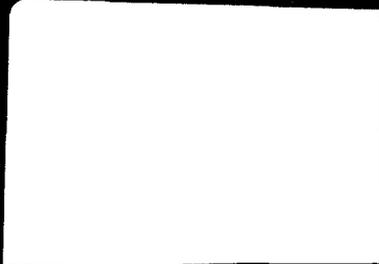




AGENCY FOR INTERNATIONAL DEVELOPMENT



PROGRAM AND PROJECT DATA

PRESENTATION TO THE CONGRESS—FY 1971

NEAR EAST & SOUTH ASIA

BEST AVAILABLE

FOREWARD

The Regional volumes provide additional program and project data relating to the FY 1971 Congressional Presentation of the Agency for International Development.

Country Data--The following narratives and tables have been included for each country as applicable:

NARRATIVE AND FISCAL SUMMARY OF COUNTRY PROGRAM--Narrative to provide a framework for the current and proposed A.I.D. program in the country; Program Summary table by funding category for FYs 1969-1971.

Table II --SUMMARY OF PROGRAM BY FUNCTION--project and program assistance for FYs 1969-1971, by major cost component and method of financing; related personnel and participant data. This table is prepared for selected countries.

Table III--PROJECT DATA--Status of individual projects: for each project for which FY 1971 obligations are proposed. This table is prepared for selected countries.

Table IV --PROJECT DATA SUMMARY

For countries other than those designated as selected, used to list:

- (a) projects with 6/30/69 unliquidated obligations:
- (b) new projects started or planned to be started in FY 1970 with estimated unliquidated balances on 6/30/70; or
- (c) projects requiring FY 1971 funding.

For selected countries, used to list:

- (a) projects for which Table IIIs are not prepared, but which have 6/30/69 unliquidated obligations; or
- (b) projects started or planned to be started in FY 1970 for which no Table IIIs are prepared, but which will have an estimated unliquidated balance on 6/30/70.

Table IVa--DESCRIPTION OF NEW FY 1971 PROJECTS--This table is used to provide a brief description of projects footnoted on Table IV as new in FY 1971.

Table V --STATUS OF DEVELOPMENT LOANS--loan status of individual, authorized Development Loans and Alliance for Progress Loans which had not been fully disbursed as of December 31, 1969; descriptive narrative focusing on implementation, with specific emphasis on measurements of progress related thereto. This table is prepared for selected countries.

Table VI --STATUS OF DEVELOPMENT LOANS SUMMARY--This table is used for countries other than selected countries to summarize for each country the fiscal data on individual Development Loans and Alliance for Progress Loans which had not been fully disbursed as of 12/31/69.

Regional Data --The following two tables provide data at the regional level:

- a. Table II--Summary of Program by Function
- b. Summary of Status of Development Loans

World-Wide Data--A separate volume with the sub-title "World-Wide Summaries and Program Support Activities" contains a world-wide section in which entries on the Regional Summaries are summarized on a world-wide basis. This volume also contains other world-wide data and program support and interregional activities information.

NEAR EAST AND SOUTH ASIA

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NEAR EAST AND SOUTH ASIA

FY 1971 PROGRAM				
(Thousands of Dollars)				
Country	Type of Assistance			
	Total	Develop- ment Loans	Technical Assistance	Supporting Assistance
<u>NEAR EAST AND SOUTH ASIA</u>				
<u>TOTAL</u>	<u>\$478,307</u>	<u>\$444,682</u>	<u>\$33,625</u>	<u>--</u>
Afghanistan	6,728	265 ^{a/}	6,463	--
Ceylon.	7,000	7,000	--	--
India	276,550	266,700	9,850	--
Jordan.	1,886	--	1,886	--
Nepal	2,591	492 ^{a/}	2,099	--
Pakistan.	125,147	119,300	5,847	--
Turkey.	54,220	50,000	4,220	--
CENTO ^{b/}	606	100 ^{a/}	506	--
Regional Programs	3,579	825 ^{a/}	2,754	--

^{a/}Grants for population programs under title X of the Foreign Assistance Act.

^{b/}Central Treaty Organization.

SUMMARY OF PROGRAM BY FUNCTION

(Dollar Amounts in Thousands)

Country: NEAR EAST AND SOUTH ASIA

TABLE II

Category	Actual FY 1969				Estimate FY 1970				Proposed FY 1971		
	Total	Tech. Coop.	Supp. Assist.	Conting. Fund	Total	Tech. Coop.	Supp. Assist.	Conting. Fund	Total	Tech. Coop.	Supp. Assist.
Development Loan Program	335,750	XXX	XXX	XXX	331,116	XXX	XXX	XXX	444,682	XXX	XXX
Programs Other than Devel. Loan											
Project Assistance											
U.S. Technicians	21,409	20,529	880		19,714	19,714			21,301	21,301	
Participants	8,122	7,643	479		7,210	7,210			8,429	8,429	
Commodities	5,381	2,760	2,621		1,924	1,924			1,853	1,853	
Other Costs	1,875	1,543	332		1,989	1,989			2,042	2,042	
Total Project Assistance	36,787	32,475	4,312		30,837	30,837			33,625	33,625	
Method of Financing											
Project Assistance											
Direct A.I.D.	20,199	17,068	3,131		16,595	16,595			16,873	16,873	
Other Agency	3,698	3,557	141		2,696	2,696			2,466	2,466	
Contract	12,890	11,850	1,040		11,546	11,546			14,286	14,286	
Program Assistance											
Total Other than Devel. Loan	36,787	32,475	4,312		30,837	30,837			33,625	33,625	
Total Assistance	372,537	XXX	XXX	XXX	361,953	XXX	XXX	XXX	478,307	XXX	XXX

a/ Includes six week Summer Science Institutes consultants as follows:

India: FY 1969 - 135; FY 1970 - 60; FY 1971 - None

Pakistan: FY 1969 - 19; FY 1970 - 39; FY 1971 - 35

NUMBER OF U.S. TECHNICIANS (Program Overseas)

TYPE OF TECHNICIAN	On Duty At Close of Year		
	Actual FY 1969	Estimate FY 1970	Proposed FY 1971
A.I.D. employed	331	330	333
Participating agency	88 ^{a/}	96 ^{a/}	76 ^{a/}
Contractor technicians	397 ^{a/}	373 ^{a/}	337 ^{a/}
Total	816 ^{a/}	799 ^{a/}	746 ^{a/}

NUMBER OF PARTICIPANTS

TYPE OF PARTICIPANT	Programmed During Year		
	Actual FY 1969	Estimate FY 1970	Proposed FY 1971
Non-contract	1,061	960	1,007
Contract	822	803	896
Total	1,883	1,763	1,903

SUMMARY OF STATUS OF DEVELOPMENT LOANS
(In Thousands of Dollars and Equivalent)

REGION: NEAR EAST AND SOUTH ASIA

COUNTRY	Cumulative Through FY 1969				FY 1970 Through December 31, 1969			
	Authorized	Obligated	Disbursed	Repaid	Authorized	Obligated	Disbursed	Repaid
AFGHANISTAN	33,563	33,520	14,329	-	-	-	32	-
CEYLON	15,689	10,689	9,793	1,784	-	4 -	508	115
GREECE	63,973	63,973	63,692	14,307	(4)	4,996	49	1,402
INDIA	2,849,805	2,849,805	2,404,070	206,836	33,876	18,877	131,213	17,783
IRAN	140,745	140,745	135,942	61,767	(56)	(56)	406	2,696
ISRAEL	194,840	194,840	138,934	7,561	(12)	(12)	143	2,569
JORDAN	12,739	12,739	6,144	2,172	-	-	65	71
LEBANON	4,892	4,892	4,892	2,343	-	-	-	178
NEPAL	869	869	419	77	-	-	-	8
PAKISTAN	1,395,018	1,370,518	1,173,682	57,155	(779)	23,721	65,884	3,259
SYRIA	3,214	3,214	3,214	1,763	-	-	-	73
TURKEY	875,810	870,810	668,186	21,394	(1,297)	3,702	28,850	1,289
U.A.R.	48,650	48,650	48,650	5,593	-	-	-	342
Total	5,639,807	5,605,264	4,671,947	382,752	31,728	51,228	227,150	29,785

Parenthesis denotes deobligation/deauthorization.

Afghanistan



BASIC DATA

Population (<i>millions – mid-1969</i>).....	16.5
Annual Growth Rate (<i>percent</i>).....	2.3
Area (<i>1000 square miles</i>).....	250
Population Density Per Square Mile.....	66
Agricultural Land as % of Total Area	21
Percent of Labor Force in Agriculture.....	87

Per Capita GNP (<i>dollars</i>).....	85*
Life Expectancy (<i>years</i>).....	n. a.
People Per Doctor	21,360
Literacy Rate (<i>percent</i>)	8
Students as % of 5-19 Age Group	9
<i>(Primary and Secondary)</i>	

* - 1968 in 1968 prices.

