. PROJECT NO. 386-11-420-179								
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		a. CUM. THRU ACTUAL FY			b. ACTUAL FY 1964			c. OPERATIONAL FY 1965			d. BUDGET FY 1966			e. PLANNING FY 1967			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL		A. MAN YEARS	U.S.	-	-	27.2	-	-	7	-	-	-	8.25	-	-	-	-	-	-	-	-	-	50.45
		Non U.S.																					
		B. ON BOARD	U.S.																				
		Non U.S.																					
II. PARTICIPANTS PROGRAMMED		A. U.S.																					20
		B. THIRD CTRY.																					

## REMARKS:

1/ End of Fiscal Year

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

E-1b

1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	3. Funding 1960 Phys. Work 1960	BEG. FY 1963 1966	END FY 1963 1966	4. PROJECT NO. 386-11-420-179	5. TITLE Bombay Central Training Institute for Craftsmen and Instructors	6. PRIOR REFERENCES:
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7. OBLIGATED AND DISBURSED	g. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR  TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G	-	-	-	-	-	-	-	-	-	-
	FA ACT	(ii) TRUST FUND Govt. Revenue	-	14	12	66	60	-	-	-	-	66	60
		(iii) OTHER LC Sec. 402	G	280	133	1,338	635	-	-	435	33	356	167
	B. P.L. 480 LC												
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		-	-	-	-	-	-	-	-	-	-
	FA ACT	(ii) TRUST FUND Govt. Revenue	-	9	9	43	43	-	-	-	-	43	43
		(iii) OTHER LC Sec. 402	G	-	57	-	274	-	-	186	14	-	74
	B. P.L. 480 LC												
III BUDGET YEAR (EST.) FY 1966	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		-	-	-	-	-	-	-	-	-	-
	FA ACT	(ii) TRUST FUND Govt. Revenue	-	10	11	48	54	-	-	-	-	48	54
		(iii) OTHER LC Sec. 402	G	-	90	-	429	-	-	292	22	-	115
	B. P.L. 480 LC												
IV PLANNING YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		-	-	-	-	-	-	-	-	-	-
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		-	-	-	-	-	-	-	-	-	-
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		-	-	-	-	-	-	-	-	-	-
	FA ACT	(ii) TRUST FUND Govt. Revenue	-	33	33	157	157	-	-	-	-	157	157
		(iii) OTHER LC Sec. 402	G	280	280	1,338	1,338	-	-	913	69	356	356
	B. P.L. 480 LC												

REMARKS:  
1/ Exchange Rate: \$1 = Rs. 4.7876  
2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c

PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS

1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING CTRY. INDIA	3. PERSONNEL SERVICES PARTICIPANT TRAINING	BEG. FY 1960 1966	END FY 1966 1966	4. PROJECT NO. 386-11-420-179
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I PROJECT PERSONNEL	A. MAN YEARS	U.S. Non U.S.	g. CUM. THRU ACTUAL FY			b. ACTUAL FY 1964			c. OPERATIONAL FY 1965			d. BUDGET FY 1966			e. PLANNING FY 1967			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
			Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
B. ON BOARD	U.S.	-	-	27.2	-	-	7	-	-	8	-	-	8.3	-	-	-	-	-	-	-	-	-	043.5
	Non U.S.	-	-	-	-	-	7	-	-	9	-	-	9	-	-	-	-	-	-	-	-	-	-
II. PARTICIPANTS PROGRAMMED	A. U.S.	-	-	20	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
	B. THIRD CTRY.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

REMARKS:  
1/ End of Fiscal Year

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-420-179	Bombay Training Center
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1. The Activity Target

The objectives of this activity are to:

- (a) help the GOI in establishing the Central Training Institute, Kurla, Bombay, and in installing training courses for craftsmen/instructors at the CTI.
- (b) assist the GOI to meet its requirement for 9,000 trained instructors in skilled trades during the Third Plan; and
- (c) contribute to development of a skilled, efficient manpower pool.

2. The Course of Action

USAID assistance to the Bombay Institute is being provided through a contract with the Dunwoody Institute of Minneapolis, Minnesota. Sufficient funds were provided in previous years to cover the contract costs. The contract provides the services of technicians assigned to the Bombay Institute, training to selected participants and limited commodity procurement. Demonstration and teaching equipment also has been provided to the Institute.

Contract Technicians

The following contract technicians are provided:

- (1) Chief Advisor
- (2) Electrical Advisor
- (3) Motor Mechanic Advisor
- (4) Sheet Metal Worker
- (5) Welder
- (6) Principles of Teaching
- (7) Machinist
- (8) Grinder
- (9) Mechanical Instrument Specialist

3. Progress to Date

This activity was completely funded in FY 1963. Operations began in the summer of 1962. The CTI is a smooth running operation.

The CTI already has attained its near capacity level. It started with 140 trainees and the Third Plan target is 340 trainees in 15 engineering trades. At present it is training 320 instructors per term. As of April 30, 1964, 1,590 or over 17% of the total GOI Third Plan target had graduated from the Bombay Institute.

Funds to the extent of \$975,000 of DG and Sec. 402 to the equivalent of \$280,000 were provided under this contract. The local currency costs of this project during the Third Plan period are being met out of PL 480 funds made available under the Craftsmen Training Project.

All the technicians except (1) the Sheet Metal Worker and (2) the Principles of Teaching Advisor are now on the job. These positions have been difficult to fill. Candidates have been found but last minute withdrawals have left these positions unfilled. Recruitment action continues.

Contract Participants

The contract has provision for the training of twenty participants, who upon completion of their U.S. training are expected to become key members of the Institute staff.

As of July 31, 1964, nine Senior Instructors from the Bombay CTI had returned to India after completing training in their respective trades for six months each in the U.S.

Seven participants are receiving training in the U.S. and are expected to return to India early in 1965. The contract is valid upto May 25, 1966.

Commodities

A technical library, workshop, teaching and demonstration equipment valued at \$340,000 has been provided to the CTI.

The GOI is providing the building and the equipment which was procured locally.

AID 102D-3 (7-64)	PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES										SECURITY CLASSIFICATION UNCLASSIFIED			
E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		END FY		4. PROJECT NO.		5. TITLE		6. PRIOR REFERENCES:	
	November 1964		India		Funding 1962		1965		386-31-420-214		Craftsmen Training			
7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)				
	(1)	(2)	(3)	(1)		(2)		(1)	(2)	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER		
	TYPE	SOURCE	LOAN OR GRANT	(a)	(b)	(a)	(b)	OBLIGATED	DISBURSED	(a)	(b)	OBLIGATED	DISBURSED	
	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	FA ACT (ii) TRUST FUND	ACT (iii) OTHER LC											
I CUMULATIVE THRU ACTUAL YEAR	B. P.L. 480 LC	Sec. 104(e)	G	57,231	57,231	274,000	274,000	274,000	274,000					
TOTAL ACTUAL FY 1964	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	FA ACT (ii) TRUST FUND	ACT (iii) OTHER LC											
	B. P.L. 480 LC	Sec. 104(e)	G	38,432	41,692	184,000	199,606	184,000	199,606					
II OPERATIONAL YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	FA ACT (ii) TRUST FUND	ACT (iii) OTHER LC											
FY 1965	B. P.L. 480 LC	Sec. 104(e)	G	16,355	16,355	78,300	78,300	78,300	78,300					
III BUDGET YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	FA ACT (ii) TRUST FUND	ACT (iii) OTHER LC											
FY _____	B. P.L. 480 LC													
IV PLANNING YEAR (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	FA ACT (ii) TRUST FUND	ACT (iii) OTHER LC											
FY _____	B. P.L. 480 LC													
V ALL SUBSEQUENT FYs (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	FA ACT (ii) TRUST FUND	ACT (iii) OTHER LC											
FY _____	B. P.L. 480 LC													
VI TOTAL ALL YEARS (EST.)	A. (i) LC COSTS CHGD TO \$ ACCTS. 2/	FA ACT (ii) TRUST FUND	ACT (iii) OTHER LC											
FY _____	B. P.L. 480 LC	Sec. 104(e)	G	73,586	73,586	352,300	352,300	352,300	352,300					

## REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES PARTICIPANT TRAINING			BEG. FY			END FY			4. PROJECT NO.				
	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS	
	A. MAN YEARS	U.S.	Non U.S.	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract		
I PROJECT PERSONNEL	B. ON BOARD	U.S.	Non U.S.																				
II PARTICIPANTS PROGRAMMED	A. U.S.																						
	B. THIRD CTRY.																						

## REMARKS:

1/ End of Fiscal Year

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-31-420-214	Craftsmen Training
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1. The Activity Target

This project aims to assist the GOI in the improvement of existing Industrial Training Centers for the training of craftsmen and raising their number to 318, to accommodate a total of 100,000 trainees, during the Third Plan. It is estimated that 1.3 million craftsmen will be needed to meet the requirements of India's industrial development during the Third Plan period.

2. Course of Action

To grant P.L. 480 funds to underwrite a major portion of the GOI's expenditures made for this purpose during the first five years of the Third Plan. The total estimated GOI expenditure on the expansion of craftsmen training scheme during the Third Plan is Rs. 491 million.

During FY 1965 it is proposed to grant to the GOI a further sum of Rs. 78.3 million for continuing the expansion of craftsmen training facilities. Cumulative total through FY 1965 - Rs.352.3 million.

Vocational training is of vital importance to the success of the Indian economic development plans. The development plans call for large-scale industrial expansion which, in turn, requires increased numbers of technical personnel, including craftsmen, to maintain and operate the industries. It was recognized as a priority program in the Second Plan and this emphasis is reflected in the Third Plan. U.S. assistance for objectives similar to those of this activity was provided in the past under Project 386-11-420-056, Trades Training.

Following is a brief description of GOI program for the training of craftsmen:

a. Industrial Training Institute

Free training in 29 engineering and 22 non-engineering trades is provided to those between 16 and 25 years of age. As of October 15, 1964 there are 298 Industrial Training Institutes with a total

capacity of 89,846 pupils; it is expected there will be 318 ITIs, with a seating capacity of over 100,000, by the end of the Third Plan. However, in view of the popularity of the training, it is expected that by the end of the Third Plan there will be at least 500,000 applicants for the 100,000 seats.

While expanding the seating capacity, efforts are being made to raise the quality of training, ensuring uniformity of standards and efficient implementation of the GOI craftsmen training schemes. Aptitude tests are used for the selection of trainees for admission to the ITIs.

Trade committees of experts in all concerned trades are set up for preparation of trade manuals, intensifying inspection of ITIs and conducting trade tests and All-India skill competitions. Improved trade manuals for moulders, plumbers and draughtsmen were introduced in March 1964.

As an administrative measure, the GOI requested each state to place the operation of its training schemes and employment service under the control of a full-time Director; this integration has been accomplished in six Indian States.

b. The Apprenticeship Training Scheme

By a 1961 Act of the Legislature Indian industries in general are required to train apprentices, and the provisions of the Act are gradually being extended to more and more industries. In order to ensure efficient implementation of the Act the GOI maintain contacts with major employers in both the public and private sectors.

The GOI expects to train 14,000 apprentices by the end of the Third Plan; as of June 30, 1964, 10,000 apprentices had been trained, generally in such engineering industries as mechanical, electrical; manufacturing, electricity generation, transmission and distribution, chemical engineering, automobiles and heavy machinery.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-31-420-214	Craftsmen Training
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c. Part-Time Classes for Industrial Workers

The objective of this scheme is to impart trade knowledge to industrial workers who have not had the benefit of training. At the beginning of the Third Plan 2,142 seats were available, and the number is expected to increase to 11,292 by the end of the Plan period; as of December 31, 1963, 3,545 seats had been sanctioned.

In order to staff the Industrial Training Institutes it is proposed to train 9,000 craft instructors at the seven Central Training Institutes. By means of three-month refresher courses at the CTIs for the ITI instructors the GOI seeks to improve the efficiency of crafts instructors at the ITIs, at private institutions and in industrial establishments.

3. Progress to Date

As of June 30, 1964, Rs. 274 million had been obligated under this project for the partial attainment of GOI objectives as follows:

Craftsmen Training Scheme

As of October 15, 1964, 89,846 seats had been introduced and 79,157 students were actually receiving training throughout the country; thus about 90 percent of the Third Plan target of 100,000 seats has been achieved.

Apprenticeship Training Scheme

As of June 30, 1964, 10,000 apprentices in various industries had received training, against the Third Plan target of 14,000.

Progress was also maintained under the engineering classes and the instructor training schemes.

The U.S. assistance is expected to terminate by the end of the Third Plan, but the GOI program for the training of craftsmen is a permanent one. Through the enactment of legislation, expansion of the training institutes, and financing of these programs the GOI expects to meet its requirements of skilled craftsmen for the industries.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-10	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA				3. PROJECT NO. -				4. TITLE Goal: Foreign Exchange and the Essentials of Long Range Investment Allocation Strategy					
	5. U.S. FUNDING:		BEGIN FY 1958		END FY 1965		6. PRIOR REFERENCES -									
	PHYSICAL WORK:		1959		1967											
7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRI- ATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT
						AID	PASA									
I. THRU ACTUAL YEAR  FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	DL I	I	879,143*	-	-	-	-	-	-	879,143	-	-	-	-	-
		TC I	I	18,366	-	-	-	-	-	-	18,366	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)	DL I	I	225,000	-	-	-	-	-	-	225,000	-	-	-	-	-
		TC I	I	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	DL I	I	583,158	-	-	-	-	-	-	583,158	-	-	-	-	-
		TC I	I	15,346	-	-	-	-	-	-	15,346	-	-	-	-	-
EXPENDITURES (ACTUAL YEAR)	DL I	I	243,488	-	-	-	-	-	-	243,488	-	-	-	-	-	
	TC I	I	2,859	-	-	-	-	-	-	2,859	-	-	-	-	-	
C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL I	I	295,985	-	-	-	-	-	-	295,985	-	-	-	-	-	
	TC I	I	3,020	-	-	-	-	-	-	3,020	-	-	-	-	-	
II. OPERATIONAL YEAR (EST.)  FY 1965	A. GROSS OBLIGATIONS	DL I	I	209,717	-	-	-	-	-	-	209,717	-	-	-	-	
		TC I	I	-	-	-	-	-	-	-	-	-	-	-	-	
	B. EXPENDITURES	DL I	I	246,697	-	-	-	-	-	-	246,697	-	-	-	-	
		TC I	I	2,000	-	-	-	-	-	-	2,000	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL I	I	259,005	-	-	-	-	-	-	259,005	-	-	-	-	
		TC I	I	1,020	-	-	-	-	-	-	1,020	-	-	-	-	
III. BUDGET YEAR (EST.)  FY 1966	A. GROSS OBLIGATIONS	DL I	I	225,000	-	-	-	-	-	-	225,000	-	-	-	-	
		TC I	I	-	-	-	-	-	-	-	-	-	-	-	-	
	B. EXPENDITURES	DL I	I	212,000	-	-	-	-	-	-	212,000	-	-	-	-	
		TC I	I	1,020	-	-	-	-	-	-	1,020	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL I	I	272,005	-	-	-	-	-	-	272,005	-	-	-	-	
		TC I	I	-	-	-	-	-	-	-	-	-	-	-	-	
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/	DL I	I	225,000	-	-	-	-	-	-	225,000	-	-	-	237,000	
		TC I	I	-	-	-	-	-	-	-	-	-	-	-	-	
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/	DL I	I	-	-	-	-	-	-	-	-	-	-	-	263,000	
		TC I	I	-	-	-	-	-	-	-	-	-	-	-	-	
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	DL I	I	1,538,860*	-	-	-	-	-	-	1,538,860	-	-	-	1,538,860	
		TC I	I	18,366	-	-	-	-	-	-	18,366	-	-	-	18,366	

## REMARKS:

- 1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

\*Includes for closed projects \$54,939

AID 10204 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	Foreign Exchange and the Essentials of Long Range Investment Allocation Strategy -- Explanatory Note
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FY66-FY67 Capital Assistance in India

Planning for capital assistance to be provided more than one year in the future is meaningful only if based on levels of such assistance in the past and projected requirements for such assistance. The total capital assistance is the sum of individual projects, for which applications are received through the Ministry of Finance, Government of India. These applications are submitted only when a project report has been prepared for the project, and generally are submitted early in the fiscal year for which financing is required. Consequently, no loan applications have yet been submitted for capital assistance in either FY66 or FY67. The planning and technical review mechanisms of the Government of India do not permit projection more than a year in advance of the financing requirements for individual projects intended to be submitted for United States assistance, and indeed probably would not be financially or economically sound to attempt to project specifics of this kind more than one year into the future. Factors which affect such long range projections are alternative sources of financing, changing priorities, and development of indigenous capacities.

However, on the basis of prior capital assistance and requirements reflected in the composition of the Five Year Plans, it is possible to project with reasonable assurance a level of assistance which will be requested from the GOI. The level of capital assistance in the past few years has been fixed by the United States pledge at the annual Indian Consortium meeting. This has been \$435 million for each of the past two years. Experience has shown that these funds have been, or are being, fully utilized. (See TOAID A-303 dated August 17, 1964 for a status report on utilization of United States Consortium pledges as of August 1, 1964.) It is felt that an amount of about the level of \$435 million should be made available for FY66, but no definite decisions have been made in this respect for next year's Consortium meeting. For FY67, with the start of the Fourth Five Year Plan on April 1, 1967, it is estimated that a level of annual assistance somewhat higher than \$435 million may be required. Again, however, no firm planning has been attempted or decisions taken by the USG in this regard.

At the moment, the GOI is considering the role of large capital projects, both those remaining in the Third Plan for

which financing has not yet been obtained, and those to be included in the Fourth Plan. In the recent past, capital projects have accounted for approximately 50 percent of United States capital assistance to India. Because a growing economy requires more kinds and more quantities of imported components and materials, and this absolute requirement generally outpaces a country's ability to develop economic sources of indigenous supply, it is probable that the level of non-project capital assistance might need to be increased from the current annual level of \$225-250 million. Although the Government of India is actively attempting to develop indigenous sources for imported requirements in this regard, an increased level of non-project capital assistance may well be required through the Fourth Five Year Plan. Concomitant with efforts to develop indigenous productive capacities, the accent of capital assistance for projects may shift somewhat from infrastructure and public sector projects to large industrial and more private sector projects.

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

SECURITY CLASSIFICATION  
UNCLASSIFIED

E-1b

1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	3. Funding 1959 Phys. Work 1959	BEG. FY 1959	END FY 1966	4. PROJECT NO.	5. TITLE Goal: Foreign Exchange and the Essentials of Long Range Investment Allocation Strategy
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7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	-	-	-	-	-	-	-	-	-	-	-
	FA ACT	(ii) TRUST FUND	-	-	-	-	-	-	-	-	-	-	-
		(iii) OTHER LC	-	-	-	-	-	-	-	-	-	-	-
	B. P.L. 480 LC	Sec. 104 (g)	L	159,162 **	159,162	762,000	762,000	762,000	762,000	-	-	-	-
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	-	-	-	-	-	-	-	-	-	-	-
	FA ACT	(ii) TRUST FUND	-	-	-	-	-	-	-	-	-	-	-
		(iii) OTHER LC	-	-	-	-	-	-	-	-	-	-	-
	B. P.L. 480 LC	Sec. 104 (g)	L	62,661 *	82,922	300,000	397,000	300,000	397,000	-	-	-	-
II OPERATIONAL YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	-	-	-	-	-	-	-	-	-	-	-
	FA ACT	(ii) TRUST FUND	-	-	-	-	-	-	-	-	-	-	-
		(iii) OTHER LC	-	-	-	-	-	-	-	-	-	-	-
	B. P.L. 480 LC	Sec. 104 (g)	L	73,105	73,105	350,000	350,000	350,000	350,000	-	-	-	-
III BUDGET YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	-	-	-	-	-	-	-	-	-	-	-
	FA ACT	(ii) TRUST FUND	-	-	-	-	-	-	-	-	-	-	-
		(iii) OTHER LC	-	-	-	-	-	-	-	-	-	-	-
	B. P.L. 480 LC	-	-	-	-	-	-	-	-	-	-	-	-
IV PLANNING YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	-	-	-	-	-	-	-	-	-	-	-
	FA ACT	(ii) TRUST FUND	-	-	-	-	-	-	-	-	-	-	-
		(iii) OTHER LC	-	-	-	-	-	-	-	-	-	-	-
	B. P.L. 480 LC	-	-	-	-	-	-	-	-	-	-	-	-
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	-	-	-	-	-	-	-	-	-	-	-
	FA ACT	(ii) TRUST FUND	-	-	-	-	-	-	-	-	-	-	-
		(iii) OTHER LC	-	-	-	-	-	-	-	-	-	-	-
	B. P.L. 480 LC	-	-	-	-	-	-	-	-	-	-	-	-
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	-	-	-	-	-	-	-	-	-	-	-
	FA ACT	(ii) TRUST FUND	-	-	-	-	-	-	-	-	-	-	-
		(iii) OTHER LC	-	-	-	-	-	-	-	-	-	-	-
	B. P.L. 480 LC	Sec. 104 (g)	L	232,267	232,267	1,112,000	1,112,000	1,112,000	1,112,000	-	-	-	-

REMARKS:  
1/ Exchange Rate: \$1 = Rs. 4.7876  
2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a  
\*Includes for closed projects; PL 480 \$20,887  
\*\*Includes for closed projects; PL 480 \$41,775

E-1c

PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS

8. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	9. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS				
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract		
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																					
		Non U.S.																					
	B. ON BOARD	U.S.																					
		Non U.S.																					
II. PARTICIPANTS PROGRAMMED	A. U.S.																						
	B. THIRD CTRY.																						

REMARKS:  
1/ End of Fiscal Year

<b>AID FORM 10-112 (7-62)</b>	<b>DATE PREPARED</b> 1 November 1964	<b>COOPERATING COUNTRY</b> INDIA	<b>SECURITY CLASSIFICATION</b> UNCLASSIFIED	<b>MULTI-YEAR LISTING</b>	<b>Goal: Foreign Exchange and the Essentials of Long Range Investment Allocation Strategy</b>	<b>E-4</b>
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Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year	Operational Year	Budget	Budget +1	Budget +2	Budget +3	Budget +4	All Subsequent Years	Total All Years
				FY 1964	FY 1965	FY 1966	FY 1967	FY 1968	FY 1969	FY 1970		
Unnumbered	Capital Equipment	DL	39,865	--	--	--	--	--	--	--	--	39,865
		DG	--	--	--	--	--	--	--	--	--	--
		SA	--	--	--	--	--	--	--	--	--	--
		480	--	--	--	--	--	--	--	--	--	--
		L/C	--	--	--	--	--	--	--	--	--	--
		Coop. C.	--	--	--	--	--	--	--	--	--	--
Unnumbered	Steel Imports	DL	84,339	--	(283)	--	--	--	--	--	--	84,056
		DG	--	--	--	--	--	--	--	--	--	--
		SA	--	--	--	--	--	--	--	--	--	--
		480	--	--	--	--	--	--	--	--	--	--
		L/C	--	--	--	--	--	--	--	--	--	--
		Coop. C.	--	--	--	--	--	--	--	--	--	--
386-46-920-134	Industrial Development Bank of India	DL	--	--	--	--	--	--	--	--	--	--
		DG	--	--	--	--	--	--	--	--	--	--
		SA	--	--	--	--	--	--	--	--	--	--
		480	75,612	20,887	52,218	--	--	--	--	--	--	127,830
		L/C	--	--	--	--	--	--	--	--	--	--
		Coop. C.	--	--	--	--	--	--	--	--	--	--
386-26-920-165 386-46-920-165	Industrial Finance Corporation I & II	DL	30,000	--	10,000	--	--	--	--	--	--	40,000
		DG	--	--	--	--	--	--	--	--	--	--
		SA	--	--	--	--	--	--	--	--	--	--
		480	--	--	--	--	--	--	--	--	--	--
		L/C	--	--	--	--	--	--	--	--	--	--
		Coop. C.	--	--	--	--	--	--	--	--	--	--
386-26-920-168 386-46-920-168	Industrial Credit and Investment Corporation	DL	5,000	--	--	--	--	--	--	--	--	5,000
		DG	--	--	--	--	--	--	--	--	--	--
		SA	--	--	--	--	--	--	--	--	--	--
		480	41,775	20,887	20,887	--	--	--	--	--	--	62,662
		L/C	--	--	--	--	--	--	--	--	--	--
		Coop. C.	--	--	--	--	--	--	--	--	--	--

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE AK-3

BEST AVAILABLE

AID FORM 10-112 (7-62)	DATE PREPARED	COOPERATING COUNTRY	SECURITY CLASSIFICATION	MULTI-YEAR LISTING					Goal: Foreign Exchange and the Essentials of Long Range Investment Allocation Strategy				E-4
	1 November 1964	INDIA	UNCLASSIFIED										
Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year FY 1964	Operational Year FY 1965	Budget FY 1966	Budget +1 FY 1967	Budget +2 FY 1968	Budget +3 FY 1969	Budget +4 FY 1970	All Subsequent Years	Total All Years	
386-22-210-209	Orissa Iron Ore	DL	-	-	-	-	-	-	-	-	-	-	
		DG	18,366	-	-	-	-	-	-	-	-	18,366	
		SA	-	-	-	-	-	-	-	-	-	-	
		480	-	-	-	-	-	-	-	-	-	-	
		L/C	-	-	-	-	-	-	-	-	-	-	
		Coop. C.	-	-	-	-	-	-	-	-	-	-	
Unnumbered	Non-Project Imports I,II, III & IV	DL	665,000	225,000	200,000	225,000	225,000	-	-	-	-	1,315,000	
		DG	-	-	-	-	-	-	-	-	-	-	
		SA	-	-	-	-	-	-	-	-	-	-	
		480	-	-	-	-	-	-	-	-	-	-	
		L/C	-	-	-	-	-	-	-	-	-	-	
		Coop. C.	-	-	-	-	-	-	-	-	-	-	
	Total: AID Activities, Foreign Exchange and the Essentials of Long Range Investment Allocation Strategy	DL	824,204	225,000	209,717	225,000	225,000	-	-	-	-	1,483,921	
		DG	18,366	-	-	-	-	-	-	-	-	-	18,366
		SA	-	-	-	-	-	-	-	-	-	-	-
		480	117,387	41,774	73,105	-	-	-	-	-	-	-	190,492
		L/C	-	-	-	-	-	-	-	-	-	-	-
		Coop. C.	-	-	-	-	-	-	-	-	-	-	-
		DL	-	-	-	-	-	-	-	-	-	-	
		DG	-	-	-	-	-	-	-	-	-	-	
		SA	-	-	-	-	-	-	-	-	-	-	
		480	-	-	-	-	-	-	-	-	-	-	
		L/C	-	-	-	-	-	-	-	-	-	-	
		Coop. C.	-	-	-	-	-	-	-	-	-	-	
		DL	-	-	-	-	-	-	-	-	-	-	
		DG	-	-	-	-	-	-	-	-	-	-	
		SA	-	-	-	-	-	-	-	-	-	-	
		480	-	-	-	-	-	-	-	-	-	-	
		L/C	-	-	-	-	-	-	-	-	-	-	
		Coop. C.	-	-	-	-	-	-	-	-	-	-	

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE AK-4

1/ MSP Loan, charged to TC Funds.

BEST AVAILABLE

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

E-1b

1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	3. Funding 1959 Phys. Work 1959	BEG. FY 1965 1966	END FY 1965 1966	4. PROJECT NO. 386-46-920-134	5. TITLE Industrial Development Bank of India / (386-W-91-OM)	6. PRIOR REFERENCES: Refinance Corporation 386-15-920-134 /
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7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
	I CUMULATIVE THRU ACTUAL YEAR												
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	Sec.104(g)	L*	75,612	75,612	362,000	362,000	362,000	362,000	-	-	-	-
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	Sec.104(g)	L**	20,887	41,148	100,000	197,000	100,000	197,000	-	-	-	-
II OPERATIONAL YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	Sec.104(g)	L	52,218	52,218	250,000	250,000	250,000	250,000	-	-	-	-
III BUDGET YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
IV PLANNING YEAR (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
	FA ACT	(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	Sec.104(g)	L	127,830	127,830	612,000	612,000	612,000	612,000	-	-	-	-

REMARKS:

1/ Exchange Rate: \$1 = Rs.4.7876

Refers to Annexes 1 & 13 of LAS.

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF:			2. COOPERATING CTRY.			3. PERSONNEL SERVICES PARTICIPANT TRAINING			BEG. FY	END FY	4. PROJECT NO.									
	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
			Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																						
		Non U.S.																						
B. ON BOARD	U.S.																							
	Non U.S.																							
II. PARTICIPANTS PROGRAMMED	A. U.S.																							
	B. THIRD CTRY.																							

REMARKS:

\* Part of Loan No. ICAX-86-4

1/ End of Fiscal Year

\*\* Part of Loan No. AID-86-11

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-46-920-134	Industrial Development Bank of India
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### 1. The Activity Target

This activity is related to the broader goal of increasing industrial production and promoting private investment during the Third Plan. Specifically the project is designed to strengthen and support the new Industrial Development Bank of India (IDBI), established June 20, 1964.

The new development bank, a wholly-owned corporate subsidiary of the Reserve Bank of India, is designed to coordinate existing sources of industrial finance in India as well as undertake wide range of industrial financing and promotion activities on its own account by way of refinance, direct loans, guarantees, underwriting and other means. The initial resources of the IDBI will amount to Rs. 200 million of issued capital plus a Rs. 100 million interest free loan from the Government. The IDBI is empowered to sell bonds and debentures, to borrow from the Reserve Bank (including funds from a special Industrial Credit Fund to be established by the Reserve Bank) and from other sources (including foreign currency loans) and to accept deposits, etc. to increase its resources. The IDBI will also administer a "Development Assistance Fund" to be created by the Government to finance essential industrial projects. Finally, the IDBI has absorbed the Refinance Corporation for Industry (RCI) and is empowered to buy up shares in the Industrial Finance Corporation with the possibility ultimately of making it a subsidiary or of merging it with the IDBI.

Since IDBI absorbed the RCI with effect from September 1, 1964, this project represents the continuation with broader scope of the Project, "Refinance Corporation", as described in earlier E-1s. At the time of absorption the RCI had utilized Rs. 262 millions of a total of Rs. 362 millions made available from PL 480 loan funds to reimburse the Government of India for loans it had made or intended to make to the RCI for relending to private industry. The obligations provided for in Agreement No.88 and its Supplement No.1 were transferred from the RCI to the IDBI by Revision No. 1 of Supplement No.1, along with the unexpended balance of Rs. 100 million.

Proposed new loans to the IDBI will not necessarily be confined to refinancing, however, but will be available for the entire spectrum of activities described above.

### 2. The Course of Action

- a. To provide financial support for the RCI (through September 1, 1964) and subsequently for the IDBI with loans of PL 480 Title I Section 104(g) rupees.
- b. The loans will be channeled through the Government of India according to loan agreements between the GOI and AID.

- c. From time to time the GOI has advanced amounts needed to the RCI on the basis of the latter's commitments. In the future the GOI will make advances to the IDBI under similar circumstances.

- d. AID will reimburse the GOI for the latter's advances as made under c. above.

### 3. Progress To Date

The experience of the IDBI, in the limited period since its founding, has not been sufficient to permit appraisal. The USAID, however, has talked with its managing officials and believes that the operation of the IDBI will prove to be successful. In particular, it is noted that the absorption of the RCI will include transfer of its staff, and continued good performance can be expected in that department of the IDBI on the basis of the record. As already noted, the RCI has utilized Rs. 262 millions of previous loans. Assistance has been extended mainly to promote the development of the textile machinery, food products, industrial chemical and fertilizer industries. RCI refinancing has been extended through all the leading commercial banks in India, including the Government owned State Bank of India, all fifteen state financial corporations and several state cooperative banks.

Now under consideration, with respect to the IDBI, is a Section 104(g) loan of Rs. 150 million. This proposal, however, may require considerable negotiation with the GOI. The only GOI proposal on hand is a request for a Rs. 100 million grant of PL 480 rupees to reimburse the GOI for the initial interest free loan (with 15 year grace period and payment in 15 equal annual installment thereafter) stipulated in the legislation and noted under "Activity Target" above; Mission is considering obligation of these funds from Section 104(g) sources.

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO.

AK-6

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November, 1964		2. COOPERATING COUNTRY INDIA				3. PROJECT NO. 386-26-220-165 386-46-920-165**				4. TITLE Industrial Finance Corporation I & II					
	5. U.S. FUNDING:		BEGIN FY 1961		END FY 1965		6. PRIOR REFERENCES									
	PHYSICAL WORK:		1961		1967											
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		c. APPROPRIATION TITLE	b. LOAN OR GRANT	a. TOTAL	d. CONTRACT <sup>1/</sup>	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		DL	L*	30,000	-	-	-	-	-	30,000	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)		DL	L	-	-	-	-	-	-	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		DL	L*	8,418	-	-	-	-	-	8,418	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)		DL	L*	3,770	-	-	-	-	-	3,770	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L*	21,582	-	-	-	-	-	21,582	-	-	-	-	-
			DL	L	10,000	-	-	-	-	-	10,000	-	-	-	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS		DL	L	10,000	-	-	-	-	-	10,000	-	-	-	-	
	B. EXPENDITURES		DL	L	5,000	-	-	-	-	-	5,000	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L	26,582	-	-	-	-	-	26,582	-	-	-	-	
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS		DL	L	-	-	-	-	-	-	-	-	-	-	-	
	B. EXPENDITURES		DL	L	10,000	-	-	-	-	-	10,000	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L	16,582	-	-	-	-	-	16,582	-	-	-	-	
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS <sup>2/</sup>		DL	L	-	-	-	-	-	-	-	-	-	16,582	-	
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>		DL	L*	40,000	-	-	-	-	-	40,000	-	-	-	40,000	

## REMARKS:

- <sup>1/</sup> This is a memorandum (non-odd) column.  
<sup>2/</sup> Show estimated expenditures in column i.

\* Loans DLF-118 & AID-36  
 \*\* Rs. 200 million of PL 480 Section 104(g) obligated and disbursed; no unliquidated balance as of 6/30/64.

Refers to Annex 1 & 13 of LAS

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-26-220-165 386-46-920-165	Industrial Finance Corporation I & II
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### 1. Activity Target

The purpose of these loans is to provide a portion of the foreign exchange requirements for medium and long term sub-loans from the Industrial Finance Corporation to private industrial borrowers. The sub-loans are utilized for the establishment of new capacity and expansions.

IFC's capital is contributed by the GOI, Reserve Bank of India, scheduled banks, cooperative societies, and other financial institutions; in addition, the IFC, which was established in 1948, raises funds in the domestic capital market. While the GOI does have controlling interest in its share capital, the management of Industrial Finance Corporation is autonomous.

On July 1, 1964, the Industrial Development Bank of India was established to provide additional credit and other facilities for industrial development. The IDB has acquired 50 percent of the IFC shares and, if the GOI so directs, all powers and holdings of the IFC may be transferred to the IDB. However, GOI officials have indicated there is no intention to exercise this right in the foreseeable future.

### 2. Course of Action

In addition to the two dollar loans already made to IFC (DLF No. 118 and AID No.036) totalling \$30 million, a third loan for \$10 million is now in the process of review to provide further foreign exchange in FY 1965.

### 3. Progress to Date

Since its creation in 1948, the IFC has sanctioned loans to a net amount of \$414 million equivalent, consisting of rupee loans of \$283 million equivalent, foreign currency loans of \$36 million equivalent, underwritings and direct subscription to capital of \$30 million equivalent, and guarantees of \$66 million equivalent. Out of the net sanctioned, \$264 million equivalent or about two-thirds, had been disbursed by June 30, 1964. The total number of projects assisted by the Corporation since its inception is 334 including 224 new undertakings.

The IFC has received two dollar loans from AID and its predecessors totalling \$30 million. Loan No. 118 is programmed entirely by IFC for 17 sub-loans and is about 84 percent disbursed. About 70 percent of loan No.036, authorized in March 1962, has been programmed for 17 sub-loans, although actual disbursements to date have been small. (For details concerning these two loans, see Development Loan Papers DLF-LC/P-211 and AID/DLC/F-17.) Under Section 104(g) of PL 480, AID also has loaned the rupee equivalent of \$42 million through FY 1964 to the Industrial Finance Corporation.

In addition to AID financing, the IFC has received two foreign exchange credits from West Germany totalling DM 40 million which have been fully committed, and a line of credit of 50 million francs from France, of which only 17 percent has been committed. In early FY 1965 West Germany allotted a new line of credit of DM 15 million to the IFC.

AID 1020-2 (8-84)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November, 1964		2. COOPERATING COUNTRY INDIA				3. PROJECT NO. 386-26-920-168 386-46-920-168				4. TITLE Industrial Credit and Investment Corporation of India					
	5. U.S. FUNDING:		BEGIN FY 1961		END FY 1961		5. PRIOR REFERENCES									
	PHYSICAL WORK:		1961		1967											
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT
						AID	PASA									
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	DL	L*	5,000	-	-	-	-	-	-	5,000	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)	DL	L	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	DL	L	636	-	-	-	-	-	-	636	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)	DL	L	151	-	-	-	-	-	-	151	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L	4,364	-	-	-	-	-	-	4,364	-	-	-	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	DL	L	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. EXPENDITURES	DL	L	500	-	-	-	-	-	500	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L	3,864	-	-	-	-	-	3,864	-	-	-	-	-	-
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	DL	L	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. EXPENDITURES	DL	L	2,000	-	-	-	-	-	2,000	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L	1,864	-	-	-	-	-	1,864	-	-	-	-	-	-
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/	DL	L	-	-	-	-	-	-	-	-	-	-	-	1,864	-
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	DL	L*	5,000	-	-	-	-	-	5,000	-	-	-	-	5,000	-

## REMARKS:

1/ This is a memorandum (non-add) column.

2/ Show estimated expenditures in column i.

Refers to Annexes 1 &amp; 13 of LAS.

\* Loan DLF-155.

AID 1020-3 (7-64)		PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES							SECURITY CLASSIFICATION UNCLASSIFIED								
E-1b		1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. Funding		BEG. FY		END FY		4. PROJECT NO.		5. TITLE Industrial Credit and Investment Corporation of India			
		1 November, 1964		INDIA		Phys. Work		1959		1966		386-26-920-168		386-46-920-168			
7. OBLIGATED AND DISBURSED		a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)						
		(1)	(2)	(3)	(1)		(2)		(1)	(2)	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER				
		TYPE	SOURCE	LOAN OR GRANT	DOLLAR EQUIVALENTS (000) 1/		LOCAL CURRENCY UNITS (000)		OBLIGATED	DISBURSED	(a)	(b)	(a)	(b)			
					(a)	(b)	(a)	(b)	OBLIGATED	DISBURSED	U.S. PERS.	NON-U.S. PERS.	OBLIGATED	DISBURSED			
I CUMULATIVE THRU ACTUAL YEAR	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/															
		(ii) TRUST FUND															
		(iii) OTHER LC															
	B. P.L. 480 LC	Sec. 104(g)	I*		41,775	41,775	200,000	200,000	200,000	200,000	-	-	-	-			
TOTAL ACTUAL FY 1964	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/															
		(ii) TRUST FUND															
		(iii) OTHER LC															
	B. P.L. 480 LC	Sec. 104(g)	I**		20,887	20,887	100,000	100,000	100,000	100,000	-	-	-	-			
II OPERATIONAL YEAR (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/															
		(ii) TRUST FUND															
		(iii) OTHER LC															
	B. P.L. 480 LC	Sec. 104(g)	I		20,887	20,887	100,000	100,000	100,000	100,000	-	-	-	-			
III BUDGET YEAR (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/															
		(ii) TRUST FUND															
		(iii) OTHER LC															
	B. P.L. 480 LC																
IV PLANNING YEAR (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/															
		(ii) TRUST FUND															
		(iii) OTHER LC															
	B. P.L. 480 LC																
V ALL SUBSEQUENT FYs (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/															
		(ii) TRUST FUND															
		(iii) OTHER LC															
	B. P.L. 480 LC																
VI TOTAL ALL YEARS (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/															
		(ii) TRUST FUND															
		(iii) OTHER LC															
	B. P.L. 480 LC	Sec. 104(g)	I		62,662	62,662	300,000	300,000	300,000	300,000	-	-	-	-			

REMARKS:  
 1/ Exchange Rate: \$1 = Rs. 4.7876  
 2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c		PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS							1. DATA CURRENT AS OF:		2. COOPERATING CTRY.		3. PERSONNEL SERVICES PARTICIPANT TRAINING		BEG. FY		END FY		4. PROJECT NO.				
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS		a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																					
		Non U.S.																					
B. ON BOARD	U.S.																						
	Non U.S.																						
II. PARTICIPANTS PROGRAMMED	A. U.S.																						
	B. THIRD CTRY.																						

REMARKS:  
 1/ End of Fiscal Year \* Parts of Loans ICAX-86-7 and AID-86-11  
 \*\* Part of Loan AID-86-11

SECURITY CLASSIFICATION UNCLASSIFIED

PAGE NO. AK-10

AID 1020-1 (7-54)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-26-920-168 386-46-920-168	Industrial Credit & Investment Corporation of India
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### 1. Activity Target

The purpose of this loan is to provide a portion of the foreign exchange required for medium and long-term sub-loans to be made by the Industrial Credit and Investment Corporation of India Limited to private industrial borrowers. The sub-loans are to finance the establishment of new industrial concerns and the development and expansion of existing firms. ICICI is a private company incorporated in 1954 to assist private sector industrial enterprises through its lending, guaranteeing, and underwriting functions.

### 2. Course of Action

It is proposed to provide PL 480, Section 104(g) loan funds of \$20.887 million equivalent in FY 1965. The ICICI is also negotiating an additional loan of DM 10 million from West Germany.

### 3. Progress To Date

ICICI has no funded debt, but has borrowed \$90 million in foreign exchange from the International Bank for Reconstruction and Development, DM 25 million from West Germany and rupee funds from the GOI, in addition to AID borrowings.

ICICI has programmed 72 percent of its AID loan of \$5 million for 15 sub-loans, although only 13 percent of the loan has been disbursed. Because of the present availability of sufficient foreign exchange through IBRD and West Germany loans, additional dollar lending by AID to ICICI in the near future is not contemplated. Two loans of Rs. 100 million each to ICICI from sales proceeds under Section 104(g) of PL 480, were made available during FY 1959 and FY 1964 respectively.

For full details concerning this loan, see Development Loan Paper DLF-LC/P-249.