AFGHANISTAN

PROGRAM SUMMARY (In millions of dollars)				
	FY 1968 Actual	FY 1969 Actual	FY 1970 Estimated	FY 1971 Proposed
Development Loans	0.7	1.3	0.1*	0.3*
Technical Assistance . . .	7.9	7.4	6.4	6.5
Supporting Assistance . . .	-	0.1*	-	-
Total A.I.D. Assistance	8.6	8.8	6.6	6.7

*Includes grants of \$87,000 in FY 1969, \$130,000 in FY 1970, and \$265,000 in FY 1971 for population programs under Title X of the Foreign Assistance Act.

U.S. AID OBJECTIVES

A.I.D. assistance to Afghanistan emphasizes increasing agriculture productivity, improving and expanding education from the primary through the university level, and improving financial management and general government administration. The program also supports the emerging private business sector.

PROBLEMS AND PROGRESS

Afghanistan's leaders, working through evolving democratic institutions, are trying to meet the nation's basic economic and social needs. The government has limited capability to increase private and public resources rapidly. The writ of government does not yet run deeply in a society which has only recently begun to adopt modern ideas of management, planning, and program implementation which will make possible national economic progress.

Afghanistan also does not have a sufficient number of experienced managers and technicians to translate such ideas into economic growth. The Afghanistan government, with the help of the United States and other donors, is facing these problems while progressing in the slow process of building technical and managerial foundations upon which to base sound developmental programs. The present successful wheat production program indicates that when the limited quantity of talent is focused on specific, urgent problems, goals can be met.

The country's political institutions continue to develop. The adoption of a new Constitution in 1964 established a national parliament and a national judiciary. These efforts to establish democratic processes continue to receive the country's highest priority.

Foreign aid provides the source of most development expenditures. However, the new government elected in late 1969 is making a determined effort to mobilize economic resources and write legislative reforms which will increase the government's revenue base and provide the domestic resources which will enable Afghanistan to make a major contribution to its own development. In the private sector, there has been a remarkable increase in the number of Afghan private citizens entering into private business ventures.

FY 1971 PROGRAM

A technical assistance program of \$6.5 million is proposed to continue to support the Afghanistan development program. Agriculture projects represent just under a third of this total, and these are oriented primarily toward Afghanistan's goal of cereal production sufficiency in the early 1970's. Afghanistan, with U.S. help, is reaching this goal through the adoption of new seed varieties, the application of modern research and extension methods, increases in application of fertilizers and pesticides and by the continued development of irrigation systems which bring more land under cultivation. In 1971 Afghanistan, with U.S. help, will begin allocating a larger proportion of available resources to agricultural program goals centered on crop diversification, agri-industry development and marketing. These programs will bring more of the nation's agricultural population into the money economy, thereby increasing farmer incomes and their ability to purchase from newly developing industries.

Approximately \$1.4 million of the 1971 program will be used to continue the development of Afghanistan's education sector. The United States has been assisting Afghanistan for a number of years in the development of its national university and its major secondary technical school. These projects are achieving successful results. Afghanistan and the United States will continue to work together in the field of primary education and are studying the possible need for assistance to secondary education curriculum development.

The remaining technical assistance funds are being used in projects designed to assist senior levels of the Afghanistan government in strengthening public and business administration, including planning and finance. To assist the private sector, A.I.D. provides technical advisors to Afghanistan's Cabinet-level Investment Committee and to the newly created Investment Advisory Center. This latter institution was created in 1969 to assist private entrepreneurs to establish new businesses and industries in Afghanistan.

AFGHANISTAN

\$265,000 will be provided to assist the Family Guidance Association in a modest family planning program. While receptivity to family planning is growing in the few urban areas, the attitudes of the predominately rural population are unknown. Following the completion this year of an A.I.D. assisted survey to determine knowledge and attitudes concerning family planning, the Government

of Afghanistan will be able to identify the priorities to be assigned to the various activities comprising a comprehensive population program.

Afghanistan remains eligible for development lending.

TABLE IV
Part 1

PROJECT DATA SUMMARY
(Dollar Amounts in Thousands)

COUNTRY: AFGHANISTAN

Project Title	Project Number	FY of Initial Obligation	FY of Scheduled Final Obligation	Through FY 1969			Estimated FY 1970			Proposed Program FY 1971		Future Year Obligation	Estimated Total Cost
				Obligations	Expenditures	Unliquidated Obligations 6/30/69	Obligations	Expenditures	Unliquidated Obligations 6/30/70	Funds	Amounts		
<u>Agriculture & Natural Resources</u>													
National Agriculture Development	306-11-190-002	1952	1972	9,486	9,084	402	1,085	1,307	180	TA	1,004	1,000	12,575
Helmand-Arghandab Valley Regional Development	306-12-995-090	1954	1972	16,642	15,914	728	900	1,516	112	TA	881	834	19,257
<u>Industry and Mining</u>													
Industrial Development*	306-11-910-116	1971	1975							TA	230	1,166	1,396
<u>Health and Sanitation</u>													
Population/Family Planning	306-11-570-110	1968	Cont.	94	17	77	130	143	64	DL	265	CONTINUING	
<u>Education</u>													
Elem. & Secondary Education	306-11-690-091	1952	1973	13,850	12,901	949	405	854	500	TA	400	672	15,327
Agriculture Education	306-11-690-092	1956	1972	5,149	4,690	459	330	451	338	TA	280	318	6,077
Technical Education	306-12-660-093	1953	1972	11,505	10,504	1,001	600	1,080	521	TA	411	490	13,006
Kabul University Administration	306-11-680-013	1966	1972	833	585	248	240	326	162	TA	260	283	1,616
<u>Public Admin. & Public Safety</u>													
Financial Administration	306-51-750-029	1956	1974	5,056	4,986	70	160	175	55	TA	240	600	6,056
Land Inventory	306-11-750-100	1967	1972	234	159	75	100	144	31	TA	94	72	500
Economic Planning	306-11-755-080	1961	1971	2,096	1,839	257	315	423	149	TA	380	-	2,791
Technical Support	306-11-999-000	1952	Cont.	25,813	24,995	818	2,113	2,486	445	TA	2,283	CONTINUING	
Total											6,728		
TC											6,463		
SA													
DL (grants)											265		

*New Project--see TABLE IVa

NUMBER OF U.S. TECHNICIANS (Program Overseas)

TYPE OF TECHNICIAN	On Duty At Close of Year		
	Actual FY 1969	Estimate FY 1970	Proposed FY 1971
A.I.D. employed	63	66	64
Participating agency.....	18	14	15
Contractor technicians.....	85	84	65
Total	166	164	144

NUMBER OF PARTICIPANTS

TYPE OF PARTICIPANT	Programmed During Year		
	Actual FY 1969	Estimate FY 1970	Proposed FY 1971
Non-contract	154	185	186
Contract	79	70	60
Total	233	255	246

PROJECT DATA SUMMARY
(Dollar Amounts in Thousands)

TABLE IV
Part 2

COUNTRY: AFGHANISTAN

Project Title	Project Number	FY of Initial Obligation	FY of Scheduled Final Obligation	Through FY 1969			Estimated FY 1970			Proposed Program FY 1971		Future Year Obligations	Estimated Total Cost
				Obligations	Expenditures	Unliquidated Obligation 6/30/69	Obligations	Expenditures	Unliquidated Obligation 6/30/70	Funds	Amount		
Private Sector Development	306-11-950-087	1963	1970	564	428	136	190	213	113	TA			754
Helmand Valley Electric Power	306-12-220-041	1957	1968	3,618	3,037	581		531	50	SA			3,618
Afghan Regional Transit	306-12-390-025	1958	1968	52,424	52,413	11		11		TA			52,424
Afghan Karakul Institute	306-15-290-004	1966	1969	241	204	37		17	20	TA			241
Air Transport Development	306-56-370-036	1956	1968	33,495	33,372	123		123		TA			33,495
National Film Laboratory	306-12-960-081	1961	1967	601	546	55		55		TA			601
Aerial Photo & Mapping	306-11-995-038	1961	1966	3,577	3,502	75		75		TA			3,577
Total													
TC													
SA													
DL (grants)													

DESCRIPTION OF NEW FY 1971 PROJECTS

COUNTRY: AFGHANISTAN

(In Thousands of Dollars)