PROJECT DATA SUMMARY — AID DOLLAR COSTS

SECURITY CLASSIFICATION  
UNCLASSIFIED

E-1a

1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-22-210-209				4. TITLE Orissa Iron Ore								
5. U.S. FUNDING:		BEGIN FY 1958	END FY 1958	6. PRIOR REFERENCES													
PHYSICAL WORK:		1959	1966	7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		PERSONNEL SERVICES		PARTICIPANTS		COMMODITIES		OTHER COSTS		LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS			
APPROPRIATION TITLE	LOAN OR GRANT	TOTAL	CONTRACT 1/	(1) U.S. AGENCIES		(2)		(1) U.S. AGENCIES		(2)		(1) DIRECT AND U.S. AGENCIES		(2)		i. 1/ LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
				AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT			
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	DL L*	18,366	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)	DL L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	DL L*	15,346	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)	DL L*	2,859	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL L*	3,020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	DL L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. EXPENDITURES	DL L*	2,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL L*	1,020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	DL L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. EXPENDITURES	DL L*	1,020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IV. PLANNING YR. (EST.) FY	GROSS OBLIGATIONS 2/																
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/																
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	DL L	18,366	-	-	-	-	-	-	-	-	-	-	-	-	-	18,366

REMARKS:

- 1/ This is a memorandum (non-add) column.
- 2/ Show estimated expenditures in column i.

Refers to Annex 1 of L.A.S.  
\*MSP Loan - ICAX-86-6.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-210-209	Orissa Iron Ore
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1. The Activity Target:

To assist India in the development of port and railway facilities for the export of iron ore through the port of Vizagapatam to Japan. The current ore export contract with Japan calls for mining and shipping two million tons of iron ore per year beginning in 1964 and six million tons in 1966. Further increases to eight million tons per year are anticipated and included in the port planning. Thus, at an average price of approximately \$10 per ton, iron ore exports from Vizagapatam are expected to earn \$20 million to a maximum of \$80 million of foreign exchange a year. Ore for the two million ton contract is being mined at Kiriburu, which was developed with Japanese technical and capital assistance, and is hauled by rail for 450 miles including 138 miles of new railroad to Vizagapatam.

The four million ton increment in iron ore production is planned to be accomplished by shipment from the new mining development under way at Bailadilla, Madhya Pradesh, 300 rail miles from the port.

U.S. assistance (limited to foreign exchange financing) is directed toward the following specific targets:

- a. Construction of 26 miles of new railroad to connect Kiriburu Mine to the previously existing railroad at Bimlagarh. (This new railroad will be used almost exclusively for the transportation of iron ore.)
- b. Construction of 113 miles of new railroad between the existing rail lines at Sambalpur and Titilagarh. (This new link will have important side benefits in promoting the agricultural and industrial development of a portion of Orissa State previously far removed from rail.)
- c. Procurement of 25 diesel locomotives for hauling ore trains from Kiriburu to Vizagapatam.
- d. Construction of the following facilities at the Port of Vizagapatam:

(1) An iron ore wharf capable of simultaneously berthing two 50,000 ton ore carrying ships.

(2) An iron ore handling plant, with a capacity of 2,670 tons per hour, or 8.0 million tons per year, for unloading railway cars, stockpiling, reclaiming, and loading ships.

2. The Course of Action:

Equipment for the Kiriburu Mine is being financed by a yen credit equivalent to \$8.0 million from Japan and an Export-Import Bank credit of \$3.8 million. U.S. financing of foreign exchange costs of the railway and port facilities was provided by a 1958 loan of \$20 million from the Asian Economic Development Fund. This amount was subsequently reduced to \$18.37 million, distributed as follows:

Rails, bridge girders and construction equipment for new railroad construction	\$5.66 million
25 diesel locomotives	\$6.97 million
Wharf construction material and equipment and iron ore handling plant.	\$5.74 million
Total:	<u>\$18.37 million</u>

The National Minerals Development Corporation (NMDC) of the Ministry of Steel & Mines has handled the construction and procurement of equipment for the Kiriburu Mine, with technical advice from Japan. The NMDC will also develop a part of the Bailadilla Mine. The U.S. participation in the mining portion of the iron ore export project was in the form of approximately \$3.8 million of Export-Import Bank financing for the major portion of the mobile mining equipment for Kiriburu. Most of the fixed equipment for Kiriburu, such as that for ore crushing, conveying, stockpiling and loading facilities, was obtained from Japan.

Railroad construction for linking both Kiriburu and Bailadilla to Vizagapatam and locomotive procurement for the Kiriburu ore transportation are being accomplished by the Ministry of Railways.

The GOI Ministry of Transport is responsible for construction of the iron ore wharf and specially designed iron ore handling plant and for procurement of auxiliary ore handling equipment. The ore handling plant was designed, supplied and erected by the U.S. firm, Stephens-Adamson Co.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-210-209	Orissa Iron Ore
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3. The Progress to Date:

The mine at Kiriburu is operational and the railroad connecting the mine to Vizagapatam Port is completed. Acquisition of the diesel locomotives is complete, and the 60 ton capacity ore cars are being delivered. The railroad is already shipping ore from Kiriburu and likely to be ready to ship ore from Bailadilla in 1966 on schedule. Difficulties are being encountered at the port with excessive fines in the iron ore and the port is not able to remove them rapidly nor equipped to dispose of them. Remedy for this situation is now under study. The progress at the Vizagapatam port has been slow due to the soft ground encountered at the ore handling plant area.

The stacker and ship loaders have been constructed and final electrical work is under way. Work on the foundations for the car dumpers and surge bin as well as the track for the mobile stockpiler is behind schedule. Thus it is unlikely that the new ore loading equipment will be in full operation before July 1965.

Procurement action for auxiliary ore handling equipment including power shovels and bulldozers for reclaiming ore from stockpiles and shunting locomotives for handling ore cars within the port area is well advanced, and should not hinder completion of the project. The civil works in the ore handling plant are now modified and caissons are being sunk, to connect the belt tunnel from the car dumper to the stockpiling area.

E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY India		3. PROJECT NO.		4. TITLE Steel Imports			
	5. U.S. FUNDING:		BEGIN FY 1959	END FY 1959	6. PRIOR REFERENCES					
	PHYSICAL WORK:		1959		1964					

7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT <sup>1/</sup>	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	DL	L*	84,339	-	-	-	-	-	-	84,339	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)	DL	L	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	DL	L*	84,056	-	-	-	-	-	-	84,056	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)	DL	L*	4,743	-	-	-	-	-	-	4,743	-	-	-	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	DL	L*	(283)	-	-	-	-	-	-	(283)	-	-	-	-	-
	B. EXPENDITURES															
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L*	-	-	-	-	-	-	-	-	-	-	-	-	-
III. BUDGET YEAR (EST.) FY _____	A. GROSS OBLIGATIONS															
	B. EXPENDITURES															
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
IV. PLANNING YR. (EST.) FY _____	GROSS OBLIGATIONS <sup>2/</sup>															
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>	DL	L*	84,056							84,056					

REMARKS:

<sup>1/</sup> This is a memorandum (non-add) column.  
<sup>2/</sup> Show estimated expenditures in column i.

\* Loans DLF 13A, 13B, 78, 159  
 Refers to Annex 1 of LAS.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED		Steel Imports
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1. Activity Target

These loans, the first of which was made in FY 1959, were to finance the acquisition and importation into India of steel products for the expansion and modernization of existing plants and the establishment of new industrial plants to meet priority industrial and transportation needs and, to a lesser extent, to provide critical maintenance items, such as tin plate. The loans were intended to assist India through provision of a specific critically needed commodity.

Recently, financing for steel has been included in larger non-project loans for financing a wider range of import requirements, and AID thus proposes no further financing specifically for this item.

2. Progress to Date

Allocation within India to priority requirements has been through the licensing system of the Government Iron and Steel Controller. Of the total of \$84,339 million which the loans provided, \$64 million was used by the private sector. The loans have been fully licensed against and disbursed, except for small amounts to be deobligated.

For full details concerning these loans, see Development Loan Papers DLF-LC/P-101, DLF-LC/P-150, and DLF-LC/P-260.

PROJECT DATA SUMMARY — AID DOLLAR COSTS

E-1a

1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	3. PROJECT NO. None	4. TITLE Capital Equipment
5. U.S. FUNDING: 1959	BEGIN FY 1959	END FY 1959	6. PRIOR REFERENCES
PHYSICAL WORK: 1959	1965	1965	

7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)	e. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT <sup>1/</sup>	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. <sup>1/</sup> LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
					(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
					AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	DL	L*	39,865	-	-	-	-	-	39,865	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)	DL	L	-	-	-	-	-	-	-	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	DL	L*	38,668	-	-	-	-	-	38,668	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)	DL	L*	2,293	-	-	-	-	-	2,293	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L*	1,197	-	-	-	-	-	1,197	-	-	-	-	-
		DL	*	-	-	-	-	-	-	-	-	-	-	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	DL	*	-	-	-	-	-	-	-	-	-	-	-	-
	B. EXPENDITURES	DL	L*	1,197	-	-	-	-	-	1,197	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L*	-	-	-	-	-	-	-	-	-	-	-	-
III. BUDGET YEAR (EST.) FY _____	A. GROSS OBLIGATIONS														
	B. EXPENDITURES														
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR														
IV. PLANNING YR. (EST.) FY _____	GROSS OBLIGATIONS <sup>2/</sup>														
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>														
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>	DL	L*	39,865						39,865					

REMARKS:

- <sup>1/</sup> This is a memorandum (non-odd) column.
- <sup>2/</sup> Show estimated expenditures in column i.

\* Loans DLF 40 & 157.

Refers to Annex 1 of LAS.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	None	Capital Equipment
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1. Activity Target

These loans provided a portion of the foreign exchange necessary to import from the United States capital machinery and equipment for new and expanding or modernizing private industrial firms primarily metallurgical, electrical, cement, machine tool, paper, industrial machinery, earth-moving machinery, and chemical industries, to increase their total productive capacity.

Provision of foreign exchange not tied to specific projects and available for imports by small and medium size enterprises meets one of India's primary financing requirements.

Since, financing for such capital equipment now is included in large non-project loans for financing a greater range of import requirements, AID proposes no further loans of this type.

2. Progress To Date

The Development Loan Fund, one of AID's predecessor organizations, provided to India dollar loans of \$14.865 million in FY 1959 and \$25 million in FY 1961 for the purpose stated above.

Licenses have been issued against the full amount of the loans. The \$14.865 million loan is entirely disbursed, and approximately \$1 million of the \$25 million loan remains to be disbursed.

See development Loan Papers DLF-LC/P-113 and DLF-LC/P-256 for full details of the program.

## PROJECT DATA SUMMARY — AID DOLLAR COSTS

SECURITY CLASSIFICATION  
UNCLASSIFIED

1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA		3. PROJECT NO. ---				4. TITLE Non-Project Imports, I, II, III & IV								
		5. BEGIN FY 1962		END FY 5/		6. PRIOR REFERENCES										
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a.	b.	c.	d.	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
		APPROPRIATION TITLE	LOAN OR GRANT	TOTAL	CONTRACT 1/	(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	DL	L <sup>1/</sup>	665,000	-	-	-	-	-	-	665,000	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)	DL	L <sup>2/</sup>	225,000	-	-	-	-	-	-	225,000	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	DL	L <sup>3/</sup>	396,441	-	-	-	-	-	-	396,441	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)	DL	L <sup>3/</sup>	213,531	-	-	-	-	-	-	213,531	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L <sup>3/</sup>	268,559	-	-	-	-	-	-	268,559	-	-	-	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	DL	L <sup>2/</sup>	200,000	-	-	-	-	-	-	200,000	-	-	-	-	-
	B. EXPENDITURES	DL	L	240,000	-	-	-	-	-	-	240,000	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L	228,559	-	-	-	-	-	-	228,559	-	-	-	-	-
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	DL	L	225,000 <sup>4/</sup>	-	-	-	-	-	-	225,000	-	-	-	-	-
	B. EXPENDITURES	DL	L	200,000	-	-	-	-	-	-	200,000	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L	253,559	-	-	-	-	-	-	253,559	-	-	-	-	-
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS <sup>2/</sup>	DL	L	225,000 <sup>4/</sup>	-	-	-	-	-	-	225,000	-	-	-	-	215,559
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup> 5/															263,000
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>	DL	L	1,315,000	-	-	-	-	-	-	1,315,000	-	-	-	-	315,000

## REMARKS:

1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

1/ Loans DLF-217 AID-82 &amp; 103

2/ Loan AID-103

3/ Includes \$50 million under AID-111

4/ Approximate figure included for projection purposes only. See statement on FY66-67 Capital Assistance in India, Page

5/ To be determined, see statement in FY66-67 Capital Assistance in India, Page AK-2.

SECURITY CLASSIFICATION UNCLASSIFIED

PAGE NO. AK-19 (Revised)

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	-	Non-Project Imports, I, II, III & IV
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In addition to these eight early loans, the DLF subsequently made three more non-project type loans. They were:

- DLF Loan No. 157 - signed during FY 1961 for \$25.0 million, to provide a portion of the foreign exchange required to import capital machinery and equipment for the private sector;
- DLF Loan No. 159 - signed during FY 1961 for \$25.0 million, to finance the foreign exchange costs of importing specific types of steel products required by public and private enterprises;
- DLF Loan No. 206 - signed during FY 1962 for \$20.0 million, to finance the purchase and importation of a portion of the non-ferrous metals (copper, aluminum, and zinc) needed for India's public and private industries.

The above loans which are still active are described in other E-1s. DLF Loan No. 217, signed in June 1962 in the amount of \$200 million, is usually called the first non-project loan, although this is partly a misnomer as the above list indicates. This was followed by non-project loans of \$240 million in FY 1963 (AID No. 082), \$225 million in FY 1964 (AID No. 103), and an initial \$50 million in FY 1965 (AID No. 111).

The entire amount of loan No. 217 to be utilized has been disbursed; \$174 million in the private sector and \$26 million in the public sector. A small amount remains to be deobligated. The principal commodities which the loan financed are non-ferrous metals (\$33.3 million), steel including railway steel (\$61.9 million), synthetic rubber and tire cord (\$15.2 million), fertilizer (\$14 million), lubricants (\$14.3 million), and wood pulp (\$11.4 million).

The entire amount of loan No. 082 has been allocated, \$221 million to the private sector and \$19 million to the public sector, while approximately \$212 million have been disbursed. Actual utilization of the entire loan will result in a balancing of these allocation figures to \$240 million total. The principal commodities for which the loan has been allocated are non-ferrous metals (\$51.4 million), machinery and machine tools (\$36.1 million), lubricants (\$25.2 million), construction equipment (\$27.3 million), steel, including railway steel (\$32.6), and chemicals (\$22.2 million).

Allocations and licenses have been issued against the full amount of loan No. 103 for the following principal commodity groups: non-ferrous metals (\$52.5 million), iron and steel (\$35.7 million), rubber including natural rubber (\$25.2 million), and automobile components (\$21.0 million). Ordering and disbursement are in initial stages.

Loan No. 111 was authorized in April 1964 and licensing is still in process.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-15-990-000			4. TITLE Technical Support							
	5. U.S. FUNDING: 1952		BEGIN FY 1952	END FY	6. PRIOR REFERENCES											
	PHYSICAL WORK:		1952													
7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES		f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS 1/		
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	13,491	-	9,269	288	-	-	-	-	3,934*	-	-	-	
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	1,533	-	986	78	-	-	-	-	469	-	-	-	
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	13,180	-	9,201	286	-	-	-	-	3,693	-	4,214	-	
	EXPENDITURES (ACTUAL YEAR)	TC	G	1,487	-	979	78	-	-	-	-	430	-	-	-	
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	1,611	260	750	62	260	-	-	539	-	-	-	-	
	B. EXPENDITURES	TC	G	1,733	244	770	58	244	-	-	507	-	154	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	189	16	48	6	16	-	-	32	-	87	-	-	
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TC	G	1,354	138	839	50	138	-	-	327	-	-	-	-	
	B. EXPENDITURES	TC	G	1,348	145	833	53	145	-	-	230	-	87	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	195	9	54	3	9	-	-	129	-	-	-	-	
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/	TC	G	1,600	-	1,136	64	-	-	-	400	-	-	-	1,520 9	
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/													266	-	
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	18,056	398	11,994	464	398	-	-	1,266	-	3,934	-	17,658 398	

## REMARKS:

- 1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

\*Includes Commodities.

SECURITY CLASSIFICATION UNCLASSIFIED

PAGE NO.  
AL-1

AID 1020-3 (7-64)	PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES							SECURITY CLASSIFICATION UNCLASSIFIED							
E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3. BEG. FY		4. PROJECT NO.		5. TITLE						
	1 November 1964		INDIA		Funding 1952 Phys. Work 1952		386-15-990-000		Technical Support						
7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)					
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER			
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED		
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G	-	-	-	-	-	-	-	-	-		
	FA ACT	(ii) TRUST FUND Govt. Revenue		-	-	-	-	-	-	-	-	-	-		
		(iii) OTHER LC Sec. 402		G	5,737	5,693	27,466	27,254	-	-	7,003	4,116	16,364	16,135	
		B. P.L. 480 LC													
	TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G	-	-	-	-	-	-	-	-	-	
		FA ACT	(ii) TRUST FUND Govt. Revenue		-	-	-	-	-	-	-	-	-	-	
		(iii) OTHER LC Sec. 402		G	1,869	1,860	8,947	8,903	-	-	2,684	1,176	5,374	5,043	
	B. P.L. 480 LC														
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G	-	-	-	-	-	-	-	-	-		
	FA ACT	(ii) TRUST FUND Govt. Revenue		-	-	-	-	-	-	-	-	-	-		
		(iii) OTHER LC Sec. 402		G	1,891	1,900	9,053	9,101	-	-	2,683	2,490	3,863	3,928	
		B. P.L. 480 LC													
	III BUDGET YEAR (EST.) FY 1966	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G	-	-	-	-	-	-	-	-	-	
		FA ACT	(ii) TRUST FUND Govt. Revenue		-	-	-	-	-	-	-	-	-	-	
		(iii) OTHER LC Sec. 402		G	1,787	1,792	8,555	8,579	-	-	2,734	2,480	3,341	3,365	
		B. P.L. 480 LC													
IV PLANNING YEAR (EST.) FY 1967		A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G	-	-	-	-	-	-	-	-	-	
		FA ACT	(ii) TRUST FUND Govt. Revenue		-	-	-	-	-	-	-	-	-	-	
		(iii) OTHER LC Sec. 402		G	1,900	1,896	9,096	9,079	-	-	2,830	2,479	3,787	3,770	
		B. P.L. 480 LC													
	V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G	-	-	-	-	-	-	-	-	-	
		FA ACT	(ii) TRUST FUND		-	-	-	-	-	-	-	-	-	-	
		(iii) OTHER LC Sec. 402		G	-	34	-	157	-	-	-	-	-	-157	
		B. P.L. 480 LC													
VI TOTAL ALL YEARS (EST.)		A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/		G	-	4,214	-	20,173	-	-	6,667	9,204	-	4,302
		FA ACT	(ii) TRUST FUND Govt. Revenue		-	-	-	-	-	-	-	-	-	-	-
		(iii) OTHER LC Sec. 402		G	11,315	11,315	54,170	54,170	-	-	15,250	11,565	27,355	27,355	
		B. P.L. 480 LC													

## REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS					1. DATA CURRENT AS OF:		2. COOPERATING CTRY.		3. PERSONNEL SERVICES PARTICIPANT TRAINING		BEG. FY		END FY		4. PROJECT NO.							
	1 November 1964					INDIA		1952		1952		386-15-990-000											
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY					b. ACTUAL FY 1964			c. OPERATIONAL FY 1965			d. BUDGET FY 1966			e. PLANNING FY 1967			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract		
I PROJECT PERSONNEL	A. MAN YEARS	U.S. 708.4	21.6	-	62.7	5.3	3.6	49	2.6	12.1	55	3	12.0	54	4	14							
		Non-U.S. 239	-	60	495	-	146	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
B. ON BOARD	U.S.				58	3	1	55	6	20	50	2	15	50	4	36							
	Non-U.S.				405	-	130	440	-	150	400	-	150	400	-	160							
II. PARTICIPANTS PROGRAMMED	A. U.S.																						
	B. THIRD CTRY.																						

## REMARKS:

1/ End of Fiscal Year

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO. AL-2

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-990-000	Technical Support
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I. DESCRIPTION OF ACTIVITY

The Technical Support activity covers costs not otherwise provided for in technical assistance projects for personnel services, office and household equipment and furnishings, administrative supplies and services and other continuing requirements for backstopping and providing logistic support to all Mission personnel, both direct-hire and contract.