TABLE IVa

Project Title	Project Number	Proposed Program FY 1971		Description
		Funds	Amount	
Industrial Development	306-11-910-116	TA	230	<p>This new project attempts to sustain the momentum achieved from the promulgation and implementation of the new investment law by strengthening the institutional framework for healthy private sector industrial development. Since the RGA promulgated the new investment law in 1967, over 100 investment proposals have been approved of which 40 are being implemented. Investments of approximately \$4¹/₂ million have actually been made.</p> <p>U.S. advisors will give major attention to assisting and training the staff of the newly established Investment Advisory Center in providing needed technical and managerial expertise to the private industrial sector. Advice is provided to clients on management, finance, accounting, marketing, engineering and plant design. The Government of Afghanistan is seeking additional advisors from the U.K., Germany and other donors to support industrial extension services of the Center. As a part of the Afghan Chamber of Commerce, the Center receives budget support from it. The project also provides assistance to the Investment Committee with emphasis on policy evaluation and training as contrasted to previous attention to promotional and operational activities.</p> <p>Should the Parliament act affirmatively on a proposal it is considering to establish an industrial development bank, limited advisory services may be provided under this project to assist that institution.</p>

STATUS OF DEVELOPMENT LOANS SUMMARY

As of 12/31/69

COUNTRY: AFGHANISTAN

(In Thousands of Dollars and Equivalent)

TABLE VI

Loan No.	Title	Date		Grace Period (years)	Life of Loan (years)	Interest Rate (%)		Amount Authorized	Amount Disbursed	Currency of Re-payment	Principal Repayments	Interest Collected
		Authorized	Loan Agreement			Grace Period	Amortization					
306-H-004	Ariana Airlines	12-28-62	3-23-63	10	40	3/4	3/4	2,606	2,521	US \$	-	82
306-H-009	Kandahar Diesel Elec. Generators	2-21-66	11-5-66	10	40	1	2 $\frac{1}{2}$	800	-	US \$	-	-
306-H-012	Land Reclamation	6-21-67	5-13-68	10	40	1	2 $\frac{1}{2}$	4,600	-	US \$	-	-
306-H-013	Kajakai Hydro Power	6-21-67	5-13-68	10	40	1	2 $\frac{1}{2}$	12,000	-	US \$	-	-
306-H-014	Land Inventory (Tech. Asst.)	6-29-67	6-17-68	10	40	1	2 $\frac{1}{2}$	400	-	US \$	-	-
306-H-016	Diamonium Phosphate (Program)	2-25-69	4-21-69	10	40	2	3	1,207	-	US \$	-	-
Total		XXXX	XXXX	XXX	XXX	XXXX	XXXX	21,613	2,521	XXXX	-	82

India



BASIC DATA

Population (<i>millions – mid-1969</i>).....	537
Annual Growth Rate (<i>percent</i>).....	2.5
Area (<i>1000 square miles</i>).....	1,262
Population Density Per Square Mile.....	428
Agricultural Land as % of Total Area	54
Percent of Labor Force in Agriculture.....	73

Per Capita GNP (<i>dollars</i>).....	87*
Life Expectancy (<i>years</i>).....	50
People Per Doctor	4,860
Literacy Rate (<i>percent</i>).....	28
Students as % of 5-19 Age Group	38
<i>(Primary and Secondary)</i>	

* - 1969/70 in 1968/69 prices.

INDIA

PROGRAM SUMMARY (In millions of dollars)				
	FY 1968 *Actual	FY 1969 Actual	FY 1970 Estimated	FY 1971 Proposed
Development Loans	285.0	194.0	195.4*	266.7*
Technical Assistance	8.6	8.6	8.0	9.8
Supporting Assistance	7.3*	.7*	-	-
Total A.I.D. Assistance	300.9	203.4	203.5	276.6

*Includes grants of \$7,321,000 in FY 1968, \$730,000 in FY 1969, \$450,000 in FY 1970 and \$700,000 in FY 1971 for population programs under Title X of the Foreign Assistance Act.

U.S. AID OBJECTIVES

The United States is seeking to help India:

- achieve self-sufficiency in food grain production in the early 1970's by expanding the use of fertilizer, water and better seed;
- speed up and strengthen its family planning program to bring population into better balance with food and other resources;
- improve industrial efficiency and export performance, essential if India is to pay its own way;
- increase employment opportunities and per capita income, with emphasis on disadvantaged groups within the economy.

In the last few years India has undertaken major economic policy reforms, encouraged by the World Bank-led India Consortium, in which other donors provide more than 50% of the aid. These reforms have reduced cumbersome administrative controls and resulted in increased reliance on market forces as the major means of improving resource allocation, mobilizing individual initiative, and broadening competitive participation.

India's economic performance and prospects have substantially improved. The new agriculture technology is spreading rapidly, with wheat output especially at historically high levels. Industrial production is accelerating in a more competitive domestic environment, and reforms initiated in 1966 should continue to bring more economic use of India's industrial capacity. But India has been unable to exploit fully the unprecedented overall growth opportunities presented by these development, primarily

because of uncertainty and Indian lack of confidence in aid prospects. India has responded to lower aid levels by pursuing cautious fiscal policy and informal restraint of essential industrial imports to protect its balance of payments from a foreign exchange crisis. As India enters the second year of its Fourth Five-Year Plan, the government is starting to increase investment expenditure plans and to relax restrictions on imports. This recent moderately more expansionary approach is in response to pressures building up in the economy, including shortages of industrial raw materials, and rising rural pressures for faster progress in spreading the green revolution and accelerating social change.

U.S. Assistance in FY 1971 will help provide essential imports to preserve the momentum of recent growth and help the Indian Government meet domestic economic and social demands. However, a major development effort able to realize the new potential for increased production, aimed at and commensurate with the scale of India's rural poverty and employment problems, would need substantially more assistance.

While the base was being created for faster growth than at any time previous, Indian democracy has been entering a new period of political change. After more than two decades of independence and political stability, the Congress Party has lost its predominance on the political scene, and has split into two parliamentary groups. In anticipation of the 1972 elections, Indian political debate is giving renewed attention to basic problems of poverty and social equity, particularly in rural areas.

Prime Minister Gandhi has used Bank nationalization as the main plank of her political platform. Nationalization of the 14 largest domestic banks was aimed at wresting control over commercial credit from India's major industrial families and at faster expansion of the banking system into rural areas. Mrs. Gandhi's program also includes a number of constructive steps to increase the participation of the rural poor in the development process. Specific measures include special programs to help small farmers with credit and irrigation, improve dry farming technology, rural public works for the underemployed, land reform and child nutrition. Such programs hold promise of economic betterment for small farmers and economically disadvantaged groups.

INDIA

PROBLEMS AND PROGRESS

Agriculture

The dramatic breakthrough in Indian agriculture is now in its third year. After the bad droughts of 1965 and 1966, which masked the spread of the new agriculture strategy, foodgrain production rose to nearly 100 million tons with the excellent rains of 1967/68. In 1968/69, with only moderately good rain, output dipped slightly but was still second highest in Indian history. This year the rains have been uneven, but foodgrain production may still exceed 100 million tons, setting a new high. The solid technological and policy foundation on which Indian agriculture now rests is largely due to a reappraisal of its national priorities triggered by rising food shortages and resulting inflationary pressures in the mid-sixties. With the help of the United States, the World Bank and other interested donors, India developed new development policies which placed top priority on investment in agriculture and called for the use of market forces to direct inputs -- such as fertilizer, improved seeds, pesticides and better tools -- to the most efficient farmers. Government-supported incentive prices for grain helped the farmers to buy these inputs. The new policies also called for improved research and agricultural education as well as increased extension and irrigation services.

Family Planning

The objective of India's family planning program is to cut the birth rate roughly in half by 1978. Family planning expenditures have risen from less than \$2 million equivalent in 1963/64 to a budgeted \$56 million in 1969/70. In absolute numbers, the program's infrastructure accomplishments are substantial -- 30,000 rural family planning centers and sub-centers are now in operation, as well as about 800 mobile units for sterilization and IUD insertion. Over 6.5 million sterilization have been performed and over 3 million IUD's inserted since 1965. Sales of condoms have shown a marked increase since the start of the subsidized distribution scheme begun in 1968.

But while the Government's efforts may have brought about a slightly reduced birth rate, primarily in urban areas, most observers agree that the net effect on the country-wide growth rate is still small.

Last year at the request of the Indian Government and the Consortium, the UN sponsored an evaluation of the Indian program. The UN report concluded that substantial further expansion was

required to make the scale of the program commensurate with India's population problem. The report pointed out a number of administrative and organizational problems, and urged that management improvements were needed to facilitate the required expansion in the program. Besides administrative problems, the family planning program has been constrained by the resource limitations that have been restricting the growth of all elements of India's development program. In view of the low direct foreign exchange costs of a larger program, external aid for an expansion of family planning would have to be largely for financing local costs, thereby meeting the indirect impact of program expansion on India's overall external resource needs.