II. BUDGET REQUIREMENTS ( SUMMARY )

	<u>Operational Year FY-65</u>				<u>Budget Year FY-66</u>			
	<u>Direct-Hire</u>		<u>Contract</u>		<u>Direct-Hire</u>		<u>Contract</u>	
	<u>Reg.</u>	<u>Cons.</u>	<u>Reg.</u>	<u>Cons.</u>	<u>Reg.</u>	<u>Cons.</u>	<u>Reg.</u>	<u>Const.</u>
A. No. of U.S. Tech Support Positions (on-board)	53	8	3	31	52	4	-	10
B. Tech Support personnel costs (includes salary, differential, overtime, CSR, Insurance, Health Benefits, Medical, Conference & Consultation travel; Home Leave expenses, etc.)					\$1,071,830			\$1,026,545
C. Tech Support Commodities and Supplies (Includes Office and Household Equipment, Motor Vehicles, Communications Media Equipment, Office Supplies and other continuing requirements)				\$ 538,800				\$ 327,000*
D. Total Dollar Costs				\$1,610,630				\$1,353,545
E. Section 402 Rupees (Dollar Equivalent) to meet all within-India expenses for Tech Support personnel costs, commodity and service contracts (includes U.S. employee allowances, local employee pay and benefits, within-India and international travel costs, communications expenses, rents and utilities for buildings, office and household furnishings and equipment and other continuing requirements)				\$2,081,510 (Sec 402)				\$1,829,180 (Sec 402)
F. GRAND TOTAL:				<u>\$3,692,140</u>				<u>\$3,182,725</u>

\*See details attached for personnel services, and commodity and service contract costs.

AID 1020-3 (7-64)	PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES										SECURITY CLASSIFICATION UNCLASSIFIED						
E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3.	BEG. FY	END FY	4. PROJECT NO.		5. TITLE			6. PRIOR REFERENCES:				
	1 November 1964		INDIA		Funding	1952	1952	386-15-990-000		Technical Support							
7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)			d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)						
	(1)	(2)	(3)	(1)		(2)		(1)	(2)		(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER				
	TYPE	SOURCE	LOAN OR GRANT	DOLLAR EQUIVALENTS (000) 1/		LOCAL CURRENCY UNITS (000)		OBLIGATED	DISBURSED		OBLIGATED	DISBURSED	(a)	(b)	(a)	(b)	
				(a)	(b)	(a)	(b)					U.S. PERS.	NON-U.S. PERS.	OBLIGATED	DISBURSED		
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G			4,214		20,173				6,667	9,204		4,302		
	FA ACT	(ii) TRUST FUND	Govt. Rev.														
		(iii) OTHER LC	Sec. 402	G	5,737		5,693		27,466		27,254				7,003	4,116	16,364
	B. P.L. 480 LC																
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G														
	FA ACT	(ii) TRUST FUND	Govt. Rev.														
		(iii) OTHER LC	Sec. 402	G	1,869		1,860		8,947		8,903				2,684	1,176	5,374
	B. P.L. 480 LC																
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/															
	FA ACT	(ii) TRUST FUND	Govt. Rev.														
		(iii) OTHER LC	Sec. 402	G	1,891		1,900		9,053		9,101				2,683	2,490	3,863
	B. P.L. 480 LC																
III BUDGET YEAR (EST.) FY 1966	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/															
	FA ACT	(ii) TRUST FUND	Govt. Rev.														
		(iii) OTHER LC	Sec. 402	G	1,787		1,792		8,555		8,579				2,734	2,480	3,341
	B. P.L. 480 LC																
IV PLANNING YEAR (EST.) FY 1967	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/															
	FA ACT	(ii) TRUST FUND	Govt. Rev.														
		(iii) OTHER LC	Sec. 402	G	1,900		1,896		9,096		9,079				2,830	2,479	3,787
	B. P.L. 480 LC																
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G														
	FA ACT	(ii) TRUST FUND	Govt. Rev.														
		(iii) OTHER LC	Sec. 402	G			34				157						157
	B. P.L. 480 LC		G														
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G			4,214		20,173				6,667	9,204		4,302		
	FA ACT	(ii) TRUST FUND	Govt. Rev.														
		(iii) OTHER LC	Sec. 402	G	11,315		11,315		54,170		54,170				15,250	11,565	27,355
	B. P.L. 480 LC																

## REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS										1. DATA CURRENT AS OF:		2. COOPERATING CTRY.		3.		4. PROJECT NO.							
											1 November 1964		INDIA		PERSONNEL SERVICES PARTICIPANT TRAINING		1952		386-15-990-000					
I PROJECT PERSONNEL	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			a. CUM. THRU ACTUAL FY			b. ACTUAL FY 64			c. OPERATIONAL FY 65			d. BUDGET FY 66			e. PLANNING FY 67			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
		Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract		
A. MAN YEARS	U.S.	708.4	21.6	3.6	62.7	5.3	3.6	49.0	2.6	13.0	55.0	3.0	12.0	54.0	4.0	14.0				866.4	31.2	42.6		
	Non U.S.	2439.0		60.0	495.0		14.6													2439.0		60.0		
B. ON 1/ BOARD	U.S.				58.0	3.0	1.0	55.0	6.0	20.0	50.0	2.0	15.0	50.0	4.0	36.0								
	Non U.S.				405.0		130.0	440.0		160.0	400.0		150.0	400.0		160.0								
II. PARTICIPANTS PROGRAMMED	A. U.S.																							
	B. THIRD CTRY.																							

## REMARKS:

1/ End of Fiscal Year

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO. AI-2 (Revised)

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-990-000	Technical Support
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**FY 1965 Tech Support Budget Personnel Services**  
**Dollar Components**

Name of the Office	Number of Positions				Man Months	Dollars			Total
	Regular DH	Consultant DH	Regular Contract	Consultant Contract		Pay & Allowance	Trvl. & Totn.	Others	
Director's Office	3	-	-	-	32	44030	800	1500	46330
Program & Finance	2	-	-	4	25	40750	2400	1000	44150
Program Operations Staff	6	-	-	-	53	46615	7400	1000	55015
Food for Peace Branch	3	-	-	-	30	38800	3300	500	42600
Development Loan Division	3	-	-	-	36	44900	4800	-	49700
Participant Training Staff	2	-	-	-	24	24000	1900	-	25900
Asst. Director for Management	14	2	-	-	171	102535	34900	2000	139435
Asst. Director Human Resources	2	-	-	-	24	36400	-	-	36400
Agriculture Division	3	4	-	1	50	75700	1800	-	77500
Health Division	2	-	1	-	42	69700	6400	5100	81200
Education Division	2	-	-	10	84	160800	4200	2500	167500
Asst. Director Physical Resources	2	-	1	-	36	36400	-	-	36400
Industrial Projects & Tech Asst. Div.	1	-	1	6	34	60400	1700	-	62100
Industrial Development Division	1	-	-	2	18	36100	-	-	36100
Power & Water Development Division	4	-	-	1	50	79100	500	-	79600
Transportation & Mining Division	1	2	-	3	19	33500	-	-	33500
Management Division	1	-	-	-	12	21500	-	1000	22500
Labor Division	<u>1</u>	<u>-</u>	<u>-</u>	<u>4</u>	<u>28</u>	<u>35900</u>	<u>-</u>	<u>-</u>	<u>35900</u>
	<u>53</u>	<u>8</u>	<u>3</u>	<u>31</u>	<u>768</u>	<u>987130</u>	<u>70100</u>	<u>14600</u>	<u>1071830</u>

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO.

AI-4

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-990-000	Technical Support
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**FL-65 Tech Support Budget - Personnel Services**  
**Rupee Components**

Name of the Office	Positions				Allowances \$	Trvl. & Tptn. (\$)	Local Pers. \$	Pers. Serv. Con. & Others \$	Benefits			Total \$
	Direct- Hire	Consul- tant	Contract Reg. Const.	Contract Const.					Med. Exam. \$	Med. Att. \$	Ev. Res. \$ Res. \$	
Director's Office	3	-	-	-	12400	3700	-	-	-	-	-	16100
Program & Finance	2	-	-	4	5400	12600	-	-	-	-	-	18000
Program Operations Staff	6	-	-	-	19900	11400	-	-	-	-	-	31300
Food for Peace Office	3	-	-	-	11500	7500	-	-	-	-	-	19000
Development Loan Division	3	-	-	-	13300	5700	-	-	-	-	-	19000
Participant Training Staff	2	-	-	-	8900	7900	-	-	-	-	-	16800
Asst. Director for Management	14	2	-	-	35400	15740 150000	500000	57500	5000	15000	25000	803640
Human Resources	2	-	-	-	9200	-	-	-	-	-	-	9200
Agriculture Division	3	4	-	1	14400	19840	-	-	-	-	-	34240
Health Division	2	-	1	-	16400	13000	-	-	-	-	-	29400
Education Division	2	-	-	10	20050	20400	-	-	-	-	-	40450
Physical Resources	2	-	1	-	9300	-	-	-	-	-	-	9300
Incl. Prof. & Tech Asst.	1	-	1	6	7300	30300	-	-	-	-	-	37600
Incl. Dev. Division	1	-	-	2	4800	8800	-	-	-	-	-	13600
Power & Water Dev. Div.	4	-	-	1	19200	3000	-	-	-	-	-	22200
Transportation & Mining	1	2	-	3	20800	3000	-	-	-	-	-	23800
Management Division	1	-	-	-	4800	-	-	-	-	-	-	4800
Labor Division	1	-	-	4	4800	13360	-	-	-	-	-	18160
	<u>53</u>	<u>8</u>	<u>3</u>	<u>31</u>	<u>237850</u>	<u>326240</u>	<u>500000</u>	<u>57500</u>	<u>5000</u>	<u>15000</u>	<u>25000</u>	<u>1166590</u>

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-990-000	Technical Support
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FY-65 Tech Support Budget

Psn.No.	Seq/BS	Title	Incumbent	Man mos.	EOD	FY-65 ETD	FY-66 ETD	C O S T S						
								Dollars				Sec. 402 Expenses		
								Pay & All.	Tvl. & Trn.	Others	Total	Allow.	Travel	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
<b>OFFICE OF THE DIRECTOR:</b>														
460	45/01	Economic Adv	Lindblom (Mal)	8	7/63	12/64	-	15,520	800	-	16,320	3,200	3,700	6,900
428	50/02	Prog Analyst	Bennet (R-7)	12	7/63	-	7/65	7,010	-	-	7,010	4,400	-	4,400
472	559/10	Rural Dev Adv	Hewes (R-2)	12	10/63	-	10/65	21,500	-	-	21,500	4,800	-	4,800
		Others		32						1,500	1,500			
								<u>44,030</u>	<u>800</u>	<u>1,500</u>	<u>46,330</u>	<u>12,400</u>	<u>3,700</u>	<u>16,100</u>
<b>OFFICE OF PROGRAM &amp; FINANCE:</b>														
477	533/02	Prog Docu Clk	Crugnale (S-5)	12	10/63	-	10/65	8,000	-	-	8,000	3,000	-	3,000
513	473/02	Prog Officer	(Katz) (R-2)	6	12/64	-	-	10,750	2,400	-	13,150	2,400	2,600	5,000
		Contract												
		Four Indo-U.S. Education		7	-	-	-	22,000	-	-	22,000	-	10,000	10,000
		Foundation Consultants.												
		Others		25						1,000	1,000			
								<u>40,750</u>	<u>2,400</u>	<u>1,000</u>	<u>44,150</u>	<u>5,400</u>	<u>12,600</u>	<u>18,000</u>
<b>PROGRAM OPERATIONS STAFF</b>														
36	478/02	Asst Prog Off	Schenk (R-3)	12	9/63	-	9/65	17,500	-	-	17,500	4,800	-	4,800
390	481/02	Asst Prog Off	Wiarda (R-5)	12	3/63	3/65	-	11,700	200	-	11,900	4,500	1,000	5,500
408	496/02	Asst Prog Off	(Merrill) (R-5)	3	3/65	-	-	3,000	2,400	-	5,400	1,000	2,600	3,600
		Asst Prog Off	(R-5)	4	3/65	-	-	3,900	2,400	-	6,300	4,800	2,600	7,400
446	486/02	Program Analyst	Swayze (R-7)	12	1/64	-	1/66	7,010	-	-	7,010	4,400	-	4,400
514	487/02	Prog Analyst	(Story) (R-7)	8	12/64	-	-	3,505	2,400	-	5,905	3,000	2,600	5,600
		Others		55						1,000	1,000			
								<u>46,615</u>	<u>7,400</u>	<u>1,000</u>	<u>55,015</u>	<u>22,600</u>	<u>8,700</u>	<u>31,300</u>

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: I November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-990-000	Technical Support
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**FOOD FOR PEACE STAFF**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	
479	493/02	Food for Peace Officer (R-3)	Williams	R-3	12	5/64	10/64	-	17,500	900	-	18,400	4,800	4,900	9,700
408	496/02	Asst Prog Off	Kinney	R-4	12	7/62	6/64	-	14,200	-	-	14,200	4,500	-	4,500
		Dev Corps Adv	-	R-4	6	12/64	-	-	7,100	2,400	-	9,500	2,200	2,600	4,800
		Others									500	500			
					<u>30</u>				<u>38,800</u>	<u>3,300</u>	<u>500</u>	<u>42,600</u>	<u>11,500</u>	<u>7,500</u>	<u>19,000</u>

**DEVELOPMENT LOAN DIVISION**

500	529/02	Dev Loan Off	Kamrich	R-2	12	9/64	-	-	21,500	2,100	-	23,600	4,800	2,100	6,900
505	532/02	Dev Loan Off	Scurria	R-5	12	7/63	-	7/65	11,700	-	-	11,700	4,500	-	4,500
504	536/02	Dev Loan Off	Gardner	R-5	12	8/64	-	-	11,700	2,700	-	14,400	4,000	3,600	7,600
					<u>36</u>				<u>44,900</u>	<u>4,800</u>	<u>-</u>	<u>49,700</u>	<u>13,300</u>	<u>5,700</u>	<u>19,000</u>

**PARTICIPANT TRAINING STAFF**

392	502/91	Training Off	Griffith	R-4	12	8/63	-	HIR 8/65	14,200	1,500	-	15,700	4,500	6,000	10,500
452	504/91	Asst Trng Off	Chatak	R-6	12	10/64	-	10/66	9,800	-	-	9,800	4,400	-	4,400
								HIR	-	400	-	400	-	1,900	1,900
					<u>24</u>				<u>24,000</u>	<u>1,900</u>	<u>-</u>	<u>25,900</u>	<u>8,900</u>	<u>7,900</u>	<u>16,800</u>

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-990-000	Technical Support
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OFFICE OF THE ASST. DIRECTOR FOR MANAGEMENT

FY-65 Tech Support Budget

Summary

	<u>No. of Positions</u>	<u>Other elements</u>	<u>Dollars</u>	<u>Sec. 402 Rs. (\$)</u>
Part I			73,500	34,340
Part II			50,935	16,800
Part III :-				
a) Personal Services			15,000	602,500
b) Travel & Transportation			-	150,000
			<u>139,435</u>	<u>803,640</u>

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-990-000	Technical Support
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OFFICE OF THE ASSISTANT DIRECTOR FOR MANAGEMENT:

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
<u>PART - I</u>														
<u>Administrative Services Branch</u>														
399	173/06	Gen Serv Off	Wolter	R-5	3	2/62	9/64	-	2,925	=	=	2,925	-	-
												1,125		
		Gen Serv Off	Thompson	R-5	9	10/64	-	-	8,775	300	-	9,075	3,375	2,600
														5,975
<u>Property Management Branch</u>														
451	174/06	Gen Serv Off	(Boley)		7	11/64	-	-	6,000	-	-	6,000	2,500	-
		R-5												2,500
<u>Motor Transport Branch</u>														
406	177/06	Gen Serv Off	Stokes	R-5	12	1/64	-	-	11,700	-	-	11,700	4,500	-
														4,500
<u>Procurement Branch</u>														
497	315/93	Supply Adv.	Fincher	R-5	12	9/62	10/64	-	11,700	900	-	12,600	4,500	1,500
														6,000
<u>Communications Media Branch</u>														
393	537/92	Commu Med Adv	Wilder	R-3	12	11/63	-	11/65	17,500	-	-	17,500	4,800	-
														4,800
025	538/92	Commu Med Adv	Clark	R-4	12	12/63	-	-	11,700	-	-	11,700	4,500	-
														4,500
<u>Consultants</u>														
		Rec Instl&Trng	McCarty		1	10/64	-	-	-	-	-	-	1,600	-
														1,600
		Film Prod Conslt	Ely		4	8/64	12/64	-	-	-	-	-	3,340	3,340
		Others												
					<u>72</u>				<u>70,300</u>	<u>1,200</u>	<u>2,000</u>	<u>2,000</u>	<u>26,900</u>	<u>7,440</u>
									<u>72,000</u>	<u>2,000</u>	<u>2,000</u>	<u>26,900</u>	<u>7,440</u>	<u>34,340</u>

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-990-000	Technical Support
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OFFICE OF THE ASST. DIRECTOR FOR MANAGEMENT Cont'd...

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	
<u>PART - II</u>															
<u>SECRETARIAL SUPPORT BRANCH</u>															
469	225/05	Secretary	Hamon	S-8	12	6/64	-	-	5,900	-	-	5,900	2,000	-	2,000
470	232/05	Secretary	Turner	SR-9	12	11/63	-	11/65	5,490	-	-	5,490	-	-	-
353	240/05	Secretary	Cozart	SR-9	12	8/63	-	8/65	5,490	-	-	5,490	-	-	-
357	264/05	Secretary	Pesta	S-10	12	6/63	-	6/65	5,490	400	-	5,890	2,000	1,900	3,900
048	271/05	Secretary	Hunter	S-9	3	1/64	7/64	-	1,475	300	-	1,775	500	1,300	1,800
		Secretary	Smith	S-8	12	8/64	2/65	-	5,900	1700	-	7,600	2,000	3,000	5,000
136	278/05	Secretary	Brady	S-8	12	7/63	-	-	5,900	-	-	5,900	-	-	-
435	285/05	Secretary	Boley	S-9	12	10/63	0	-	5,490	-	-	5,490	-	-	-
414	292/05	Secretary	Wallace	S-8	6	11/63	9/64	-	2,950	200	-	3,150	1,000	1,000	2,000
		Secretary	Repl.	S-8	6	12/64	-	-	2,950	1300	-	4,250	1,000	1,000	2,100
					99				47,035	3900		50,935	8,500	8,300	16,800

PART - III

A. PERSONNEL SERVICES

1. Indian Employees (440)															500,000
2. Personal Services Contracts (including institutional, U.S. personnel and Indian)															50,000
3. Pre-departure medical examination															5,000
4. Medical Attention in India															15,000
5. Medical Evacuation, Rest & Recuperation															25,000
6. Others															
										15,000	15,000				
										15,000	15,000			602,500	

B. TRAVEL & TRANSPORTATION

1. Within-India Travel of U.S. technicians & transportation of things.																75,000	75,000
2. Within-India travel of Indian nationals																75,000	75,000
										150,000	150,000						

AND 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-990-000	Technical Support
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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
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OFFICE OF HUMAN RESOURCES

463	1405/01	Asst Dir. Hum. Rescs	Holt	O-1	12	8/63	-	8/65	26,600	-	-	26,600	4,800	-	4,800
334	483/02	Asst Prog Off-Opr.	Cohen	R-6	12	8/63	-	8/65	9,800	-	-	9,800	4,400	-	4,400
					24				36,400	-	-	36,400	9,200	-	9,200

AGRICULTURE DIVISION

42	555/10	Food & Agr. Off	Johnson	R-1	12	8/64	-	-	26,600	-	-	26,600	4,800	-	4,800
43	557/10	Dep Food&Agr Off	Galli	R-3	12	7/62	10/64	-	17,500	900	-	18,400	4,800	2,100	6,900
437	564/10	Agr Adv.	Mayer	R-3	12	3/63	-	-	17,500	900	-	18,400	4,800	2,100	6,900
		<u>Consultants-Direct Hire</u>													
		Price Support	Thompson		6				8,200	-	-	8,200	-	6,000	6,000
		Price Support	Abel		3				4,200	-	-	4,200	-	3,000	3,000
		Agr Aviation	Gelser		1				-	-	-	-	-	2,260	2,260
		Grain Storage	Elder		3				-	-	-	-	-	1,080	1,080
		<u>Consultant - Contract</u>													
		Price Support	Cochrane		1				1,700	-	-	1,700	-	3,300	3,300
					50				75,700	1,800	-	77,500	14,400	19,840	34,240

HEALTH DIVISION

145	1540/50	Chf PH Advisor	Campbell	R-1	12	11/62	11/64	-	26,600	900	-	27,500	4,800	2,100	6,900
447	1855/50	Chf PH Engr	Harris	R-2	6	12/64	-	-	13,300	2,400	-	15,700	2,400	2,100	4,500
		<u>Contract: Rural PH Adv.</u>			24				29,800	3,100	4,100	37,000	9,200	8,800	18,000
		<u>Others</u>			42				69,700	6,400	5,100	81,200	16,400	13,000	29,400

EDUCATION DIVISION

432	1925/60	Chief Edu Adv	Williams	R-1	12	3/63	3/65	-	26,600	900	-	27,500	4,800	3,800	8,600
391	1948/60	Edu Prog Asst	Mosley	R-5	12	3/63	6/65	-	11,700	900	-	12,600	4,500	4,000	8,500
		Replacement for-Mosley			2	4/65			2,500	2,400	-	4,900	750	2,600	3,350
		10 Contract Consultants			60	-	-	-	120,000	-	-	120,000	10,000	10,000	20,000
		<u>Others</u>			84				160,800	4,200	2,500	167,500	20,050	20,400	40,450

AID (220-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-990-000	Technical Support
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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
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OFFICE OF PHYSICAL RESOURCES

483	1196/01	Asst Dir Phy Rese	Kilbridge R-1	12	9/63	-	7/65	26,600	-	-	26,600	4,800	-	4,800
494	1209/20	Phy Res. Prog Asst	Rusin R-6	12	4/64	-	4/66	9,800	-	-	9,800	4,500	-	4,500