A.I.D. has been discussing with the Indian Government a proposed program expansion beyond the Fourth Plan targets, which might be related to U.S. financial assistance. The discussions have also covered the substantial administrative improvements (recommended by the UN) which would be needed to carry out such an expansion effectively.

Significant progress can be achieved in family planning only after a longer period of sustained effort. However, if the needed administrative improvements can be made, and the program can maintain its fast growth rate to date, the long run out-look for attainment of the program's objectives could be improved substantially.

Export Growth

India's efforts to achieve self-sustaining growth will be dependent on the long-term growth of its exports. The Indian Government's target for export growth over the next several years is an average of 7% per year. Exports are estimated to have grown 13% in 1968/69, an increase which confirms the effectiveness of the 1966 devaluation and other governmental inducements. Initial reports indicate that overall export growth in 1969/70 has slowed significantly because of declining prices for agri-based exports. However, exports from the modern manufacturing sector, such as mechanical equipment and chemicals, were up about 20%.

In recent months raw material shortages have begun to slow this export growth, emphasizing the importance of a sustained flow of imports and of foreign aid for achievement of the 7% target over the next few years.

INDIA

Defense Spending

The Indian Government recognizes the need for restraint in defense spending, clearly seeing the dangers posed by an arms race with its neighbors. At the same time, India feels it must maintain a defense posture adequate to discourage possible Communist Chinese aggression in South Asia. Limits on defense expenditures are indicated by the fact that they have declined slightly over the past six years as a percentage of GNP, from about 4.3% in 1963/64 to 3.6% in 1969/70.

FY 1971 PROGRAM

A Development Loan program of \$266.7 million including a \$700,000 grant under Title X for family planning and a Technical Assistance program of \$9.8 million is proposed for FY 1971. About \$191 million in sales of P.L. 480 Title I food and other agricultural products is also proposed. In addition, the Export-Import Bank may lend India about \$55 million. Other donors including the World Bank will provide about \$620 million. Communist countries also provide assistance.

In the past two years of industrial recovery, the Indian Government pursued a cautious fiscal policy because of its concern about the long-run shortage of foreign exchange necessary to carry forward the development program. The effort to hold imports within immediate foreign-exchange availabilities had serious effects: investment growth was sluggish and industrial production, (of which over 85% is in the private sector) was well below maximum achievable levels.

In recent months continuing industrial recovery has pressed against these policy constraints. With emerging shortages of steel and other imported raw materials now affecting both exports and domestic industrial production, industrial import licensing was increased 30% over the 1968/69 level.

In addition, as the Fourth Five-Year Plan moved into its second year and rural pressures for more rapid growth developed, the Indian Government has started to expand the development program more rapidly to take advantage of the opportunities created by the new agricultural dynamism.

The 1970/71 government investment budget is planned to increase 15-18% over 1969/70. New or expanded programs to be initiated are designed to increase the earning potential of landless laborers and of very small and dry-land farmers, groups which have not yet shared sufficiently in the benefits of the green

revolution. However, the cost of these programs will add to the government's budgetary and foreign exchange problems. The \$266 million requested for India for FY 1971, though it is \$71 million more than is expected to be provided in FY 1970, is significantly below the level required to take full advantage of the growth potential of the Indian economy. The requested level for 1970/71 would provide about 34% of Consortium assistance, still well below past shares which were closer to 40%.

The Indian economy is now capable of sustained rapid growth. A policy framework for rapid development - consisting of emphasis on agriculture, exports, and on continuation of the liberalization of industrial imports - is now in place. Agricultural growth at a rate which will mean food self-sufficiency in the near future is within reach, if foreign inputs are available. This can lift the whole economy and assure food supplies at reasonable prices to the urban population. The government will be able to strike out on a sustained, vigorous development course, and to carry out programs designed to improve the income-generation potential of those groups that have been left behind by the green revolution. This kind of a larger development effort is needed, and is possible, if adequate foreign exchange is available.

Industrial Production and Exports

A major part of the proposed program will be used to support increased levels of private industrial production. These imports of industrial raw materials components and spare parts will also continue to foster more efficient use of existing plant capacity. Rapid private industrial growth will generate the corporate savings needed to finance further industrial development. Despite recent political events there have been no major changes in the liberalized import licensing system introduced in 1966 which placed more reliance on market forces.

Agriculture

Fertilizer. India's use of fertilizer must continue to rise sharply if the new agricultural policies are to succeed. Every dollar's worth of fertilizer used means \$4 worth of additional grain production.

Fertilizer consumption, which had been growing at the remarkable rate of 22% annually, has now slowed to around 12%, reflecting marketing and other problems. In order to maximize the growth of fertilizer consumption the Indian Government has removed restrictions on fertilizer distribution. India produced 1,075,000 nutrient metric tons of fertilizer in 1969/70 and hopes to boost

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this to about 4,500,000 tons in 1973/74. The Indian Government recognizes that so great an expansion of productive capacity calls for foreign private investors who can provide capital as well as production, management and marketing experience.

Numerous plants have been and are being constructed, several of which involve American private investment. The Indian Government recently gave its approval for a large fertilizer plant to be put up by U.S. Steel and the Indian Birla family interests. A.I.D. will provide a local currency "Cooley" loan and an Investment Guarantee in support of this project. In 1969/70 \$15 million of A.I.D. funds, matched by \$15 million of United Kingdom aid, is being loaned for construction of a 390,000 ton plant for the Indian Farmers Fertilizer Cooperatives. Management assistance is to be provided by the Cooperative Farmers International of the United States.

Despite these new plants, India will still need substantial fertilizer imports for the next several years. Fertilizer will be one of the major commodities to be financed from FY 1971 assistance.

Technical Assistance

The A.I.D. Technical Assistance program will continue to be closely coordinated with the overall priorities of India's development program. Highest priority is placed on agriculture and family planning in keeping with overall priorities for India's development. Technical assistance is also offered in other high-priority areas, such as nutrition, education and exports. \$10.6 million is requested for FY 1971 financing of technical assistance projects, including \$700,000 for family planning.

Agriculture. A.I.D. technical assistance in agriculture (\$6.5 million in FY 1971) is directed at developing and strengthening the institutions and organizational arrangements for providing key agricultural inputs crucial to the continuing success of India's new agricultural strategy. Major agricultural projects supporting this strategy are: assistance (from U.S. land-grant colleges) to Indian agricultural universities, whose tasks in the new technology are in manpower training, research and assistance in extension activities; assistance in establishing effective coordination between state government agricultural

extension staffs and the state agricultural universities (or other research facilities); assistance in the expansion of irrigation facilities, as adequate water supplies are required for use of the new high yielding varieties of wheat and rice; and assistance in increasing the supply and use of other key inputs (i.e. fertilizer, pest control, and seeds) required by the new agricultural technology.

Family Planning. FY 1970 is in a sense a transition period between the initial U.S. effort to provide adequate supplies of contraceptives and other commodities to India's family planning program, and the current effort resulting from the UN report to expand the size of the Indian program. No large quantities of contraceptive supplies are programmed in FY 1970 as in previous years since there are sufficient supplies on hand to meet demand.

In FY 1970 A.I.D. plans to spend about \$450,000 for continued support of demographic training and research, family planning training centers, and the mass-mailing scheme. The FY 1971 program calls for about \$700,000 to support expanded efforts in research and evaluation as well as getting underway an intensive districts activity. The ultimate size of the FY 1971 program will depend to a great extent on the outcome of on-going discussions regarding prospects for an expanded program.

Other Technical Assistance

In the field of education A.I.D. is proposing a program of \$1.3 million. Primary emphasis is on science and engineering. Projects include: assistance, through the U.S. National Science Foundation, in upgrading the teaching of science and mathematics and in curriculum development; and assistance in development of the Indian Institute of Technology at Kanpur, now one of India's leading higher educational institutions.

To get at India's massive problems of malnutrition, A.I.D. has a nutrition project (\$400,000 in FY 1971) aimed at fortification of popular food items with protein and vitamins, creating more nutritious foods for child-feeding programs and for commercial sale, and acting as a catalyst to encourage Indian Government and private organization and industry programs to reduce malnutrition.

SUMMARY OF PROGRAM BY FUNCTION

Country: INDIA

(Dollar Amounts in Thousands)

TABLE II

Category	Actual FY 1969				Estimate FY 1970				Proposed FY 1971		
	Total	Tech. Coop.	Supp. ^{a/} Assist.	Conting. Fund	Total	Tech. Coop.	Supp. Assist.	Conting. Fund	Total	Tech. Coop.	Supp. Assist.
Development Loan Program	194,000	XXX	XXX	XXX	195,450 ^{a/}	XXX	XXX	XXX	266,700 ^{a/}	XXX	XXX
Programs Other than Devel. Loan											
Project Assistance											
U.S. Technicians	7,145	6,835	310	-	6,227	6,227	-	-	7,058	7,058	-
Participants	1,757	1,713	44	-	1,618	1,618	-	-	2,370	2,370	-
Commodities	455	79	376	-	160	160	-	-	422	422	-
Other Costs	-	-	-	-	-	-	-	-	-	-	-
Total Project Assistance	9,357	8,627	730	-	8,005	8,005	-	-	9,850	9,850	-
Method of Financing											
Project Assistance											
Direct A.I.D.	3,235	2,654	581	-	2,749	2,749	-	-	3,271	3,271	-
Other Agency	1,446	1,346	100	-	831	831	-	-	932	932	-
Contract	4,676	4,627	49	-	4,425	4,425	-	-	5,647	5,647	-
Program Assistance	9,357	8,627	730		8,005	8,005	-	-	9,850	9,850	-
Total Other than Devel. Loan	9,357	8,627	730	^{a/}	8,005	8,005	-	-	9,850	9,850	-
Total Assistance	203,357	XXX	XXX	XXX	203,455	XXX	XXX	XXX	276,550	XXX	XXX

^{a/} Includes \$730 thousand in FY 1969, \$450 thousand in FY 1970 and \$700 thousand in FY 1971 for population grants under Title X of the Foreign Assistance Act.

^{b/} Includes 135 summer science consultants in FY 1969 and 60 in FY 1970.

^{c/} Includes 22 in family planning in FY 1970 and 20 in FY 1971.

NUMBER OF U.S. TECHNICIANS (Program Overseas)

TYPE OF TECHNICIAN	On Duty At Close of Year		
	Actual FY 1969	Estimate FY 1970	Proposed FY 1971
A.I.D. employed	77	72	75
Participating agency	35	40	36
Contractor technicians	246 ^{b/}	184 ^{b/}	144
Total	358	296	255

NUMBER OF PARTICIPANTS

TYPE OF PARTICIPANT	Programmed During Year		
	Actual FY 1969	Estimate FY 1970	Proposed FY 1971
Non-contract	245	264 ^{c/}	335 ^{c/}
Contract	94	112	165
Total	339	376	500

Country: INDIA

PROJECT DATA

TABLE III

PROJECT TITLE Agricultural Universities	ACTIVITY Agriculture and Natural Resources	FUNDS TA
PROJECT NUMBER 386-11-110-281	PRIOR REFERENCE Page 40 FY 1970 PDB	INITIAL OBLIGATION FY: 1955
		SCHEDULED FINAL OBLIGATION FY: 1974

Project Target and Course of Action: To develop the capacity of Agricultural Universities to plan and administer fully integrated programs in agricultural teaching, research, and extension. Six U.S. land grant Universities provide nine Indian agricultural Universities with comprehensive advisory services in administrative and technical fields, advanced training of Indian staff members in the U.S., and limited amounts of technical equipment to support demonstration activities. Each Indian Agricultural University is to: 1) develop an administrative organization to manage the professional and supporting work of an institution integrating teaching, research, and extension; 2) introduce teaching techniques that require students to learn by thinking and doing, and curricula which prepares students for specific jobs in agriculture; 3) initiate state-wide applied research programs focussed on solving problems impeding agricultural production; 4) develop an extension education program for the State; and 5) develop programs for applying the resources of the University to increasing productivity in the community served. The six U.S. universities providing assistance are coordinating their efforts through the Council of U.S. Universities for Rural Development.

Progress to Date: As each State agricultural university was created by State legislative action at a different

point in time, progress among the universities being assisted has not been uniform. However, the stages of university development have been similar. The first stage developed modern academic programs and improved physical facilities and administration. Administration has assumed particular importance at Universities with several colleges and campuses. While the internal examination and course credit system has been introduced in all of the universities, obtaining full faculty and student acceptance still requires attention.

The slowest progress has been within the critical areas of research and extension, although the Punjab Agriculture University and the Uttar Pradesh Agriculture University have made very good progress. Five of the eight agricultural universities have been assigned full responsibility for state research programs. Pilot programs to integrate research and extension activities have been effective in obtaining acceptance of the integrated approach.

The Association of Indian Agricultural Universities has recently been revitalized. It is assuming its role of coordinator of foreign assistance, and, more importantly, in devising mutually compatible university development plans. The Association has led the Central and State Governments to review their policies with respect to the

U.S. DOLLAR COSTS (In Thousands)				OBLIGATIONS							PRINCIPAL CONTRACTORS/AGENCIES
	Obligations	Expenditures	Unliquidated	Estimated FY 1970			Proposed FY 1971				
				Direct AID	Contract/Other Agency	Total	Direct AID	Contract/Other Agency	Total		
Through 6/30/69	21,953	19,720	2,233							University of Illinois Ohio State University Kansas State University University of Tennessee University of Missouri Pennsylvania State University	
Estimated FY 70	2,530	2,677									
Estimated through 6/30/70	24,483	22,397	2,086	50	1,840	1,890	56	1,705	1,761		
		Future Year Obligations	Estimated Total Cost	5	587	592	6	898	904		
				-	48	48	-	50	50		
				-	-	-	-	-	-		
Proposed FY 71	2,715	4,776	31,974	55	2,475	2,530	62	2,653	2,715		

Country: INDIA

PROJECT DATA (Continued)

TABLE IIIa

PROJECT TITLE	PROJECT NUMBER
Agricultural Universities	386-11-110-281

Universities, with the consequence that the Universities have achieved greater influence on State and Central Ministry policies and administration.

Agricultural gains during the past two years heightened the need for more broadly trained Indian agriculturalists and research workers. Five State universities are reaching the stage where they can develop on their own. These five: 1) rest on adequate State legislation; 2) employ well qualified, dynamic administrative and professional staff and have provided for the replacement of staff as they retire; 3) have established teaching, research, and extension programs; and 4) have firm arrangements for annual budgets in the amounts necessary to support the teaching and research staff to maintain facilities and to develop additional programs and facilities to support these.

An important step marking the phase-out of this project will be the exchange of Indian personnel from the stronger universities to the weaker departments of the less advanced universities. However, because of increasing demands from their own States for service, even the most advanced Indian agricultural universities are not likely to be in a position to release sufficient qualified personnel before 1974, although visits have begun and are having a beneficial effect on the slower universities.

When the study of the Punjab University development program is completed, we will have a model for the evaluation of the other Universities. These evaluations will enable us to develop phase-out plans for each University.

FY 1971 Program: Forty-eight full-time contract advisors will work at nine universities, eight continuing from last year and one new -- Assam. The teams at the

universities which have established a reasonably sound foundation will be reduced in size; our attention will be focussed on strengthening specific disciplines to improve post graduate study and the research competency of these institutions. The teams at the other universities will continue to work to improve administration, modernize curriculum, and raise academic standards. Short-term consultants will be an increasing component of the teams, particularly where the number of full time advisors are being reduced as well as of teams where the university is newly created and experiencing initial development problems. To help coordinate the work of six participating universities, A.I.D. will finance one contract technician at the Council of U.S. Universities for Rural Development in India.

U.S. Technicians: 49 full-time contract specialists, 42 contract consultants, and 2 direct-hire project managers.

Participants: Contract: 43 will begin training in the United States in technical and administrative fields; 107 participants will continue their training. Direct: six short-term will be funded.

Commodities: Demonstration materials and supplies.

Contract: To fund contracts with six U.S. universities for one year.

Country: INDIA

PROJECT DATA

TABLE III

PROJECT TITLE Rural Electric Cooperatives Development	ACTIVITY Agriculture and Natural Resources	FUNDS TA	
PROJECT NUMBER 386-11-220-342	PRIOR REFERENCE Page 44, FY 1970 PDB	INITIAL OBLIGATION FY: 1967	SCHEDULED FINAL OBLIGATION FY: 1972

Project Target and Course of Action: To provide the institutional basis to accelerate rural electrification by developing five demonstration rural electrification cooperatives in selected States and to teach villagers how to administer a rural electric cooperative efficiently.

Progress to Date: The Government of India decided to develop a system of rural electric distribution patterned after the rural electric cooperatives that played a large role in the United States.

The financing of the effort will come from the new Rural Electric Corporation of India which was established in July 1969 by the Central Government to provide a permanent source of financing. A.I.D. has agreed to grant Rs. 1,050,000 (\$140 million equivalent) to the Corporation from U.S. Uses Rupees as part of the capital for the program; the rest will be contributed by the Government of India. At the Center a Unit has been organized to establish standards, provide technical assistance, and finance the organization of the rural cooperatives and the construction of the facilities. The U.S. role is to help develop five pilot Rural Electric Cooperatives in five different States. The first three phases covering the feasibility studies were completed under a contract with the National Rural Electric Cooperative Association (NRECA) and were the

basis for the Government of India's request for the five NRECA rural electric cooperative management specialists-- one for each pilot area-- who now are in India assisting in organizing and planning for the construction and initial operation of the pilot electric projects. Six participants, one for each of the five cooperatives to be formed, were sent to the United States for training so that qualified counterparts would be available when the U.S. technicians arrived last Fall.