Contracts

Research Asst.	Levinson	12	6/64	-	-									
		<u>36</u>						<u>36,400</u>			<u>36,400</u>	<u>9,300</u>		<u>9,300</u>

[Budgets provided in EO's projections]

INDUSTRIAL PROJECTS & TECHNICAL ASSISTANCE DIVISION

111	1200/20	Industry Officer	McComb R-2	12	5/63	5/65	-	21,500	-	-	21,500	4,800	-	4,800
						HL&T		-	400	-	400	-	2,000	2,000

Contract

Foundry Tech.	Sehmur	10	10/64	12/64	HLR			18,200	1,300	-	19,500	2,500	8,200	10,700
Tourism Consultant		3						5,175	-	-	5,175	-	4,500	4,500
Tourism Consultant		3						5,175	-	-	5,175	-	4,500	4,500
Tourism Consultant		3						5,175	-	-	5,175	-	4,500	4,500
Tourism Consultant		3						5,175	-	-	5,175	-	4,500	4,500
CONA Team Visit (2)		<u>2</u>						-	-	-	-	-	2,100	2,100
		<u>36</u>						<u>60,400</u>	<u>1,700</u>		<u>62,100</u>	<u>7,300</u>	<u>30,300</u>	<u>37,600</u>

INDUSTRIAL DEVELOPMENT DIVISION

487	1902/20	Chief Engineer	Cooperman R-2	12	2/64	-	2/66	21,500	-	-	21,500	4,800	-	4,800
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Contract

SC & Rese Consult.	-	3						7,300	-	-	7,300	-	4,400	4,400
Se & Rese Consult.	-	<u>3</u>						<u>7,300</u>			<u>7,300</u>		<u>4,400</u>	<u>4,400</u>
		<u>18</u>						<u>36,100</u>			<u>36,100</u>	<u>4,800</u>	<u>8,800</u>	<u>13,600</u>

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-990-000	Technical Support
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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	
<u>POWER &amp; WATER DEVELOPMENT DIVISION</u>															
486	1321/20	Dev Off Power	Wade	R-1	12	3/64	-	3/66	26,600	-	-	26,600	4,800	-	4,800
360	1315/20	General Engr	Manly	R-3	12	7/63	-	7/65	17,500	-	-	17,500	4,800	-	4,800
404	1335/20	Elec Engr-Power	Lawrence	R-3	12	9/63	-	9/65	17,500	-	-	17,500	4,800	-	4,800
455	1340/20	Elec Engr-Power	Carter	R-3	12	11/63	-	11/65	17,500	-	-	17,500	4,800	-	4,800
<u>Contract</u>															
		Nuclear Conslt.	Whipple		2				-	500	-	500	-	3,000	3,000
					50				79,100	500	-	79,600	19,200	3,000	22,200

TRANSPORTATION & MINING DEVELOPMENT DIVISION

489	1365/20	Mining Engr	Royce	R-3	12	3/64	-	1/66	19,000	-	-	19,000	4,800	-	4,800
<u>Consultants - PASA</u>															
		Port Specialist	Marsden		2				6,000	-	-	6,000	4,000	-	4,000
		Beach Erosion Spec.	Watts		1				2,500	-	-	2,500	-	3,000	3,000
<u>Contract</u>															
		Trans.Conslt.	Busk		2				5,000	-	-	5,000	4,000	-	4,000
		Trans.Conslt.	Arwood		1				500	-	-	500	4,000	-	4,000
		Trans.Conslt.	Bailey		1				500	-	-	500	4,000	-	4,000
					18				33,500	-	-	33,500	20,800	3,000	23,800

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-990-000	Technical Support
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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
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MANAGEMENT DIVISION

488	1352/70	Public Adm Adv.	Hyde	R-2	12	3/64	-	3/66	21,500	-	-	21,500	4,800	-	4,800
		Others									1,000	1,000			
									21,500	-	1,000	22,500	4,800	-	4,800

LABOR DIVISION

143	2100/40	Labor Tech Off	Lindahl	R-3	12	8/64	-	8/66	17,500	-	-	17,500	4,800	-	4,800
		<u>Contract</u>													
		Lab Press Info Conslt.				4			4,600	-	-	4,600	-	3,340	3,340
		Lab Press Coop. Conslt.				4			4,600	-	-	4,600	-	3,340	3,340
		Trade Union Lab Conslt.				4			4,600	-	-	4,600	-	3,340	3,340
		Apprenticeship Trng Conslt.				4			4,600	-	-	4,600	-	3,340	3,340
						28			35,900	-	-	35,900	4,800	13,360	18,160

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-990-000	Technical Support
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FL-65 Tech Support Budget - Dollar Component  
Equipment & Supplies

Auto vehicles, parts and supplies	...	...	\$240,000
Household equipment and supplies	...	...	96,500
Office Equipment & Supplies	...	...	91,800
Communications Media Equipment and supplies...	...	...	48,500
Building Equipment and Material	...	...	18,400
Malaria Eradication Film Production	...	...	14,800
Labor and Tool Kit Programs	...	...	29,000
			<u>\$539,000</u>

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-990-000	Technical Support
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FY-1966 Technical Support - Personnel Services  
Dollar Component - Sept. 25, 1964

Name of Office	Number of Positions				D o l l a r s			
	Regular	Consultant	Contract Reg. Const. mos.	Man pos.	Pay & Allow.	Inter. Travel	Others	Total
Director's Office	2	-	-	24	31,300	1,800	1,500	34,600
Program & Finance	2	2	-	32	41,460	300	1,500	43,260
Program Operations Staff	8	-	-	103	95,600	5,700	1,000	102,300
Food for Peace Staff	2	-	-	24	31,700	-	500	32,200
Development Loan Division	3	-	-	36	44,900	1,800	500	47,200
Participant Training Staff	2	-	-	24	24,000	1,500	500	26,000
Asst. Director for Management	14	2	-	178	138,110	3,600 25,000	3,500	170,210
Asst Director for Human Resources	1	-	-	12	26,600	400	1,000	28,000
Agriculture Division	3	-	-	36	61,600	900	5,000	67,500
Health Division	2	-	-	24	48,100	-	10,000	58,100
Education Division	2	-	10	84	168,100	2,400	2,500	173,000
Asst Director Physical Resources	2	-	-	24	36,400	3,000	1,500	40,900
Industrial Projects & Tech Asst. Div.	1	-	-	12	21,500	2,400	-	23,900
Industrial Development Division	1	-	-	12	21,500	1,600	-	23,100
Power & Water Development Division	4	-	-	37	65,975	6,800	-	72,775
Transportation & Mining Dev. Division	1	-	-	12	17,500	1,900	3,000	22,400
Management Division	1	-	-	9	21,500	700	1,500	23,700
Labor Division	1	-	-	28	35,900	-	1,500	37,400
	<u>52</u>	<u>4</u>	<u>10</u>	<u>711</u>	<u>931,745</u>	<u>59,800</u>	<u>35,000</u>	<u>1,026,545</u>

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-990-000	Technical Support
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FY 1966 TECH SUPPORT BUDGET  
PERSONNEL SERVICES  
RUPEE COMPONENT, SEPT 25, 1964

Name of Office	Direct- Hire	D.H. Conslt.	Contract Reg. Cons.	RUPEE COMPONENT, SEPT 25, 1964			Pers.Serv. Contracts & Others	Benefits			Total
				Allow.	Trvl.& Transp.	Local		Med.Exam.	Med.Att.	Evac.Rest. & Recup.	
Director's Office	2	-	-	9,200	7,600						16,800
Program & Finance	2	2	-	12,600	4,180						16,780
Program Oprns.Staff	8	-	-	36,100	16,500						52,600
Food for Peace Staff	2	-	-	9,300	-						9,300
Loan Development Div.	3	-	-	13,800	7,600						21,400
Participant Trng.Staff	2	-	-	8,900	6,000						14,900
Asst.Director for Mgmt.	14	2	-	35,900	15,380	500,000	17,500	5,000	12,500	25,000	786,280
					100,000						
					75,000						
Human Resources	1	-	-	4,800	1,900						6,700
Agriculture	3	-	-	14,400	3,800						18,200
Health	2	-	-	9,600	-						9,600
Education	2	-	10	31,880	22,800						54,680
Physical Resources	2	-	-	9,200	12,000						21,200
Incl.Proj.& Tech.Asst.	1	-	-	4,800	2,600						7,400
Incl.Dev.Div.	1	-	-	4,800	6,800						11,600
Power & Water Dev.	4	-	-	15,600	29,100						44,700
Transportation&Mining	1	-	-	4,800	7,900						12,700
Management Division	1	-	-	4,800	3,600						8,400
Labor Division	1	-	4	4,800	13,360						18,160
	52	4	14	235,280	336,120	500,000	17,500	5,000	12,500	25,000	1,131,400

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-990-000	Technical Support
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FY-66 Tech Support Budget

Psn.No.	Seq/BS	Title	Incumbent	Man mos.	EOD	FY-66 ETD	FY-67 ETD	C O S T S							
								Dollars			Sec. 402 Rupees				
								Pay & All.	Tvl. & Tpn.	Others	Total	Allow.	Travel	Total	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	
<u>OFFICE OF THE DIRECTOR</u>															
428	50/02	Prog. Analyst	Bennet	R-7	12	7/63	7/65	-	9,800	900	-	10,700	4,400	3,800	8,200
472	559/10	Rev. Off. Rural	Hewes	R-2	12	10/63	10/65	-	21,500	900	-	22,400	4,800	3,800	8,600
		Others									1,500	1,500			
									<u>31,300</u>	<u>1,800</u>	<u>1,500</u>	<u>34,600</u>	<u>9,200</u>	<u>7,600</u>	<u>16,800</u>
<u>OFFICE OF PROGRAM &amp; FINANCE</u>															
477	533/02	Prog Doc Glk	Crugnale	S-5	12	10/63	10/65	-	8,000	300	-	8,300	4,000	1,300	5,300
513	473/02	Prog Officer	(Katz)	R-2	12	12/64	-	12/66	21,500	-	-	21,500	4,800	-	4,800
		(2) Consultants & Others									1,500	1,500	3,800	2,880	6,680
									<u>11,960</u>	<u>-</u>	<u>1,500</u>	<u>13,460</u>	<u>3,800</u>	<u>2,880</u>	<u>6,680</u>
									<u>41,460</u>	<u>300</u>	<u>1,500</u>	<u>43,260</u>	<u>12,600</u>	<u>4,180</u>	<u>16,780</u>
<u>PROGRAM OPERATIONS STAFF</u>															
36	478/02	Asst Prog Off	Schenk	R-3	6	9/63	9/65	-	8,750	600	-	9,350	2,400	3,000	5,400
		Asst Prog Off	Replacement "		6	12/65	-	-	8,750	2,400	-	11,150	2,400	2,600	5,000
390	485/02	Asst Prog Off (Opm)		R-5	12	3/65	-	3/67	11,700	-	-	11,700	4,500	-	4,500
334	490/02	Asst Prog Off Opr	Cohen	R-5	12	8/65	-	-	11,700	1,800	-	13,500	4,500	7,100	11,600
		Asst Prog Off. Op.-		R-5	12	3/65	-	3/67	11,700	-	-	11,700	4,500	-	4,500
		Asst Prog Off. Op.-		R-5	12	3/65	-	3/67	11,700	-	-	11,700	4,500	-	4,500
		Asst Prog Off. Op.-		R-5	12	3/65	-	3/67	11,700	-	-	11,700	4,500	-	4,500
446	150/02	Prog Analyst	Swayze	R-6	12	1/64	1/66	-	9,800	900	-	10,700	4,400	3,800	8,200
514	487/02	Prog Analyst	(Story)	R-6	12	12/64	-	12/66	9,800	-	-	9,800	4,400	-	4,400
		Others									1,000	1,000			
									<u>95,600</u>	<u>5,700</u>	<u>1,000</u>	<u>102,300</u>	<u>36,100</u>	<u>16,500</u>	<u>52,600</u>

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-990-000	Technical Support
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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
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FOOD FOR PEACE STAFF

479	493/02	Food for Peace Officer	Williams	R-3	12	11/64	-	11/66	17,500	-	-	17,500	4,800	-	4,800
408	496/02	Asst Prog. Off.	Kinney	R-4	12	10/64	-	10/66	14,200	-	-	14,200	4,500	-	4,500
		Others									500	500			
									<u>31,700</u>	-	500	<u>32,200</u>	<u>9,300</u>	-	<u>9,300</u>

DEVELOPMENT LOAN DIVISION

500	529/02	Dev Loan Off	Kanrich	R-2	12	5/64	5/66	-	21,500	900	-	22,400	4,800	3,800	8,600
505	532/02	Dev Loan Off	Scurria	R-5	12	7/63	7/65	-	11,700	900	-	12,600	4,500	3,800	8,300
504	536/02	Dev Loan Off	Gardner	R-5	12	8/64	-	8/66	11,700	-	-	11,700	4,500	-	4,500
		Others									500	500			
									<u>44,900</u>	<u>1,800</u>	500	<u>47,200</u>	<u>13,800</u>	<u>7,600</u>	<u>21,400</u>

PARTICIPANT TRAINING STAFF

392	543/91	Trng Off	Griffith	R-4	12	8/63	-	8/65	14,200	-	-	14,200	4,500	-	4,500
452	547/91	Asst Trng Off	Chatak	R-6	12	9/62	9/64	-	9,800	400	-	10,200	4,400	1,900	6,300
		Others									500	500			
									<u>24,000</u>	<u>400</u>	500	<u>24,900</u>	<u>8,900</u>	<u>1,900</u>	<u>10,800</u>

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-990-000	Technical Support
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OFFICE OF THE ASSISTANT DIRECTOR FOR MANAGEMENT

FY-66 - Technical Support Budget

Summary

	<u>No. of Positions</u>	<u>Other employees</u>	<u>Dollars</u>	<u>Sec. 402 Rupees (\$)</u>
PART - I	8	-	49,600	9,900
PART - II	6+2 Consultants		95,610	41,380
PART - III	A) Personnel Services		25,000	560,000
	B) Travel & Transportation		-	175,000
			<u>170,210</u>	<u>786,280</u>

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-990-000	Technical Support
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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
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PART I - SECRETARIAL SUPPORT BRANCH

469	225/05	Secretary	Hamon	S-8 12	6/64	6/66	-	5,900	400	-	6,300	2,000	1,900	3,900
470	232/05	Secretary	Turner	SR-9 12	11/63	11/65	-	5,900	-	-	5,900	-	-	-
353	240/05	Secretary	Cozart	SR-9 12	8/63	8/65	-	5,900	-	-	5,900	-	-	-
357	264/05	Secretary	Pesta	S-10 12	7/65	-	-	5,900	-	-	5,900	2,000	-	2,000
48	271/05	Secretary	Smith	S-8 12	3/65	-	-	5,900	-	-	5,900	2,000	-	2,000
136	278/05	Secretary	Brady	SR-9 12	7/65	-	-	5,900	-	-	5,900	-	-	-
435	285/05	Secretary	Boley	SR-9 12	7/65	-	-	5,900	-	-	5,900	-	-	-
414	292/05	Secretary	-	S-8 12	12/64	-	-	5,900	-	-	5,900	2,000	-	2,000
		Others									2,000	2,000		
					<u>96</u>			<u>47,200</u>	<u>400</u>	<u>2,000</u>	<u>49,600</u>	<u>8,000</u>	<u>1,900</u>	<u>9,900</u>

PART - II

399	173/06	Gen Serv Off	Thompson	R-5 12	10/64	-	8/66	11,700	-	-	11,700	4,500	-	4,500
451	174/06	Gen Serv Off-PM	-	R-5 12	10/64	-	10/66	11,700	-	-	11,700	4,500	-	4,500
406	177/06	Gen Serv Off-MT	Stokes	R-5 12	7/64	-	7/66	11,700	-	-	11,700	4,500	-	4,500
497	315/93	Supply Adv.	Fincher	R-5 12	12/64	-	12/66	11,700	-	-	11,700	4,500	-	4,500
393	537/10	Commu Media Off	Wildar	R-3 8	11/63	11/65	-	11,700	800	-	12,500	3,000	4,200	7,200
		Commu Media Off	Repl.	R-3 6	12/64	-	12/66	8,750	2,400	-	11,150	2,400	2,600	5,000
25	538/92	Commu Media Off	Clark	R-5 12	10/64	-	10/66	11,700	-	-	11,700	4,500	-	4,500
		Two Consultants & Other Costs			<u>8</u>			<u>11,960</u>	<u>-</u>	<u>1,500</u>	<u>13,460</u>	<u>-</u>	<u>6,680</u>	<u>6,680</u>
					<u>82</u>			<u>90,910</u>	<u>3,200</u>	<u>1,500</u>	<u>95,610</u>	<u>27,900</u>	<u>13,480</u>	<u>41,380</u>

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-990-000	Technical Support
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PART - III

	<u>Dollars</u>	<u>Sec. 402 Rs.</u>
A. <u>PERSONNEL SERVICES</u>		
1. Indian Employees (440)		500,000
2. Personal Services Contracts		10,000
3. Pre-departure medical examinations		5,000
4. Medical Attention in India		12,500
5. Medical Evacuation, Rest & Recuperation		25,000
6. Others	<u>25,000</u>	<u>7,500</u>
	<u>25,000</u>	<u>560,000</u>
B. <u>TRAVEL &amp; TRANSPORTATION</u>		
1. Within-India Travel of U.S. Technicians and transportation of things.		100,000
2. Within-India travel of Indian nationals		<u>75,000</u>
		<u>175,000</u>

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-990-000	Technical Support
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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
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OFFICE OF HUMAN RESOURCES

462	1405/01	Asst Dir Hum ResHolt	0-1	12	8/63	8/65	-	26,600	400	-	27,000	4,800	1,900	6,700
		Others									1,000	1,000		
				<u>12</u>				<u>26,600</u>	<u>400</u>		<u>28,000</u>	<u>4,800</u>	<u>1,900</u>	<u>6,700</u>

AGRICULTURE DIVISION

42	555/10	Food & Agr Off Johnson	R-1	12	8/64	-	8/66	26,600	-	-	26,600	4,800	-	4,800
43	557/10	Dep Food&Ag Off Galli	R-3	12	12/64	-	12/66	17,500	-	-	17,500	4,800	-	4,800
437	564/10	Agrl Adv Mayer	R-3	12	3/63	3/65	-	17,500	900	-	18,400	4,800	3,800	8,600
		Others									5,000	5,000		
				<u>36</u>				<u>61,600</u>	<u>900</u>		<u>67,500</u>	<u>14,400</u>	<u>3,800</u>	<u>18,200</u>

HEALTH DIVISION

145	1540/50	Chief PH Adv Campbell	R-1	12	1/65	-	1/67	26,600	-	-	26,600	4,800	-	4,800
447	1855/50	Chief PH Engr Harris	R-2	12	12/64	-	12/66	21,500	-	-	21,500	4,800	-	4,800
		Others									10,000	10,000		
				<u>24</u>				<u>48,100</u>	<u>-</u>		<u>58,100</u>	<u>9,600</u>	<u>-</u>	<u>9,600</u>

EDUCATION DIVISION

432	1925/60	Chief Edu Adv Williams	R-1	12	5/65	-	5/67	26,600	-	-	26,600	4,800	-	4,800
		Chief Adm Off	-	R-2	12	7/65	-	21,500	2,400	-	23,900	4,800	2,600	7,400
		8 Professors & 2 Admin Assistants		60				120,000	-	-	120,000	22,280	20,200	42,480
		Others									2,500	2,500		
				<u>84</u>				<u>168,100</u>	<u>2,400</u>		<u>173,000</u>	<u>31,880</u>	<u>22,800</u>	<u>54,680</u>

AID 1020-4 (7-64)		1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		SECURITY CLASSIFICATION								
		1, November, 1964		INDIA		UNCLASSIFIED			386-15-990-000		Technical Support			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
<u>OFFICE OF PHYSICAL RESOURCES</u>														
483	1196/01	Asst Dir Phy Resc Kilbridge	R-1 12	9/63	7/65	-		26,600	1,800	-	28,400	4,800	7,100	11,900
494	1209/20	Phy Res Prog Asst Rusin	R-6 12	4/64	4/66	-		9,800	1,200	-	11,000	4,400	4,900	9,300
		Others									1,500	1,500		
								36,400	3,000		40,900	9,200	12,000	21,200
<u>INDUSTRIAL PROJECTS &amp; TECHNICAL ASSISTANCE DIVISION</u>														
111	1200/20	Industry Off	McComb replacement	R-2 12	7/65	7/65	-	21,500	2,400	-	23,900	4,800	2,600	7,400
<u>INDUSTRIAL DEVELOPMENT DIVISION</u>														
487	1302/20	Chief Engr	Cooperman	R-2 12	2/64	2/66	-	21,500	1,600	-	23,100	4,800	6,800	11,600
<u>POWER &amp; WATER DEVELOPMENT DIVISION</u>														
486	1321/20	Dev Off Power	Wade	R-1 12	3/64	3/66	-	26,600	900	-	27,500	4,800	3,800	8,600
360	1315/20	General Engr	Manly	R-3 1	7/63	7/65	-	4,375	600	-	4,975	1,200	2,700	3,900
404	1335/20	Elec Engr Power	Lawrence	R-3 12	9/63	9/65	-	17,500	2,100	-	19,600	4,800	9,500	14,300
455	1340/20	Elec Engr Power	Carter	R-3 12	11/63	-	11/65	17,500	3,200	-	20,700	4,800	13,100	17,900
<u>TRANSPORTATION &amp; MINING DEVELOPMENT DIVISION</u>														
489	1365/20	Mining Engr	Royce	R-3 12	3/64	1/66	-	17,500	1,900	-	19,400	4,800	7,900	12,700
		Others									3,000	3,000		
								126,475	12,700		142,175	30,000	46,400	76,400
<u>MANAGEMENT DIVISION</u>														
488	1352/70	Public Adm Adv	Hyde	R-2 9	3/64	3/66	-	21,500	700	-	22,200	4,800	3,600	8,400
		Others									1,500	1,500		
								21,500	700		23,700	4,800	3,600	8,400
<u>LABOR DIVISION</u>														
143	2100/40	Labor Tech Off	Lindahl	R-3 12	8/64	-	8/66	17,500	-	-	17,500	4,800	-	4,800
		Contract-4 Consultants		16				18,400	-	-	18,400	-	13,360	13,360
		Others									1,500	1,500		
								35,900	-		37,400	4,800	13,360	18,160

SECURITY CLASSIFICATION

PAGE NO.