FY 1971 Program: A NRECA team of 5 advisors, each working with one model cooperative in the States of Uttar Pradesh, Andhra Pradesh, Maharashtra, Gujarat, and Mysore will assist and advise on construction, management, and initial operation.

U.S. Technicians: 5 NRECA contract specialists.

Participants: Ten participants, two for each of the five cooperatives and two for the Center, will receive up to 4 months training each in the U.S. in the organization and operation of rural electric cooperatives.

Contract: To fund the NRECA contract to March, 1972. (\$187,000)

U.S. DOLLAR COSTS (In Thousands)				PRINCIPAL CONTRACTORS/AGENCIES							
	Obligations	Expenditures	Unliquidated	Cost Components	OBLIGATIONS						
					Estimated FY 1970			Proposed FY 1971			
					Direct AID	Contract/Agency	Total	Direct AID	Contract/Agency	Total	U.S. National Rural Electric Cooperative Association
Through 6/30/69	356	92	264								
Estimated FY 70	66	178									
Estimated through 6/30/70	422	270	152	U.S. Technicians	-	30	30	-	185	185	
		Future Year Obligations	Estimated Total Cost	Participants ...	34	-	34	43	-	43	
				Commodities ...	-	2	2	-	2	2	
Proposed FY 71	230	240	892	Other Costs ...	-	-	-	-	-	-	
				Total Obligations	34	32	66	43	187	230	

Country: INDIA

PROJECT DATA

TABLE III

PROJECT TITLE Agricultural Production Promotion	ACTIVITY Agriculture and Natural Resources	FUNDS TA
PROJECT NUMBER 386-11-110-366	PRIOR REFERENCE Page 46, FY 1970 PDB	INITIAL OBLIGATION FY: 1967
		SCHEDULED FINAL OBLIGATION FY: 1974

Project Target and Course of Action: The aim of the project is 1) to solve field agricultural problems which reduce potential yields of new varieties and 2) to build links between agricultural institutions responsible for research and for extension. Establishing a cooperative problem solving approach as a normal working pattern not only makes an impact on food production but also on the successful development and transfer of knowledge and technique for other agriculture development activities at the farm level.

In selected Indian States A.I.D. provides four to six subject matter specialists in such fields as seed production, plant protection, soil fertility, water management and drainage, and agricultural implements. Each U.S. technician joins with his technical Indian counterparts from the State Department of Agriculture, or other State facility responsible for conducting research, and the local Agricultural University. These three persons constitute a Field Problem Unit (FPU) to identify production problems, encourage coordinated work of Indian organizations to find solutions and subsequently disseminate corrective measures determined through research. The FPUs work under the guidance of a State High-level Coordinating Committee, composed of representatives of the Center Government, the State Department of Agriculture, the State Agricultural University or research facility, the leader of the American team in the State,

and the A.I.D. Project Coordinator. Initially the American specialist emphasizes demonstrations of improved techniques and materials to demonstrate to his counterparts how the new approaches to problem solving will yield greater food production. As the project matures, the U.S. specialist stresses strengthening the institutional arrangements that are necessary so that cooperation in problem solving will continue after the U.S. has terminated its assistance.

Progress to Date: Teams of U.S. specialists are in seven Indian States. The first team to be completely in place was in March 1967; the last team in October 1969. High-level Coordinating Committees are organized in all states. Each FPU prepares and conducts training programs in its speciality field for extension specialists, plant protection officers and district agricultural engineers who in turn train members of the state extension staff who work directly with the Indian farmer.

The FPUs have developed a number of programs which emphasize the inter-disciplinary approach. For example, in four states the FPUs have been instrumental in establishing a state-wide insect and disease surveillance system to alert the plant protection officers to the need for rapid counter-measures; Maharashtra and Bihar have established regular organizations and have taken over complete responsibility and operation of the system from the FPU.

U.S. DOLLAR COSTS (In Thousands)				PRINCIPAL CONTRACTORS/AGENCIES							
	Obligations	Expenditures	Unliquidated	Cost Components	OBLIGATIONS						
					Estimated FY 1970			Proposed FY 1971			
					Direct AID	Contract/Other Agency	Total	Direct AID	Contract/Other Agency	Total	
Through 6/30/69	2,791	1,851	940								University of Tennessee
Estimated FY70	982	1,050									Kansas State University
Estimated through 6/30/70	3,773	2,901	872	U.S. Technicians	88	746	834	63	1,054	1,117	University of Missouri
				Participants . . .	141	-	141	169	-	169	Pennsylvania State Univ.
				Commodities . . .	-	-	7	-	14	14	U.S. Department of Agriculture (USDA)
				Other Costs . . .	-	-	-	-	-	-	
Proposed FY 71	1,300	5,588	10,661	Total Obligations	229	753	982	232	1,068	1,300	

PROJECT TITLE	PROJECT NUMBER
Agricultural Production Promotion	386-11-110-366

Directly pointed to the rodent problem in three states are education, motivation, and action programs developed by FPU's. As a result of demonstrations sponsored under this project, Maharashtra this year has agreed to furnish poison bait free of cost to farmers who will cooperate with the District Plant Protection Officers in a well structured program for lessening damage from rats.

As a result of the stimulation of the agriculture implements FPU in Andhra Pradesh, the State and the Young Farmers' Organizations are conducting training programs and stimulating the use of improved implements. Private businesses have begun to design and manufacture improved implements so suitable for local conditions that private firms in certain sections are unable to supply the new demand for the improved tools.

In each of the states under the project, team activities led to the adoption of multiple-cropping in some areas heretofore limited traditionally to a single crop. Where water is available, from well or canal, it now is not unusual for three crops to be grown each year. These additional crops often are new varieties which had not been grown previously in that area. This multiple cropping is the result of the use of new varieties with short growing seasons.

In four states Soil Fertility FPU's started programs to correlate field results with the recommendations that had been given based on laboratory tests of field soil samples; these tests now are being run on different soil types to determine the validity of the recommendations -- illustrating growth of the concept that research must be applicable to actual field requirements.

Under stimulus of this project several new high yielding varieties -- rice, corn, sorghum, millets, wheat -- have been introduced and are being adopted increasingly by the Indian farmers in these areas. For example, in Tamil Nadu the IR-8 rice is being planted on two million acres.

On-farm water distribution systems, salinity problems, and drainage deficiencies are being attacked by FPU's in four states.

FY 1971 Program: The FPU's will concentrate on the second generation problems created by the new high-yielding seed technology -- the problems of safeguarding the additional grain produced. This includes both maintaining the quality of the product by protection from moisture, insect pests, and rodents and secondly enabling the farmer to obtain maximum return on his efforts by marketing his surplus grain during periods of favorable prices. Storage facilities therefore, are being designed to encourage and enable the farmer to follow this course of action. Additional emphasis will be given to ensuring that retention of the cooperative pattern between agencies will continue after the project terminates.

U.S. Technicians: Full time: Contract--29; PASA--4; Direct Hire--2; Short Term: 10 consultants.

Participants: 21 for six months each in practical problems in their specialties; 9 high level officials for 3 months each in the United States in production program management.

Commodities: Teaching and demonstration supplies.

Contract: \$918,000 to fund contracts with four U.S. universities for one year.

PASA: \$136,000 to fund the PASA with the United States Department of Agriculture.

Country: INDIA

PROJECT DATA (Continued)

TABLE IIIa

PROJECT TITLE Increased Agricultural Inputs	PROJECT NUMBER 386-11-190-367
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supervised the construction and demonstration of a peanut dryer for control of poisonous aflatoxins which develop in peanuts under Indian growing conditions and limit their use for human consumption.

FY 1971 Program: U.S. experts will continue to conduct training programs, demonstrations, seminars, market studies, and fertilizer promotional campaigns with both public and private fertilizer organizations; provide advice to the Government of India on fertilizer requirements and distribution, and to fertilizer manufacturers on fertilizer technology and management; work with the National Seeds Corporation, State Governments, and private seed businesses to improve the processing, storage, and marketing of seeds; assist the pesticides industry to increase pesticide production and help the government of India conduct plant protection training programs, and improve grain storage; assist the government and the farm machinery industry in programs to promote the increased use of farm machinery.