AL-24

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-990-000	Technical Education
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TECH SUPPORT BUDGET

COMMODITY ESTIMATES

FY 1966

PART I (DOLLAR COMPONENT)

	<u>Quantity</u> <u>(A + R)*</u>	<u>Total</u> <u>Cost</u> \$	<u>Procurement Sources</u> GSA/Market/etc.
<u>Vehicles and Equipment</u>			
Jeep Station Wagons	20	52,000	GSA
Carryalls	3	7,500	GSA
Sadans	9	16,200	GSA
Trucks (1 ton or less)	2	4,600	GSA
Auto Spares		10,000	GSA
Freight		<u>13,600</u>	
Sub Total:		<u>103,900</u>	
<u>Office Equipment</u>			
Typewriters (Elec)	15 + 5	8,010	GSA
Typewriters (Manual)	5 + 15	3,870	GSA
Printing Calculators	7	4,160	GSA
Filing Cabinets	5 + 35	2,270	GSA
Autostat Machines	1	325	GSA
Ditto Duplicators	2	1,130	GSA
Laminators	1	690	GSA
Other Office Equipment - 4 steel safes, etc)		7,518	GSA
Freight		<u>4,194</u>	
Sub Total:		<u>32,167</u>	
<u>Household Equipment</u>			
Refrigerators	20 + 10	10,800	GSA
Air-Conditioners	60 + 200	48,620	GSA
GAS Cooking Ranges	20 + 10	3,900	GSA
Other HHE Equipment (Folding Metal Tables & Chairs)		1,405	GSA
Freight		<u>9,708</u>	
Sub Total:		<u>74,433</u>	

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE NO. AL-25

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-990-000	Technical Support
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	Quantity (A + R)*	Total Cost \$	Procurement Sources GSA/Market/etc.
<u>Communications Media Equip.</u>			
Electronic Equipment	A + R	5,000	
Still Photo Equipment	A + R	1,500	
Other CM Equipment		500	
Freight		<u>700</u>	
Sub Total:		<u>7,700</u>	
<u>Supplies &amp; Materials</u>			
Office Supplies & Stationery		18,000	GSA
Building Materials (not available in India)		1,000	GSA & Market
Spare Parts for HH, Office & CM Equipment		12,000	GSA & Market
Tools for HH, Office, MT & CM Equipment		13,000	GSA & Market
Tech. Books & Publications		8,100	GSA & Market
Tires & Tubes		4,500	GSA
Batteries		1,100	GSA
Motion Pic. Raw Stock & Tapes	A	28,000	
Film & Film Strips	A + R	5,000	
Graphic & Still Photo Supplies & Materials		7,000	
Freight		<u>10,800</u>	
Sub Total		<u>108,500</u>	
GRAND TOTAL: (DOLLAR COST)		<u><u>\$326,700</u></u>	

\*A = Additional  
R = Replacement

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-990-000	Technical Support
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PART II (RUPEE COMPONENT)

Total Cost (See 402 Rupees)  
\$ Equiv.

Equipment

Office Equipment (Wall clocks, Brief cases, Costumers, Exhaust Fans, etc)	3,000
Household Equipment (Fans, Fire Extinguishers, geysers, Lamps, Hot Plates, etc)	16,300
Building Maintenance Equipment	2,600
Office Furniture (Desks, Chairs, Credenzas, etc)	8,920
Household Furniture (Tables, Chairs, Beds, Mattresses, Stools, Chest of drawers, Almirahs, etc.)	34,368
Auto Equipment	1,500
Communications Media Equipment (Elec. Equipment, Tape recorders, 16 mm. projector)	2,105
Sub Total	<u>68,793</u>

Supplies and Materials

Office Supplies & Stationery	10,500
Spares (Auto, Office & HHE Equip)	6,800
Tools ( " " " " )	650
Gasoline & Lubricants	160,000
Tires and Tubes	<b>12,000</b>
Batteries	2,500
Rugs	19,400
Drapery Materials	10,000
Uniforms	17,500
Building Materials & Supplies	17,400
Communications Media Supplies	840
Auto Supplies	4,000
Technical Books & Publications	10,920
Other Supplies and Materials	<u>5,100</u>
Sub Total:	<u>277,610</u>

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-15-990-000	Technical Support
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Total Cost (See 402 Rupees)  
\$ Equiv.

Contractual Services

Cable Expenses	3,144
Postage & Cartage Expenses	15,720
Building Maintenance & Repairs	21,700
Auto Repairs & Maintenance	2,500
Office Equip. Maintenance & Repairs	3,000
Household Equipment Maintenance & Repairs	19,500
Auto Insurance Premium	3,800
Upholstery charges	3,000
Printing Contractors	24,380
Labor Contracts (Open End)	7,350
Rents (Warehouse/Office/Hostel)	151,000
Utilities (Warehouse/Office/Hostel)	55,800
Motion Picture Production (Laboratory Costs)	23,158
Personal Services Contracts (Film editing, Cameraman, Artists, etc.)	10,525
Other Contractual Services (Intercomm, tents, rug cleaning, etc.)	<u>6,800</u>
Sub Total:	<u>351,377</u>
GRAND TOTAL:	<u>\$697,780 (RUPEE COST)</u>

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED						
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-11-980-076				4. TITLE Nuclear Engineering								
	5. U.S. FUNDING:		BEGIN FY 1955		END FY 1964		6. PRIOR REFERENCES											
	PHYSICAL WORK:		1956		1966													
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT <sup>1/</sup>	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS			
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)		
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT		
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		TC	G	885	-	-	-	-	885	-	-	-	-	-	-	-	
	GROSS OBLIGATIONS (ACTUAL YEAR)		TC	G	117	-	-	-	-	117	-	-	-	-	-	-	-	
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		TC	G	691	-	-	-	-	691	-	-	-	-	-	-	132	-
	EXPENDITURES (ACTUAL YEAR)		TC	G	124	-	-	-	-	124	-	-	-	-	-	-	-	-
C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC	G	194	-	-	-	-	194	-	-	-	-	-	-	-	-	
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS		TC	G	-	-	-	-	-	-	-	-	-	-	-	-	-	
	B. EXPENDITURES		TC	G	76	-	-	-	-	76	-	-	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC	G	118	-	-	-	-	118	-	-	-	-	-	-	-	-
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS		TC	G	-	-	-	-	-	-	-	-	-	-	-	-	-	
	B. EXPENDITURES		TC	G	118	-	-	-	-	-	-	-	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		TC	G	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IV. PLANNING YR. (EST.) FY	GROSS OBLIGATIONS <sup>2/</sup>																	
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>																	
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>		TC	G	885	-	-	-	-	885	-	-	-	-	-	-	132	-

## REMARKS:

<sup>1/</sup> This is a memorandum (non-add) column.<sup>2/</sup> Show estimated expenditures in column i.

This activity does not address any goal section in the LAS.

SECURITY CLASSIFICATION UNCLASSIFIED

PAGE NO.

AM-1

PROJECT DATA SUMMARY — AID DOLLAR COSTS

7.	AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)	a. APPROPRIATION TITLE	b. LCAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES		f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	44,615	2,817	160	-	1,507	1,900	336	39,450	568	288	406		
		DL	L	7,800	-	-	-	-	-	-	7,800	-	-	-		
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	117	-	-	-	-	117	-	-	-	-	-		
		DL	L	7,800	-	-	-	-	-	-	7,800	-	-	-		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	44,399	2,796	160	-	1,487	1,706	336	39,449	568	288	405	645*	-
		EXPENDITURES (ACTUAL YEAR)	TC	G	291	158	-	-	126	124	-	9	-	-	32	
C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	216	21	-	-	20	194	-	1	-	-	1			
	DL	L*	7,800	-	-	-	-	-	-	7,800	-	-	-			
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	-	-	-	-	-	-	-	-	-	-			
		DL	L	6,300	2,000	-	-	2,000	-	-	4,300	-	-	-		
	B. EXPENDITURES	TC	G	98	21	-	-	20	76	-	-	-	-	1		
		DL	L	5,200	200	-	-	200	-	-	5,000	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	118	-	-	-	-	118	-	-	-	-	-		
		DL	L	8,900	1,800	-	-	1,800	-	-	7,100	-	-	-		
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	TC	G	-	-	-	-	-	-	-	-	-	-			
		DL	L	-	-	-	-	-	-	-	-	-	-			
	B. EXPENDITURES	TC	G	118	-	-	-	-	-	-	-	-	-	-		
		DL	L	7,800	1,000	-	-	1,000	-	-	6,800	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	-	-	-	-	-	-	-	-	-	-	-		
		DL	L	1,100	800	-	-	800	-	-	300	-	-	-		
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/	TC	G	-	-	-	-	-	-	-	-	-	-	-	-	
		DL	L	-	-	-	-	-	-	-	-	-	-	-	300	800
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	-	-	-	-	-	-	-	-	-	-	-	-	
		DL	L	-	-	-	-	-	-	-	-	-	-	-	-	
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	44,615*	2,817	160	-	1,507	1,900	336	39,450	568	288	406	41,798	2,817
		DL	L	14,100	2,000	-	-	2,000	-	-	12,100	-	-	-	-	12,100

REMARKS:

- 1/ This is a memorandum (non-add) column.
- 2/ Show estimated expenditures in column i.

\*Includes for closed projects: 1. L/C charged to \$ Accounts = \$418  
2. DG \$42517

E-1b 1. DATA CURRENT AS OF: 1 November 1964 2. COOPERATING COUNTRY: INDIA 3. BEG. FY: 1955, 1956; END FY: 1965, 1966 4. PROJECT NO. 5. TITLE: Goal: Projects not addressed to any Goal 6. PRIOR REFERENCES:

7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A. (ii) LC COSTS CHGD TO \$ ACCTS. 2/	Govt. Rev.	G	62	61	298	296	-	-	828	-	298	2,255
	FA ACT (iii) TRUST FUND	Sec. 402	G	376*	337	1,801	1,616	-	-	-	3	877	744
	B. P.L. 480 LC	Sec. 104(e)	G	1,671*	1,671	8,000	8,000	8,000	8,000	-	-	-	-
TOTAL ACTUAL FY 1964	A. (ii) LC COSTS CHGD TO \$ ACCTS. 2/	Govt. Rev.	G	-	-	-	-	-	-	-	-	-	-
	FA ACT (iii) TRUST FUND	Sec. 402	G	26	102	118	491	-	-	283	2	118	206
	B. P.L. 480 LC	Sec. 104(e)	G	-	9	-	43	-	43	-	-	-	-
II OPERATIONAL YEAR (EST.)	A. (ii) LC COSTS CHGD TO \$ ACCTS. 2/	Govt. Rev.	G	-	1	-	2	-	-	-	-	-	2
	FA ACT (iii) TRUST FUND	Sec. 402	G	-	39	-	185	-	-	52	-	-	133
	B. P.L. 480 LC	Sec. 104(e)	L	2,089	2,089	10,000	10,000	10,000	10,000	-	-	-	-
III BUDGET YEAR (EST.)	A. (ii) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (iii) TRUST FUND												
	B. P.L. 480 LC												
IV PLANNING YEAR (EST.)	A. (ii) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (iii) TRUST FUND												
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A. (ii) LC COSTS CHGD TO \$ ACCTS. 2/												
	FA ACT (iii) TRUST FUND												
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A. (ii) LC COSTS CHGD TO \$ ACCTS. 2/	Govt. Rev.	G	645*	645*	3,083	3,083	-	-	826	-	298	2,255
	FA ACT (iii) TRUST FUND	Sec. 402	G	62*	62	298	298	-	-	-	-	298	298
	B. P.L. 480 LC	Sec. 104(e)	L**	3,760*	3,760	18,000	18,000	18,000	18,000	921	3	877	877

REMARKS: 1/ Exchange Rate: \$1 = Rs. 4.7876 2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a \* Includes closed projects: Sec. 402 = \$92 L/C charged to \$ Accts = \$418 \*\* 2,089 Loan & 1,671 Grant. PL 480 = \$1671 Govt. Revenue = \$ 53

E-1c PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS 1. DATA CURRENT AS OF: 1 November 1964 2. COOPERATING CTRY.: INDIA 3. PERSONNEL SERVICES PARTICIPANT TRAINING 4. PROJECT NO. Goal: Projects not addressed to any Goal

5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY			b. ACTUAL FY 1964			c. OPERATIONAL FY 1965			d. BUDGET FY 1966			e. PLANNING FY 1967			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	-	-	55 1/	-	-	4.5	-	-	-	-	-	-	-	-	-	-	-	-	55
	Non U.S.		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	B. ON BOARD	U.S.																			
	Non U.S.																				
II PARTICIPANTS PROGRAMMED	A. U.S.		187 2/	-	-	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	487
	B. THIRD CTRY.																				

REMARKS: 1/ End of Fiscal Year 2/ Includes 45 for closed projects addressed to this goal. 3/ Includes 46 for closed projects addressed to this goal.

Goal Code or Activity Code	Title of Goal or Activity	\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year	Operational Year	Budget	Budget +1	Budget +2	Budget +3	Budget +4	All Subsequent Years	Total All Years	
				FY 1964	FY 1965	FY 1966	FY 1967	FY 1968	FY 1969	FY 1970			
386-11-980-076	Nuclear Engineering	DL	-	-	-	-	-	-	-	-	-	-	
		DG	885	117	-	-	-	-	-	-	-	-	885
		SA	-	-	-	-	-	-	-	-	-	-	-
		480	-	-	-	-	-	-	-	-	-	-	-
		L/C	165	25	-	-	-	-	-	-	-	-	165
		Coop. C.	-	-	-	-	-	-	-	-	-	-	-
386-11-280-163	Steel Training	DL	-	-	-	-	-	-	-	-	-	-	
		DG	1,213	-	-	-	-	-	-	-	-	-	1,213
		SA	-	-	-	-	-	-	-	-	-	-	-
		480	-	-	-	-	-	-	-	-	-	-	-
		L/C	119	1	-	-	-	-	-	-	-	-	119
		Coop. C.	-	-	-	-	-	-	-	-	-	-	-
386-24-230-267	National Engineering Industries	DL	-	-	4,300	-	-	-	-	-	-	-	
		DG	-	-	-	-	-	-	-	-	-	-	4,300
		SA	-	-	-	-	-	-	-	-	-	-	-
		480	-	-	-	-	-	-	-	-	-	-	-
		L/C	-	-	-	-	-	-	-	-	-	-	-
		Coop. C.	-	-	-	-	-	-	-	-	-	-	-
386-22-290-268 386-42-290-268	Trombay Methanol Plant	DL	7,800	-	-	-	-	-	-	-	-	-	
		DG	-	-	-	-	-	-	-	-	-	-	7,800
		SA	-	-	-	-	-	-	-	-	-	-	-
		480	-	-	2,089	-	-	-	-	-	-	-	2,089
		L/C	-	-	-	-	-	-	-	-	-	-	-
		Coop. C.	-	-	-	-	-	-	-	-	-	-	-
386-22-250-270	Consulting Services	DL	-	-	2,000	-	-	-	-	-	-	-	
		DG	-	-	-	-	-	-	-	-	-	-	2,000
		SA	-	-	-	-	-	-	-	-	-	-	-
		480	-	-	-	-	-	-	-	-	-	-	-
		L/C	-	-	-	-	-	-	-	-	-	-	-
		Coop. C.	-	-	-	-	-	-	-	-	-	-	-

SECURITY CLASSIFICATION  
UNCLASSIFIED

AID FORM 10-112 (7-62)	DATE PREPARED	COOPERATING COUNTRY	SECURITY CLASSIFICATION		MULTI-YEAR LISTING		Goal: Projects not addressed to any Goal and/or LAS Annex - AM					E-4	
	1 November 1964	INDIA	UNCLASSIFIED										
Goal Code or Activity Code	Title of Goal or Activity		\$ 1,000 Obligations	Cumulative Through Actual Year	Actual Year FY 1964	Operational Year FY 1965	Budget FY 1966	Budget +1 FY 1967	Budget +2 FY 1968	Budget +3 FY 1969	Budget +4 FY 1970	All Subsequent Years	Total All Years
	TOTAL: AID Activities, Projects Not Addressed to Any Goal and/or LAS Annex.		DL	7,800	-	6,300	-	-	-	-	-	-	14,100
			DG	2,098	117	-	-	-	-	-	-	-	2,098
			SA	-	-	-	-	-	-	-	-	-	-
			480	-	-	2,089	-	-	-	-	-	-	2,098
			L/C	284	-	-	-	-	-	-	-	-	284
			Coop. C.	-	-	-	-	-	-	-	-	-	-
			Other	-	-	-	-	-	-	-	-	-	-
			DL										
			DG										
			SA										
			480										
			L/C										
			Coop. C.										
			Other										
			DL										
			DG										
			SA										
			480										
			L/C										
			Coop. C.										
			Other										
			DL										
			DG										
			SA										
			480										
			L/C										
			Coop. C.										
			Other										

SECURITY CLASSIFICATION  
UNCLASSIFIED

PAGE AM-iv

AID 1020-3 (7-64)	PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES										SECURITY CLASSIFICATION <b>UNCLASSIFIED</b>									
E - 1b	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY INDIA		3. BEG. FY 1955 END FY 1964		4. PROJECT NO. 386-11-980-076		5. TITLE Nuclear Engineering				6. PRIOR REFERENCES:							
	7. OBLIGATED AND DISBURSED			c. FUNDS				b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)						
			(1) TYPE		(2) SOURCE		(3) LOAN OR GRANT		(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED		(2) DISBURSED		(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
									(a) OBLIGATED		(b) DISBURSED		(a) OBLIGATED		(b) DISBURSED		(a) U.S. PERS.		(b) NON-U.S. PERS.	
I CUMULATIVE THRU ACTUAL YEAR			A. (i) LC COSTS CHGD TO \$ ACCTS. 2/		G				132		633								633	
			FA ACT (ii) TRUST FUND		Govt. Rev.															
			FA ACT (iii) OTHER LC		Sec. 402		G		165		138		790		661				790 661	
			B. P.L. 480 LC																	
TOTAL ACTUAL FY 1964			A. (i) LC COSTS CHGD TO \$ ACCTS. 2/		G															
			FA ACT (ii) TRUST FUND		Govt. Rev.															
			FA ACT (iii) OTHER LC		Sec. 402		G		25		37		116		179				116 179	
			B. P.L. 480 LC																	
II OPERATIONAL YEAR (EST.)			A. (i) LC COSTS CHGD TO \$ ACCTS. 2/																	
			FA ACT (ii) TRUST FUND		Govt. Rev.															
			FA ACT (iii) OTHER LC		Sec. 402		G		-		27		-		129				-	
			B. P.L. 480 LC																	
III BUDGET YEAR (EST.)			A. (i) LC COSTS CHGD TO \$ ACCTS. 2/																	
			FA ACT (ii) TRUST FUND																	
			FA ACT (iii) OTHER LC																	
			B. P.L. 480 LC																	
IV PLANNING YEAR (EST.)			A. (i) LC COSTS CHGD TO \$ ACCTS. 2/																	
			FA ACT (ii) TRUST FUND																	
			FA ACT (iii) OTHER LC																	
			B. P.L. 480 LC																	
V ALL SUBSEQUENT FYs (EST.)			A. (i) LC COSTS CHGD TO \$ ACCTS. 2/																	
			FA ACT (ii) TRUST FUND																	
			FA ACT (iii) OTHER LC																	
			B. P.L. 480 LC																	
VI TOTAL ALL YEARS (EST.)			A. (i) LC COSTS CHGD TO \$ ACCTS. 2/		G				132		633								633	
			FA ACT (ii) TRUST FUND		Govt. Rev.															
			FA ACT (iii) OTHER LC		Sec. 402		G		165		165		790		790				790 790	
			B. P.L. 480 LC																	

## REMARKS:

1/ Exchange Rate: \$1 = Rs. 4.7876

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E - 1a

E - 1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS			1. DATA CURRENT AS OF: 1 November 1964			2. COOPERATING CTRY. INDIA			3. PERSONNEL SERVICES PARTICIPANT TRAINING		BEG. FY 1956 END FY 1966		4. PROJECT NO. 386-11-980-076												
	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			a. CUM. THRU ACTUAL FY			b. ACTUAL FY 1964			c. OPERATIONAL FY 1965			d. BUDGET FY 1968			e. PLANNING FY 1967			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS				
			Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract			
I PROJECT PERSONNEL			A. MAN YEARS			U.S.																				
			Non U.S.																							
			B. ON BOARD			U.S.																				
			Non U.S.																							
II. PARTICIPANTS PROGRAMMED			A. U.S.			146			-			-			-			-			146			-		
			B. THIRD CTRY.			-			-			-			-			-			-			-		

## REMARKS:

1/ End of Fiscal Year

SECURITY CLASSIFICATION **UNCLASSIFIED**PAGE NO.  
AM-2

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-980-076	Nuclear Engineering
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### 1. The Activity Target

- (a) To assist the GOI in developing India's atomic energy resources and in implementing a program of research and utilization of atomic energy for peaceful purposes, including power development.
- (b) To provide U.S. training for Indian scientists of the Atomic Energy Establishment Trombay (AEET) in advanced techniques and practices in various fields of nuclear engineering.