U.S. Technicians: A total of 10 long term technicians: five direct hire: a coordinator; a fertilizer advisor; one pesticides advisor; a pest control specialist; and one farm machinery engineer; one USDA (PASA) entomology advisor; and four contract seed specialists. Also fourteen short term consultants in fertilizer, plant protection and farm machinery.

Participants: A total of 120 participants will receive training in the United States. Sixty-seven of these will receive training in fertilizer production, distribution, and marketing; 16 will receive training in seed technology, production processing, and marketing; 20 in plant protection control and in pesticides formulation and marketing; 17 will receive training in farm implement design and testing, and farm machinery production and marketing. Thirty of the total will be trained for 6 to

12 months. The remaining 90 will be trained for shorter periods.

Commodities: Demonstrational materials and equipment, proto-type implements, training aids, and materials.

Contract: A contract to fund the four-man seed team for one year and short term consultants (\$163,000).

PASA: \$59,000 to fund one full time entomology advisor and five short-term consultants.

Country: INDIA

PROJECT DATA

TABLE III

PROJECT TITLE Soil and Water Management		ACTIVITY Agriculture and Natural Resources		FUNDS TA	
PROJECT NUMBER 386-11-120-368		PRIOR REFERENCE Page 50, FY 1970 PDB		INITIAL OBLIGATION FY: 1967	
				SCHEDULED FINAL OBLIGATION FY: 1973	

Project Target and Course of Action: To develop an integrated, efficient program of soil and water resource management. A.I.D. and the Government of India are undertaking four activities: (1) develop a coordinated approach for soil and water management and conservation, including the identification of problems and the development of technically competent organizations to meet these problems; (2) establish strong programs of research in soil and water management; (3) develop organizations to collect and compile information on India's land and water resources and to assess the location and extent of groundwater supplies; (4) establish pilot demonstrations of soil and water management.

Water management is one of the keys to effective use of other inputs recommended for the high yielding varieties of wheat and rice. Modern water management takes into account the relationship between irrigation, the type of crops, soil types, drainage requirements, farm machinery, disease and pest control, fertilizer, and climate. An effective water management program requires a coordinated effort by all Indian Center and State agencies dealing with agriculture and water supplies.

Progress to Date: In 1967 the Minor Irrigation Division and the Water Management Unit of the Ministry of Food

and Agriculture were brought under single leadership, under which were placed all the soil and water personnel formerly dispersed throughout the Ministry and other organizations. This new unit provides technical leadership and coordinates the activities of other Ministries and agencies in the Center and State governments that deal with land and water problems. The Unit has succeeded in persuading the various Indian agencies to adopt uniform standards for soil survey and soil and land classifications, in reviewing project proposals, and in conducting field evaluations. Four A.I.D. specialists assist the unit.

The Central government has also established a Resource Inventory Unit to compile data on soil and water resources in India. One A.I.D. specialist is working with this unit.

Studies have been conducted by a joint Indo-American team on efficient water and farm management. The Ralph M. Parsons Company consultants and an Indian team have developed a model to permit the optimization of production where constraints exist on fertilizer and water supplies. Additional field data will be needed to make this study fully effective, and existing research programs are being so directed.

U.S. DOLLAR COSTS (In Thousands)							PRINCIPAL CONTRACTORS/AGENCIES				
	Obligations	Expenditures	Unliquidated	Cost Components	OBLIGATIONS						
					Estimated FY 1970			Proposed FY 1971			
					Direct AID	Contract/Other Agency	Total	Direct AID	Contract/Other Agency	Total	
Through 6/30/69	1,443	870	573		-	352	352	25	775	800	Soil Conservation Service Contractor to be selected
Estimated FY 70	637	808		U.S. Technicians	276	-	276	313	-	313	
Estimated through 6/30/70	2,080	1,678	402	Participants ...	-	9	9	-	42	42	
		Future Year Obligations	Estimated Total Cost	Commodities ...	-	-	-	-	-	-	
				Other Costs ...	-	-	-	-	-	-	
Proposed FY 71	1,155	2,002	5,237	Total Obligations	276	361	637	338	817	1,155	

Country: INDIA

PROJECT DATA (Continued)

TABLE IIIa

PROJECT TITLE	PROJECT NUMBER
Soil and Water Management	386-11-120-368

In 1969 an A.I.D. tubewell specialist began assisting the Minor Irrigation Division on design, construction, operation, and maintenance of public and private tubewells.

Three Regional Pilot Projects for Soil and Water Management have been established in three of India's principal soil and water areas. The first project established near Bellary in Mysore State in 1967 applies existing knowledge toward managing and irrigating the red and black soils in the Deccan Plateau. A.I.D.'s team of four specialists have helped State personnel develop a program for solving water runoff problems on private lands. The farmers' own plots serve as demonstrations to their neighbors, and cooperative actions by neighborhood groups permit solution of community problems. A second project was established in 1969 near Patiala (State of Punjab) an area where complex drainage problems require careful irrigation water management. A third was established in 1969 near Dohri Dhat, Uttar Pradesh, in the Gangetic Plain. This area is characterized by good soils, low yields, extremely small farms, both canal and tubewell irrigation, and a potential for considerably more water development. Each U.S. team has a water management specialist, an irrigation engineer, an agronomist, and a soil scientist.

A two man U.S. Geological Survey team has prepared a recommendation for the organization and conduct of a study to assess the surface and ground water resources of the Narmada Basin, a major Indian river under study for future development.

FY 1971 Program: The Soil Conservation Service teams at the Center and State levels will continue to assist the Indian government in operations, research, and educational activities. A Surface Water Hydrologist and a Sedimentationist added in FY1970 will assist the Soil Conservation Branch in developing procedures for estimating the peak rate and volume of runoff and the sources and volumes of sediments produced so that effective controls can be established in the River Valley Projects to prolong the useful life of major reservoirs.

The Government of India is requesting a team of 12 specialists to assist the development of competent organizations in 5 States to conduct groundwater assessment programs, particularly in areas where heavy utilization is pointing up potential shortages. The specialists will assist the five States and the Central Exploratory Tubewell Organization (Ministry of Food and Agriculture) carry out detailed exploration and development of ground water resources including quantitative and qualitative assessment. This study will help integrate ground and surface water resource information to enable the government to plan the optimum use of irrigation resources for extending the Green Revolution. The team of 12 will be under contract from either a U.S. state water department or a private consultant firm.

U.S. Technicians: Direct Hire: One Coordinator of the Assessment Program. PASA: 20 Soil Conservation Service Advisors (8 to work at the Central level on the coordination of programs and provide technical assistance in the fields of soil science, irrigation, drainage, resource inventory, tubewell development, hydrology, and sedimentation and 12 to work in three states on Regional Pilot Projects for Soil and Water Management). Four short-term consultants from the USDA will be provided to assist the Center with special problems in operations and research programs. Contract: 12 specialists on groundwater assessment.

Contract: 12 specialists in groundwater assessment: \$300,000.

Participants: Fifty-four participants will train in the United States in soil and water research, use and conservation, in irrigation and drainage methods, and agricultural economics with special reference to irrigation and drainage.

Commodities: Demonstration materials and supplies.

Country: INDIA

PROJECT DATA

TABLE III

PROJECT TITLE Agriculture Production Incentives		ACTIVITY Agriculture and Natural Resources		FUNDS TA
PROJECT NUMBER 386-11-140-282		PRIOR REFERENCE Page 42, FY 1970 PDB	INITIAL OBLIGATION FY: 1967	SCHEDULED FINAL OBLIGATION FY: 1971

Project Target and Course of Action: A.I.D. is assisting
1) the Food Corporation of India, which is responsible for managing buffer stocks, establishing price incentives to cultivators, and providing loans to producers; and
2) the Government in strengthening the agricultural credit system.

1. Food Corporation of India: FCI undertakes the purchase, storage, movement, transport, distribution, and sale of foodgrains and other foodstuffs to build sufficient buffer stocks to stabilize market prices in a country subject to large yearly variations in output caused by weather. The FCI is interested in help to establish a cost accounting system technically suited to specific agricultural products and to geographic areas, to establish more effective programming and financial criteria for implementation of its responsibilities, and to develop the technical and operational reporting functions of the organization. From this base, the FCI will be able to carry out its responsibilities for modernizing the traditional Indian grain marketing structure so that the farmer realizes the benefits of increased production.

2. Agriculture Credit: With stepped up availability and use of agricultural inputs for food production, the demand for short-term credit to cultivators is more pronounced and suppliers are exploring ways and means of securing improved financing. Medium and long-term credit is needed for irrigation projects (i.e. private

sector tubewells, land development, and agricultural machinery).

Progress to Date:

1. Food Corporation of India: Assistance to FCI in the management field will begin in FY 1970.

2. Agriculture Credit: In agriculture credit, the A.I.D. advisor has helped the Agriculture Credit Corporation to develop a manual for its member commercial banks to use in making loans to farmers and has helped the Government of India to establish guidelines for the Rural Electric Corporation which is responsible for accelerating rural electrification.