The Atomic Energy Establishment, Trombay, has undertaken through its various scientific divisions the development of atomic energy in all its facets, including processing plants; instrumentation; setting up, operation, and maintenance of nuclear reactors; research laboratories; and location and development of radioactive minerals.

India was the first country in Asia to embark upon a program of atomic energy research and development. Despite its generally low economic and technological level, India had the benefit of a small corps of competent scientists in nuclear physics and related fields. A decision was taken to establish an Atomic Energy Commission under the chairmanship of Dr. H.J. Bhabha, an internationally-known nuclear scientist, and to create an Atomic Energy Establishment (AEET) at Trombay (on the out-skirts of Bombay).

### 2. The Course of Action

The Atomic Energy Establishment of the GOI Department of Atomic Energy, is India's national center for research and development work in the peaceful uses of atomic energy. The main objectives of the Indian nuclear program are (1) to develop and utilize atomic energy as a source of electricity for industrial and other uses and (2) to develop nuclear energy for its manifold uses in agriculture, biology, medicine and industry, mainly through the production of radio-active isotopes. The Government of India has affirmed on many occasions that this program is concerned only with research and utilization of nuclear energy for peaceful purposes.

In nuclear power development, it was decided to set up the Tarapur Atomic Power Station (about 60 miles north of Bombay), to have an installed capacity of 380 MW and to cost Rs. 48.35 crores (\$101.5 million).

The GOI plans to build a second atomic power station at Rana Pratap Sagar, near Kotah in Rajasthan, with an initial capacity of 200 MW and facilities for expanding to 400 MW. This station will be of the CANDU type, developed in Canada, using natural uranium oxide as fuel and heavy water as moderator and coolant. Its total cost is estimated at Rs. 32 crores (\$67 million). It also has been decided to locate India's third nuclear power station in Madras State, near Mahabalipuram.

Earlier, in FY 1956, under the Colombo Plan, the AEET was furnished with three research reactors which are in operation. In the same year the U.S. Government provided specialized equipment and supplies for nuclear research under Project 386-12-980-090, Nuclear Research.

For the development of research programs in the scientific and industrial application of atomic energy for peaceful purposes and for the design, operation, and maintenance of research and power reactors it is necessary for the AEET to have a large number of scientists and engineers trained in all phases of nuclear science.

The AEET has a strength of over 3,000 scientific and technical staff who have acquired basic experience in the field. It is highly desirable, however, that advanced training in specialized fields, not available in India, be provided in the U.S. for the AEET scientists. It was, therefore, proposed that about 200 scientists and technical personnel of the AEET be sent to the U.S. for one-year specialized training in various aspects of nuclear science.

### 3. Progress to Date

This activity was started in FY 1956, providing only for participant training, and terminated with FY 1964 funding. No funding has been proposed in the Operational Year.

A U.S.-financed feasibility survey of the proposed Tarapur atomic power station was made by the U.S. firm, Burns & Roe; the International General Electric Company of the U.S. was selected by the Government of India to design and construct the complete station. A loan of \$80 million (about Rs. 38.1 crores) to finance the foreign exchange cost of plant and equipment was authorized by the U.S. Agency for International Development on December 7, 1963.

Through FY 1963, 129 participants were trained in the U.S. and in third countries, at a total cost of \$768,000 (DG), plus Section 402 rupees equivalent to \$140,000.

Of the 17 participants programmed in FY 1964 for year training, 9 are already in the States and the others are in process. Total cost: \$117,000 (DG) plus Sec. 402 rupees equivalent to \$25,000.

1 November 1964

INDIA

UNCLASSIFIED

The 40 MW Canada-India Reactor of the NRI type; the pool type Reactor 'Apsara'; and ZERLINA, a zero energy reactor for lattice investigations and new assemblies, supplied by the Colombo Plan countries are in operation. The U.S.-furnished specialized equipment and supplies for nuclear research, including a 5.5 MW Van de Graaf Accelerator, have been installed. The Colombo Plan assistance amounted to \$10 million, and U.S. contribution in FY 1956 toward nuclear research equipment amounted to about \$662,000.

Available, perhaps incomplete, figures indicate that the Atomic Energy Establishment was operated during the Second Five Year Plan at a cost of approximately \$60 million (GOI); the Third Plan expenditure will be about \$75 million (GOI).

The benefits gained by the participants from U.S. training cannot be adequately quantified in terms of immediate improvements and changes in techniques and procedures at the AEET. Nevertheless some examples of specific applications of training can be cited.

Several returned participants have been working on the design of power reactors and on power reactor feasibility studies. One is heading a team engaged in the development of an Indian-designed reactor. Others have been devoting themselves to training in the research and development of fast reactors using thorium. Most of the returned participants from the Reactor Engineering Division of AEET have assisted in the evaluation of international tenders for the construction of the proposed nuclear power plant at Tarapur (near Bombay). One of the earlier participants is now the deputy officer in charge of the 40 MW Canada-India Reactor. Another participant is now the head of the Spectroscopy Section of the Analytical Division. One of the first group of participants has been in charge of the design of the AEET plutonium recovery plant now under construction at Trombay.

Additional training in FY 1965 and future years has been requested by the GOI for the younger, junior officers of the AEET selected on the basis of their promise of future accomplishment. Emphasis recently has been on training those scientists who require further knowledge and skills for specific development projects undertaken or proposed by the AEET. Senior Indian atomic energy officials, recognizing U.S. primacy in this field, have

been anxious that junior scientists observe and study the U.S. systems so as to broaden their outlook and provide for them some general guidelines in the management of India's own atomic energy efforts.

The U.S. A.I.D. favors future training for AEET scientists in this important field. But the Mission now feels it necessary to evaluate carefully future training needs and judge whether further assistance to the AEET is a priority use of our limited technical assistance funds.

Short-term services of a nuclear consultant, in the field of peaceful uses of atomic energy, were requested of AID/W (under the Technical Support project) to determine the effectiveness of training already provided; interview the trainees and observe and evaluate the work they are now doing and the effect their U.S. training has upon their work; evaluate the necessity for, and advisability of specific future U.S. training programs proposed for AEET scientists; advise the Mission in the light of today's needs whether to continue the project; and if continuation is recommended, to assist in the design of a project for future U.S. assistance.

Dr. G. Hoyt Whipple of the University of Michigan, completed his study on October 30, 1964. His final report is expected in November. After a review of his findings, the Mission will decide whether to submit a revised E-1 supporting a request for FY 65 funds for participant training in this field.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY -- AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY			3. PROJECT NO.			4. TITLE							
	1 November 1964		INDIA			386-11-280-163			Steel Training							
	5. U.S. FUNDING:		BEGIN FY		END FY	6. PRIOR REFERENCES										
		1959		1962												
7. AID DOLLAR FINANCING -- OBLIGATIONS AND EXPENDITURES (\$000)		PHYSICAL WORK:	1959		1964											
		a.	b.	c.	d.	e.		f.		g.		h.		i. 1/		
		APPROPRIATION TITLE	LOAN OR GRANT	TOTAL	CONTRACT 1/	PERSONNEL SERVICES		PARTICIPANTS		COMMODITIES		OTHER COSTS		LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
						(1) U.S. AGENCIES		(2)		(1) DIRECT AND U.S. AGENCIES		(2)		(1) DIRECT AND U.S. AGENCIES		
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	CONTRACT	CONTRACT	CONTRACT	CONTRACT	CONTRACT	
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR	TC	G	1,213	287	-	-	232	912	-	14	-	-	55		
	GROSS OBLIGATIONS (ACTUAL YEAR)	TC	G	-	-	-	-	-	-	-	-	-	-	-		
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR	TC	G	1,191	266	-	-	212	912	-	13	-	-	54	95	-
	EXPENDITURES (ACTUAL YEAR)	TC	G	167	158	-	-	126	-	-	9	-	-	32	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	22	21	-	-	20	-	-	1	-	-	1		
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	TC	G	-	-	-	-	-	-	-	-	-	-	-		
	B. EXPENDITURES	TC	G	22	21	-	-	20	-	-	1	-	-	1	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	TC	G	-	-	-	-	-	-	-	-	-	-	-		
III. BUDGET YEAR (EST.) FY _____	A. GROSS OBLIGATIONS															
	B. EXPENDITURES															
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
IV. PLANNING YR. (EST.) FY _____	GROSS OBLIGATIONS 2/															
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	TC	G	1,213	287	-	-	232	912	-	14	-	-	55	95	-

## REMARKS:

- 1/ This is a memorandum (non-add) column.  
2/ Show estimated expenditures in column i.

PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES

7. OBLIGATED AND DISBURSED	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3.		4. PROJECT NO.		5. TITLE				6. PRIOR REFERENCES:				
	1 November 1964		INDIA		Funding	BEG. FY	END FY	386-11-280-163		Steel Training							
					Phys. Work	1959	1962										
	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)							
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER					
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED				
I CUMULATIVE THRU ACTUAL YEAR	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G		95		455			19			436				
	FA	(ii) TRUST FUND	Govt. Rev.	-	9	8	42	-	-	-	-	42	40				
	ACT	(iii) OTHER LC	Sec. 402	G	119	107	569	-	-	467	3	47	43				
	B. P.L. 480 LC																
TOTAL ACTUAL FY 1964	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G														
	FA	(ii) TRUST FUND	Govt. Rev.	-													
	ACT	(iii) OTHER LC	Sec. 402	G	1	65	2	312		283	2	2	27				
	B. P.L. 480 LC																
II OPERATIONAL YEAR (EST.) FY 1965	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/															
	FA	(ii) TRUST FUND	Govt. Rev.	-		1		2					2				
	ACT	(iii) OTHER LC	Sec. 402	G		12		56		52			4				
	B. P.L. 480 LC																
III BUDGET YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/															
	FA	(ii) TRUST FUND															
	ACT	(iii) OTHER LC															
	B. P.L. 480 LC																
IV PLANNING YEAR (EST.) FY _____	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/															
	FA	(ii) TRUST FUND															
	ACT	(iii) OTHER LC															
	B. P.L. 480 LC																
V ALL SUBSEQUENT FYs (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/															
	FA	(ii) TRUST FUND															
	ACT	(iii) OTHER LC															
	B. P.L. 480 LC																
VI TOTAL ALL YEARS (EST.)	A.	(i) LC COSTS CHGD TO \$ ACCTS. 2/	G		95		455			16			436				
	FA	(ii) TRUST FUND	Govt. Rev.	-	9	9	42	42	-	-	-	42	42				
	ACT	(iii) OTHER LC	Sec. 402	G	119	119	569	569	-	519	3	47	47				
	B. P.L. 480 LC																

REMARKS:

1/ Exchange Rate: \$1 =

2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS		1. DATA CURRENT AS OF:		2. COOPERATING CTRY.		3.		BEG. FY	END FY	4. PROJECT NO.											
			1 November 1964		INDIA		PERSONNEL SERVICES	PARTICIPANT TRAINING	1959	1964	386-11-280-163											
5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS	a. CUM. THRU ACTUAL FY			b. ACTUAL FY 1964			c. OPERATIONAL FY 1965			d. BUDGET FY 1966			e. PLANNING FY 1967			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS			
	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.	-	-	10	-	-	4.5													10	
		Non U.S.	-	-	-	-	-	-														
B. ON BOARD	U.S.																					
	Non U.S.																					
II. PARTICIPANTS PROGRAMMED	A. U.S.		295	-	-	-	-	-								295	-	-				
	B. THIRD CTRY.		-	-	-	-	-	-								-	-	-				

REMARKS:

1/ End of Fiscal Year

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-280-163	Steel Training
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### 1. The Activity Target

This activity was started in FY 1959 and terminated in FY 1964; its targets were:

- (a) To train 300 engineers and technicians in the United States in various aspects of steel production;
- (b) To establish a comprehensive training program for personnel at all levels at the three steel plants and headquarters of the Hindustan Steel Limited (HSL);
- (c) To advise and assist the Chairman of the Board of Directors on principles and processes for determining corporate objectives; and
- (d) To advise and assist the Chief Engineer, HSL Central Engineering and Design Bureau, in his functions within the organization.

The Hindustan Steel Limited, a public sector corporation with headquarters at Ranchi (Bihar), operates three integrated steel plants at Rourkela, Durgapur, and Bhilai. An alloy steel plant at Durgapur is under construction and expansion programs in each plant are planned. Its performance is vitally important to the planned industrial development targets.

This activity was to assist HSL improve its operating skills through the development of an overall personnel training program at all levels, which is essentially required to achieve India's planned production targets of 5.9 million tons of steel by 1966 and 10 million tons by 1971.

Personnel trained in each of the above plants are to be used in the expansion programs and are to form the nucleus for staffs in the steel plants under consideration.

Much of the complex managerial and technological skills required for efficient operation of modern steel producing and processing facilities are unavailable within India. Each of the three plants was designed, constructed and financed by a different country; the Durgapur plant by the United Kingdom with U.K. equipment, the Rourkela plant by West Germany with German equipment, the Bhilai plant by Russia with Russian equipment. Each plant now has either a general manager or an assistant general manager from the country that designed and constructed the plant. A few individuals with experience in India's private steel plants have been recruited by HSL and a

large number of supervisory engineering personnel and key operators were trained in the steel industries of U.S.A., U.K., U.S.S.R., West Germany and Australia; in addition key technicians from these countries are assisting in the operation of the plants.

However, in each case the third country technicians at HSL are under contract to operate the plants and are not establishing the training programs which are required in all modern steel plants. HSL recognized this need and the Mission agreed that, for efficient modern steel producing and processing, comprehensive training programs within India were necessary to upgrade the managerial, supervisory and technical operating skills at all levels of HSL operation, especially to provide plant personnel with on-the-job instruction and guided experience.

The original project targets (c) and (d) above were suspended due to internal changes within HSL.

### 2. The Course of Action

It was proposed:

- a. That 300 engineers and technicians be sent to the United States for training in several steel plants in various aspects of steel making, under the INSTEP (Indian Steel Training & Education Program) program.
- b. That a team of six training advisors, consisting of the following technicians, be provided under contract, for a period of two years initially, for assignment to the HSL plants:

Chief Training Advisor	- Ranchi
Training Advisor	- Durgapur
Training Advisor	- Rourkela
Training Advisor - Mech. Maintenance	- Rourkela
Training Advisor - Elec. Maintenance	- Rourkela
Training Advisor	- Alloy Steel Plant Durgapur

Cost:	DG \$	Sec. 402 Rupees \$ Equiv.
FY 1961	133,000	101,000
FY 1962	154,000	18,000
	\$ <u>287,000</u>	\$ <u>119,000</u>

These advisors were to:

- (1) advise and assist HSL in developing and installing improved management and operating policies and methods;

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-280-163	Steel Training
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- (2) assist in planning, organizing, and conducting classroom training programs in the Training Institutes as well as on-the-job instructions at the Rourkela and Durgapur steel plants, the Alloy Steel Plant at Durgapur, and at HSL's headquarters at Ranchi;
  - (3) assist in improving HSL operating methods and the technical skills of its personnel to the extent necessary to meet planned targets for growth and expansion of steel production;
  - (4) work consistently through the HSL superintendents of training at each plant in setting up the types of courses needed to accomplish the objectives;
  - (5) guide and assist the Indian training officers in the conduct of training activities and see that the training instructors become thoroughly competent in the operation of the respective training courses.
- c. That HSL Training Institutes be established at Ranchi, Rourkela, and Durgapur and equipped with audio-visual and training materials and reference libraries.
  - d. That courses of instruction be prepared and lecturers and/or instructors be selected and trained; participants for the various courses be selected from each department on the basis of individual training needs; training and study guides be prepared for each unit of all production departments, for use by the training officers in providing guidance to the trainees; and local supplies, including classroom furniture, be provided and administrative staff recruited.
  - e. That reference material, books and periodicals, films and filmstrips be provided to the four Training Institutes at Ranchi, Rourkela, Durgapur and Alloy Steel Plant at Durgapur. Cost: \$14,000 (DG) funded in FY 1962.
  - f. That audio-visual equipment and graphic supplies be provided to the Audio-visual & Graphic Units of the four Training Institutes, in support of demonstration and training activities of the American technicians. Cost: \$23,000 (BG) funded in FY 1963. (This provision was cancelled and funds deobligated due to GOI's delay in establishing and properly furnishing of these units.

It was originally envisioned that one American training advisor would be located at the Bhilai steel plant, but this met with resistance by the Russians, who felt that adequate training was being provided by their technicians at Bhilai, and he was assigned instead to the Alloy steel plant at Durgapur, now under construction. There he was to advise the Superintendent of Training on review and evaluation of existing training facilities and on the establishment of programs at some 12 training centers in India for alloy steel personnel; to assist in the planning of a training institute; and to advise and participate in training programs applicable to plants of this type.

In addition to a training advisor to the Superintendent of Training at the Rourkela plant, two American advisors were to be provided to assist in the establishment of proper operating and in-plant training procedures in the fields of (a) plant-wide electrical maintenance and (b) plant-wide mechanical maintenance, both with emphasis on preventive maintenance.

The original request for four Management specialists to advise the HSL Chairman and the Board of Directors on principles and processes for determining corporate objectives and to help develop continuing ability of HSL executives to make future determinations on organizational matters was withdrawn and funds deobligated. This was due partly to unsuccessful efforts to recruit top level specialists. However, in the meantime, the Government of India undertook the reorganization of HSL, which resulted in decentralization of responsibility for plant operation. Such responsibility now rests directly on the General Manager of each plant, and the need for the top level management specialists has been removed.

The GOI also withdrew its request for a six-man contract team of engineering advisors to assist and guide the functions of the Chief Engineer, HSL Central Engineering and Design Bureau.

### 3. Progress to Date

Under the FY 1959 and FY 1960 programs, 295 engineers and technicians were trained in the United States in various aspects of steel making (\$912,000). All have returned and are assigned at the HSL plants to put into practice and disseminate the knowledge and skills acquired. Some who specialized in maintenance were assigned to construction jobs, while other operating personnel helped assemble and install plant equipment. This INSTEP training program, supervised by the Carnegie Institute of Technology, was initiated jointly by the Ford Foundation, U.S.A.I.D., and the GOI. Its success resulted in the GOI request for further U.S. assistance through the assignment of technical training advisors for additional within-India training.

Approximately 1200 additional engineers and technicians from HSL were trained in third country steel plants under bilateral agreements; 680 in the Soviet Union, 200 in West Germany, and 300 in the United Kingdom. All of these trainees are now assigned to the HSL plants effectively using the knowledge and experience acquired.

AID 1020-4 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-280-163	Steel Training
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In January 1961, with the assistance of the Ford Foundation, a Training Plan Development Team of two members -- the Assistant Vice President, Personnel, U.S. Steel Corporation (William P. Jones) and the Director of the INSTEP Training Program at Carnegie Institute of Technology (Stephen C. Blickenstaff) -- came to India to investigate for HSL the need for a continuing training program at all levels of personnel. The team's report recommended different types of training programs for the development of various departments at the HSL plants.

To assist HSL in the implementation of the recommendations, USAID entered into a contract with the Carnegie Institute of Technology (#AIDC-2287) to provide the services of six training advisors. These advisors arrived in India and departed on the following dates, after completing a total of about 10 man-years of work.

Name	Title	Arrived	Departure
Blickenstaff	Chief Training Advisor (Team Leader)	4.1.62	5.31.64
Wooldridge	Training Advisor	5.20.62	5.4.64
Facknitz	Training Advisor	10.5.62	5.5.64
Drummond	Trg. Adv.- Mech. Maint.	1.25.63	12.8.63
McCafferty	Trg. Adv.- Elec. Maint.	1.21.63	4.21.64
Fedorca	Trg. Adv. (Alloy Steel Plant)	11.9.62	5.31.64

The team leader (formerly the Director of the INSTEP program) was assigned to HSL's headquarters at Ranchi, one training advisor each was at the Durgapur and the Rourkela steel plants, two preventive maintenance advisors at Rourkela and one training advisor at the Alloy Steel Plant, Durgapur.

The Management Training Institute at Ranchi, the Rourkela Technical Institute and Durgapur Technical Institute have been established and are being used for personnel training; plans for establishing an institute at the Alloy Steel Plant have been approved.

Most of the books, periodicals, films and film strips, for funds were provided in FY 1962, for the libraries of the four institutes have been received.

In support of this training program, the GOI contributed toward local expenses for each technician; paid customs duties and inland handling charges on commodities; assigned one Indian counterpart to work with each U.S. technician; and provided all needed local supplies.

In January 1963 reorganization of HSL began; the Chairman of the Board of Directors and the General Managers of the steel plants were replaced. The new Chairman adopted the concept of decentralization of management; each plant General Manager was made responsible for, among other things, establishing a training program to fit his particular needs to meet production targets.

The Chinese aggression in 1962 placed top priority on increasing production and each General Manager had to step up steel production to meet requirements of a war economy. Without guidance from HSL headquarters, and under pressure to increase production, the General Managers placed little emphasis on establishing a comprehensive training program. The result was that the American training advisors did not receive adequate support from management and were not used as originally intended.

It was necessary to change the original project targets and objectives somewhat because of the reorganization of HSL. None of the new managers took part in accepting the Jones-Blickenstaff recommendations. They therefore decided that the training advisors should play roles different from those first envisioned, and each advisor was left to his own resources, more or less, except that the managers felt in-plant training more necessary than other kinds. Therefore each advisor set out to establish training programs that would be acceptable to the manager of the plant to which he was assigned. Following are the results of their efforts:

#### 1. At Headquarters, Ranchi

The team leader (chief training advisor) gave informal, oral and written advice to the Director of Training on a plan for training employees for the new positions which would be required by the expansion of the Durgapur, Rourkela and Bhilai plants. He advised the Chairman on the reorganization of HSL staff with reference to the function of training; developed a 42-week training program in management courses, offered by the Management Training Institute, Ranchi, in Conference Leadership, Steel Making Appreciation Course, Job Instruction Training, Job Relation Training, Job Methods Training, etc., and advised on a plan to solicit support and seek cooperation of the general managers of the three plants to implement this program. He advised on the development and implementation of a master plan for the introduction of training-within-industry to cover virtually all plant supervisory personnel at the three plants.

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-280-163	Steel Training
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## 2. Durgapur Steel Mill

The training advisor was eminently successful in coaching the Assistant Superintendent for in-plant training and his assistants; under his guidance they have so developed their skills that they now can carry on efficient in-plant training programs. During his two-year tour more than 650 employees, including graduate engineers, operators, junior operators, turners, were trained. After a start in the wheel and axle plant, the heads of other operating departments who saw the results requested training programs. During the last five months he convinced the General Manager of the need for a comprehensive management development program. He conducted management study groups for middle management personnel from various departments, in which 50 employees were indoctrinated in the principles and practices of management. This program will be continued under the supervision of the Superintendent of Training, and it is expected that other new courses will be developed and conducted by the trained Indian instructors.

## 3. Alloy Steels Plants, Durgapur

The training advisor advised the Superintendent of Training and his assistants on reviewing and evaluation of existing training facilities and on establishment and implementation of an integrated system for planning, coordinating, reporting and controlling training programs. He advised the training officers at 20 plants throughout India about training Alloy Steel plant personnel while the Durgapur plant is under construction. He trained the PERT development group, including the instructors who will train others. He planned a manual clerical system for an entire PERT program adaptable smoothly later to electronic data processing equipment, and introduced a program of self-development for trainers and obtained the required publications for its use. He developed a training engineer program; prepared a Job Breakdown and Job Knowledge program for these engineers who will supervise the training function; and prepared a feasibility study for the proposed Training Institute.

## 4. Rourkela Steel Mill

a. The training advisor held seminars with training engineers and training officers on in-plant training problems and solutions and prepared detailed training programs for various departments. He assisted in training 35 crane operators and, with the assistance of USAID's

Communications Media Section, produced a training film for crane operators and for use in plant-wide training. He also helped select 150 crane operators for further training and planned to help train 2,000 more. The advisor helped prepare a film strip on maintenance and operation of tractors; assisted in developing training courses, including demonstrations, for tractor operators, lubrication engineers, hot strip and plate mill operators, and steel melting shop personnel. He wrote the text for and conducted a course in Human Relations, and prepared recruitment and placement psychological tests for employment applicants.

b. The electrical maintenance advisor helped the Training Engineer of the electrical department in preparing various training courses for electrician personnel. He compiled instructions for maintenance of materials handling equipment, crane rails and crane wheels and electrical parts of heavy equipment, and on the functioning of a combined maintenance department. He prepared the text and taught a course in preventive electrical maintenance for operating personnel, assistant foremen, foremen and general foremen. He made studies of operations in several departments and submitted recommendations for corrective action; prepared recommendations to avert main mill drive motor flash-over in the cold rolling mill; and continued the diesel engine training program after the departure of the mechanical maintenance advisor.

c. The mechanical maintenance advisor prepared instruction for the proper maintenance of mechanical equipment in use throughout the mill; obtained training manuals for maintenance of diesel engines and instructed classes in their use; and prepared skill tests for trade testing in mechanics. He also made a study of the operation of the shear and trim line in the hot strip mill and on the maintenance of crane wheels and crane runways, and submitted recommendations to reduce maintenance delays and to improve production output. He returned to the U.S. for annual leave in December 1963 and resigned in January 1964.

The request for four top level management specialists to advise the HSL Chairman and Board of Directors was withdrawn and funds deobligated. The request for a six-man contract team of engineering advisors for the Chief Engineer, HSL Central Engineering & Design Bureau, was also withdrawn.

In view of all the difficulties, the campus coordinator from Carnegie Institute of Technology, the advisory team, and Mission representatives decided to terminate the contract as of May 31, 1964. All the technicians have departed. No future funding is proposed for this project.

This project was only moderately successful in that the objectives were only partly achieved as a result of reorganization of HSL and decentralization of responsibility for plant operation and management. The general managers were not interested in establishing comprehensive training programs for all levels of personnel. Although the American training advisors were not used for management training and were given secondary roles in assisting the

AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-11-280-163	Steel Training
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conduct of in-plant training programs, the in-plant type programs made satisfactory progress, considering the many factors involved. It is felt that the many training programs conducted by the advisors contributed to the overall knowledge of each employee who participated.

**E-1a**

1. DATA CURRENT AS OF: 1 November 1964

2. COOPERATING COUNTRY: India

3. PROJECT NO.: 386-24-230-267

4. TITLE: National Engineering Industries

5. U.S. FUNDING: BEGIN FY 1965, END FY 1965

PHYSICAL WORK: 1965, 1967

6. PRIOR REFERENCES:

7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)	a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES		f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS		
					(1) U.S. AGENCIES		(2) CONTRACT	(1) U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT	(1) DIRECT AND U.S. AGENCIES	(2) CONTRACT
					AID	PARA									
I. THRU ACTUAL YEAR FY _____	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR														
	GROSS OBLIGATIONS (ACTUAL YEAR)														
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR														
	EXPENDITURES (ACTUAL YEAR)														
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR														
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS	DL	I*	4,300	-	-	-	-	-	4,300	-	-	-		
	B. EXPENDITURES	DL	L	1,000	-	-	-	-	-	1,000	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	I*	3,300	-	-	-	-	-	3,300	-	-	-		
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS	DL	L	-	-	-	-	-	-	-	-	-	-		
	B. EXPENDITURES	DL	L	3,000	-	-	-	-	-	3,000	-	-	-		
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR	DL	L	300	-	-	-	-	-	300	-	-	-		
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS 2/	DL	L	-	-	-	-	-	-	-	-	-	-	300	-
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/														
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/	DL	L	4,300	-	-	-	-	-	4,300	-	-	-	4,300	-

REMARKS:

1/ This is a memorandum (non-odd) column.

2/ Show estimated expenditures in column i.

\*AID Loan #101.

AID 1080-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-24-230-267	National Engineering Industries
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### 1. The Activity Target

To expand the existing production of the National Engineering Industries, Ltd., (NEI) from 2.7 million ball, needle, and roller bearings per year to 7.5 million, and from 3.0 million steel balls per year to 4.2 million. NEI is a public limited company, located at Jaipur in Rajasthan state.

The demand for bearings in India was estimated at 8.5 million in 1963 and is expected to rise to 12 million in 1965; present production is three million per year, most of which are used in the manufacture of such products as electric fans and motors, pumps, vehicles, and machine tools. The entire production of steel balls is taken by cycle motive manufacturers; this production will not be affected by the proposed loan.

Description of the Project: The loan will enable NEI to

1. increase its annual production of ball bearings from 4.03 million bearings to 5.7 million bearings and its production of straight roller bearings from 0.06 million bearings per annum to 0.72 million, and

2. establish a new plant to produce 1.08 million tapered roller bearings yearly.

The U.S. collaborator, Federal Mogul Bower Bearing Inc. (FMBB), will prepare the layout for the plant, designed to permit a 100 percent increase in capacity, after which top NEI technical personnel will review the layout, the final equipment list and the planned production flow. NEI will be responsible for the procurement of the equipment and design and supervision of construction of the plant.

During the construction period, NEI will send six department foremen to FMBB for training. When plant operations are ready to start FMBB will send a number of its foremen and supervisors to Jaipur to help get the plant into production, which FMBB believes should be by the end of 1965. A senior FMBB technical official has been hired by NEI to serve as plant manager, and retired FMBB several employees will assist NEI during the start-up period; all will serve as NEI employees. Once operations commence, NEI will assume complete responsibility for the operation of the plant.

### 2. The Course of Action

Financing: AID Loan No. 101, signed on July 21, 1964, provides \$4.3 million to finance the foreign exchange costs of expanding the National Engineering Industries Limited (NEI) ball bearing and straight roller bearing production. It is estimated that \$3,095,000 of the loan will be utilized to establish the new tapered roller bearing facilities and the balance to expand NEI's existing ball

bearing and straight roller bearing facilities. Local costs will be met by the borrower from its own resources.

### 3. Progress to Date

The loan agreement was signed July 21, 1964. There has been no activity to date (September 20, 1964).

UNCLASSIFIED

PAGE NO.

AM-13

AID 1020-2 (8-64)		PROJECT DATA SUMMARY -- AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED				
E-1a	1. DATA CURRENT AS OF: 1 November 1964		2. COOPERATING COUNTRY India			3. PROJECT NO. 386-22-290-268				4. TITLE Trombay Methanol Plant						
	5. U.S. FUNDING:		BEGIN FY 1964		END FY 1964		6. PRIOR REFERENCES									
	PHYSICAL WORK:		1964		1966											
7. AID DOLLAR FINANCING - OBLIGATIONS AND EXPENDITURES (\$000)		a. APPROPRIATION TITLE	b. LOAN OR GRANT	c. TOTAL	d. CONTRACT 1/	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS	
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT
I. THRU ACTUAL YEAR FY 1964	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR		DL	L*	7,800	-	-	-	-	-	7,800	-	-	-	-	-
	GROSS OBLIGATIONS (ACTUAL YEAR)		DL	L*	7,800	-	-	-	-	-	7,800	-	-	-	-	-
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR		DL	L	-	-	-	-	-	-	-	-	-	-	-	-
	EXPENDITURES (ACTUAL YEAR)		DL	L	-	-	-	-	-	-	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L*	7,800	-	-	-	-	-	7,800	-	-	-	-	-
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS															
	B. EXPENDITURES		DL	L	4,000	-	-	-	-	-	4,000	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L	3,800	-	-	-	-	-	3,800	-	-	-	-	
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS															
	B. EXPENDITURES		DL	L	3,800	-	-	-	-	-	3,800	-	-	-	-	
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR															
IV. PLANNING YR. (EST.) FY	GROSS OBLIGATIONS 2/															
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS 2/															
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS 2/		DL	L	7,800**	-	-	-	-	-	7,800	-	-	-	7,800	

## REMARKS:

- 1/ This is a memorandum (non-odd) column.  
2/ Show estimated expenditures in column i.

\*AID Loan # 104.  
\*\*\$1.84 million of this loan will be utilized to meet increased costs of the Trombay Fertilizer Plant - see Project #386-22-230-199.

AID 1020-3 (7-64)	PROJECT DATA SUMMARY - LOCAL COSTS FINANCED WITH AID DOLLARS AND/OR CONTROLLED LOCAL CURRENCIES										SECURITY CLASSIFICATION UNCLASSIFIED		
E-1b	1. DATA CURRENT AS OF:		2. COOPERATING COUNTRY		3.		4. PROJECT NO.		5. TITLE				
	1 November 1964		India		Funding	END FY	386-42-290-268		Trombay Methanol Plant				
				1965	1966	386-22-290-268		6. PRIOR REFERENCES:					
7. OBLIGATED AND DISBURSED	a. FUNDS			b. TOTALS				c. PHYSICAL FACILITIES AND EQUIPMENT LOCAL CURRENCY UNITS (000)		d. OPERATIONAL SUPPORT LOCAL CURRENCY UNITS (000)			
	(1) TYPE	(2) SOURCE	(3) LOAN OR GRANT	(1) DOLLAR EQUIVALENTS (000) 1/		(2) LOCAL CURRENCY UNITS (000)		(1) OBLIGATED	(2) DISBURSED	(1) U.S. ADMINISTERED PERSONNEL, DISBURSED		(2) OTHER	
				(a) OBLIGATED	(b) DISBURSED	(a) OBLIGATED	(b) DISBURSED			(a) U.S. PERS.	(b) NON-U.S. PERS.	(a) OBLIGATED	(b) DISBURSED
I CUMULATIVE THRU ACTUAL YEAR	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
		(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
TOTAL ACTUAL FY	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
		(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
II OPERATIONAL YEAR (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
		(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	Sec.104(g)	L	2,089	2,089	10,000	10,000	10,000	10,000	-	-	-	-
III BUDGET YEAR (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
		(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
IV PLANNING YEAR (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
		(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
V ALL SUBSEQUENT FYs (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
		(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC												
VI TOTAL ALL YEARS (EST.)	A. FA ACT	(i) LC COSTS CHGD TO \$ ACCTS. 2/											
		(ii) TRUST FUND											
		(iii) OTHER LC											
	B. P.L. 480 LC	Sec.104(g)	L	2,089	2,089	10,000	10,000	10,000	10,000	-	-	-	-

REMARKS:  
 1/ Exchange Rate: \$1 = Rs. 4.7876  
 2/ The total dollar equivalent amounts are the same as in Col. 1 of Table E-1a

E-1c	PROJECT DATA SUMMARY - PERSONNEL AND PARTICIPANTS										1. DATA CURRENT AS OF:		2. COOPERATING CTRY.		3. PERSONNEL SERVICES PARTICIPANT TRAINING		BEG. FY	END FY	4. PROJECT NO.					
	5. NUMBERS OF PERSONS-PROJECT PERSONNEL AND PARTICIPANTS			a. CUM. THRU ACTUAL FY			b. ACTUAL FY			c. OPERATIONAL FY			d. BUDGET FY			e. PLANNING FY			f. ALL SUBSEQUENT FYs			g. TOTAL ALL YEARS		
			Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	Direct	PASA	Contract	
I PROJECT PERSONNEL	A. MAN YEARS	U.S.																						
		Non U.S.																						
B. ON BOARD	U.S.																							
	Non U.S.																							
II. PARTICIPANTS PROGRAMMED	A. U.S.																							
	B. THIRD CTRY.																							

REMARKS:  
 1/ End of Fiscal Year

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AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November 1964	2. COOPERATING COUNTRY India	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-290-268	Trombay Methanol Plant
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1. The Activity Target

Is to finance the foreign exchange and local currency costs of a methanol plant to be located adjacent to the fertilizer plant of the Fertilizer Corporation of India (FCI) at Trombay, near Bombay. The loan of \$7.8 million provides \$1.84 million to cover the increased cost of the fertilizer plant and \$5.96 million for the Trombay methanol plant. A PL-480 Section 104(g) loan of Rs.10 million (equiv. of \$2.089 million) in FY 1965 will cover local currency costs of the methanol plant.

At present methanol is not produced in India, although demand for the chemical is estimated at 25,000 tons per year. New industries benefiting from a ready supply of methanol would be plastics, drugs, dyestuffs, and synthetic fibers.

2. The Course of Action

Bids were requested and received for a turnkey methanol plant and turnkey contract executed in June 1964. The preparation of the site next to the fertilizer plant will be the responsibility of FCI. FCI will accept the unit after it meets guaranteed specifications. The U.S. contractor expects to have the civil works completed by October 1964, and the plant ready for testing by October 1965.

3. Progress to Date

The loan for this project was authorized in January 1964, and the contract for the turnkey plant was signed in June 1964. FCI handed over the plant site to the construction company in May 1964.

AID 1020-2 (8-64)		PROJECT DATA SUMMARY — AID DOLLAR COSTS										SECURITY CLASSIFICATION UNCLASSIFIED					
E-1a	1. DATA CURRENT AS OF: 1 November, 1964		2. COOPERATING COUNTRY INDIA			3. PROJECT NO. 386-22-250-270			4. TITLE Consulting Services								
	5. U.S. FUNDING:		BEGIN FY 1965		END FY 1965	6. PRIOR REFERENCES											
	PHYSICAL WORK:		1965		1967												
7. AID DOLLAR FINANCING — OBLIGATIONS AND EXPENDITURES (\$000)		c. APPROPRIATION TITLE	b. LOAN OR GRANT	e. TOTAL	d. CONTRACT <sup>1/</sup>	e. PERSONNEL SERVICES			f. PARTICIPANTS		g. COMMODITIES		h. OTHER COSTS		i. LOCAL CURRENCY COSTS CHARGED TO DOLLAR ACCOUNTS <sup>1/</sup>		
						(1) U.S. AGENCIES		(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
						AID	PASA	CONTRACT	U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	DIRECT AND U.S. AGENCIES	CONTRACT	
I. THRU ACTUAL YEAR FY _____	A. CUMULATIVE NET OBLIGATIONS THRU ACTUAL YEAR																
	GROSS OBLIGATIONS (ACTUAL YEAR)																
	B. CUMULATIVE EXPENDITURES THRU ACTUAL YEAR																
EXPENDITURES (ACTUAL YEAR)																	
C. UNLIQUIDATED OBLIGATIONS END OF YEAR																	
II. OPERATIONAL YEAR (EST.) FY 1965	A. GROSS OBLIGATIONS		DL	L*	2,000	-	-	-	2,000	-	-	-	-	-	-	-	
	B. EXPENDITURES				200	-	-	-	200	-	-	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L*	1,800	-	-	-	1,800	-	-	-	-	-	-	-	-
III. BUDGET YEAR (EST.) FY 1966	A. GROSS OBLIGATIONS																
	B. EXPENDITURES		DL	L*	1,000	-	-	-	1,000	-	-	-	-	-	-	-	-
	C. UNLIQUIDATED OBLIGATIONS END OF YEAR		DL	L*	800	-	-	-	800	-	-	-	-	-	-	-	-
IV. PLANNING YR. (EST.) FY 1967	GROSS OBLIGATIONS <sup>2/</sup>																800
V. ALL SUBSEQUENT YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>		DL	L*	2,000	-	-	-	2,000	-	-	-	-	-	-	-	2,000
VI. CUMULATIVE TOTAL ALL YEARS (EST.)	GROSS OBLIGATIONS <sup>2/</sup>																

## REMARKS:

<sup>1/</sup> This is a memorandum (non-add) column.<sup>2/</sup> Show estimated expenditures in column i.

\* Loan AID-115

SECURITY CLASSIFICATION UNCLASSIFIED

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AID 1020-1 (7-64)	1. DATA CURRENT AS OF: 1 November, 1964	2. COOPERATING COUNTRY INDIA	SECURITY CLASSIFICATION UNCLASSIFIED	386-22-250-270	Consulting Services
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### 1. Activity Target

Many loan projects require the services of consultants and advisors for preliminary investigations, feasibility studies, preparation and/or review of plans and designs, supervision, technical and management advice during the construction and start-up of projects. In the past such services often were provided by U.S. firms and experts and financed by AID project loan or grant funds. In other cases, GOI elected to finance consulting services from its own funds. However, AID has felt increasingly that India has not made enough use of foreign consultants and experts in support of its projects and their assistance in the broader areas of sectoral studies and overall planning. Furthermore, the frequent need to provide many of these services on short notice and for relatively brief periods of time requires a ready source of financing.

To encourage this use of consulting services, AID in early FY 1965 authorized a loan of \$2 million to finance such services for broader sectoral studies and for assistance to planning bodies at both central and state levels on existing or potential capital-projects. It is intended that the loan cover consulting and advisory services in a wide range of important economic sectors, including irrigation, power, mining, industry, communications, and transportation.

### 2. Course of Action

To work with the GOI to develop a pattern of utilizing foreign consulting services for major capital projects, sectoral studies (e.g. power, coal and transportation), and improvement of the planning process. It is envisaged that there will be a broad range of users of the funds. Potentially these include such organizations as the following:

- Central Government agencies, such as the National Coal Development Corporation (NCDC), the National Mineral Development Corporation, and the Central Water and Power Commission (CWPC).
- Government departments, such as State Public Works Departments, Irrigation Departments, and Industries Departments.
- Project authorities for specific projects, such as State Electricity Boards.
- Central or State Government departments concerned with broad economic and sectoral studies, such as the Indian Planning Commission, the Department of Economic Affairs, and the various State Planning Commissions.
- Private sector firms.

Initially \$2 million was authorized with little empirical information concerning the number of ministries or agencies that might request the use of these services or the rate at which these funds may be committed. If the services to be funded under this loan provide the expected benefits to the development process, AID plans to provide further loans, when needed, for continuation of these services.

### 3. Progress to Date

The present loan was authorized in July 1964. The GOI is actively considering several ministry requests for consulting services.

(See Development Loan Paper AID-NESA/P-17 for fuller details of this Loan.)