FY 1971 Program: A.I.D. will help the FCI improve its managerial, financial and operational capabilities. A credit advisor will work with commercial and cooperative banks and departments and institutions of government to improve financial facilities and credit flow for food production.

U.S. Technicians: Direct-Hire: One Agriculture Credit Advisor. PASA: One Senior Accountant for one year, one Operations Research Advisor for five months, and two consultants for the FCI.

U.S. DOLLAR COSTS (In Thousands)				Cost Components	OBLIGATIONS						PRINCIPAL CONTRACTORS/AGENCIES
	Obligations	Expenditures	Unliquidated		Estimated FY 1970			Proposed FY 1971			
					Direct AID	Contract/Other Agency	Total	Direct AID	Contract/Other Agency	Total	
Through 6/30/69	365	314	51							U.S. Department of Agriculture (USDA)	
Estimated FY 70	15	41									
Estimated through 6/30/70	380	355	25	U.S. Technicians	-	13	13	25	55		80
		Future Year Obligations	Estimated Total Cost	Participants ...	2	-	2	-	-		-
				Commodities ...	-	-	-	-	-		-
				Other Costs ...	-	-	-	-	-		-
Proposed FY 71	80	-	460	Total Obligations	2	13	15	25	55	80	

Country: INDIA

PROJECT DATA

TABLE III

PROJECT TITLE Rice Research Improvement	ACTIVITY Agriculture and Natural Resources	FUNDS TA	
PROJECT NUMBER 386-11-110-379	PRIOR REFERENCE Page 53, FY 1970 PDB	INITIAL OBLIGATION FY: 1967	SCHEDULED FINAL OBLIGATION FY: 1973

Project Target and Course of Action: To accelerate and improve rice research in India. Under contract with A.I.D., the International Rice Research Institute, Philippines (IRRI) provides research specialists and training for Indian scientists to strengthen the operational and research aspects of the All-India Coordinated Rice Improvement Program (AICRIP).

Progress to Date: Under the guidance of AICRIP, 12 regional centers, often operated by participating Research Stations and Universities, develop and conduct experiments at up to 30 locations in one cropping season. The ability to grow two crops in one year permits simultaneous observation and screening of thousands of rice varieties with high yield, and disease and insect resistance characteristics. Two nationwide workshop conferences are held each year to plan the experiments for the next season, and the proceedings each season are widely distributed. The program has been able to release several improved varieties, develop promising new varieties, identify sources of specific genetic characteristics needed for higher production and resistance to diseases, and develop "packages of practices" for the farmers to use with the high yielding varieties currently in use.

FY 1971 Program: The IRRI specialists will provide assistance to AICRIP in designing and conducting field experiments and laboratory research to solve specific

problems in the use of high yielding varieties. Specific research now underway is directed toward developing a variety of high yielding rice that has sufficiently stiff straw to withstand the recurrent cyclones in southern India, and that is highly responsive to fertilizer. Another long term research problem is the development of high yielding varieties resistant to pests such as the stem borer and gall fly. Besides assisting in specific research, IRRI specialists are helping introduce the organizational and conceptual approaches to rice research that will enable AICRIP to continue testing and evaluation on a sound scientific basis.

Setbacks in rice production experienced in Northeastern India due to the prevalence of certain virus disease have pointed up the need for more extensive and effective dissemination and application of research findings. The virus problem calls for even more accelerated research at AICRIP and State research centers to provide solutions to field problems prior to the time these problems become a menace or hindrance to production.

In addition to the scientific research, we will help AICRIP headquarters develop better functional and organizational arrangements so the AICRIP stations can conduct research programs more efficiently.

U.S. Technicians: Five contract technicians; plant physiologist; agronomist; entomologist; plant

U.S. DOLLAR COSTS (In Thousands)							PRINCIPAL CONTRACTORS/AGENCIES				
	Obligations	Expenditures	Unliquidated	Cost Components	OBLIGATIONS						
					Estimated FY 1970			Proposed FY 1971			
					Direct AID	Contract/Other Agency		Total	Direct AID	Contract/Other Agency	Total
Through 6/30/69	312	143	169					International Rice Research Institute (IRRI)			
Estimated FY 70	61	121									
Estimated through 6/30/70	373	264	109	U.S. Technicians	-	43	43		-	116	116
				Participants ...	-	18	18		-	19	19
		Future Year Obligations	Estimated Total Cost	Commodities ...	-	-	-		-	5	5
				Other Costs ...	-	-	-		-	-	-
Proposed FY 71	140	259	772	Total Obligations	-	61	61		-	140	140

Country: INDIA

PROJECT DATA (Continued)

TABLE IIIa

PROJECT TITLE	PROJECT NUMBER
Rice Research Improvement	386-11-110-379

pathologist; one specialist on program management and organization. Four short-term consultants from IRRI for three months each to assist with specific research problems.

Participants: Eleven Indian scientists will be sent to the IRRI in the Philippines: three for advanced study in such fields as rice breeding, agronomy and entomology for periods of 9 to 12 months; two for 6 months each; and six others for short-term observational familiarization periods of 2 to 3 weeks.

Commodities: Demonstration materials and supplies.

Contract: To fund the contract for one year: \$140,000.

Country: INDIA

PROJECT DATA

TABLE III

PROJECT TITLE Export Promotion	ACTIVITY Industry and Mining	FUNDS TA	
PROJECT NUMBER 386-15-260-384	PRIOR REFERENCE Page 55, FY 1970 PDB	INITIAL OBLIGATION FY: 1968	SCHEDULED FINAL OBLIGATION FY: 1971

Project Target and Course of Action: To assist the Government of India to analyze the problems impeding the growth of Indian export earnings.

broadened to include industrial management skills related to export promotion.

Progress to Date: From 1968 to 1970 A.I.D. has assisted the Indian Government implement a program to use Indian research talent to study problems affecting a wide range of export commodities and set forth alternate courses of action. Ten major commodity and functional (i.e. transport and freight structure) studies have been completed and eight others are in process. In FY 1970 selected Indian institutions are to take over the survey and report functions. A Planning and Implementation Unit was established within the Ministry of Foreign Trade to evaluate India's export policies, to assure that consideration is given to recommendations for improving export performance contained in the survey reports, and to follow up on their implementation. Consideration also is being given to the establishment of a Research and Analysis Unit in the quasi-governmental Institute of Foreign Trade. Actions on the establishment of an "economic news service" and the creation of an association of export houses (both in the private sector) are somewhat behind schedule, but both organizations should be operational by the end of 1970.

U.S. Technicians: One direct-hire technician, plus up to eight short-term contract technicians who will work with the Indians on the organization of the new Planning and Implementation Unit and other new Indian institutions concerned with export growth; and consolidate and assist in implementing the recommendations of both the commodity surveys and functional studies conducted under the project.

Participants: 40 selected business executives from firms newly engaged in export activities are expected to be sent on foreign market study tours: A.I.D. will finance travel and living costs in the U.S.; the GATT/UNCTAD International Trade Center in Geneva has agreed to pay most of the cost of visiting third countries. 15 participants will be trained in the United States for periods of from 2 to 6 months in marketing, trade statistics, regulatory procedures, commodity data, and industrial management.

Contract: \$64,000 to fund eight short-term personal services contracts.

FY 1971 Program: Consolidate and follow-up on the activities designed to implement selected recommendations of the studies. Training will be

U.S. DOLLAR COSTS (In Thousands)							PRINCIPAL CONTRACTORS/AGENCIES			
	Obligations	Expenditures	Unliquidated	OBLIGATIONS						
				Estimated FY 1970				Proposed FY 1971		
				Direct AID	Contract/Other Agency	Total		Direct AID	Contract/Other Agency	Total
Through 6/30/69	431	271	160							
Estimated FY 70	234	253		Cost Components						
Estimated through 6/30/70	665	524	141	U.S. Technicians						
		Future Year Obligations	Estimated Total Cost	Participants ...						
				Commodities ...						
				Other Costs ...						
Proposed FY 71	166	-	831	Total Obligations						
				76	158	234	102	64	166	

PROJECT TITLE	PROJECT NUMBER
Family Welfare Planning	386-11-580-332

The Government is planning to introduce family planning into the schools; interministerial working groups have begun the task of developing curricula.

The Government of India recently introduced a bill to permit abortions where the mother's physical or mental health is believed to be endangered. The Government also is considering raising the minimum legal age for marriage for both men and women.

A.I.D. has financed the purchase of contraceptives to help develop a subsidized commercial distribution system and to test the effectiveness of oral contraceptives in the Indian environment. We have also purchased medical supplies and equipment for an anemia prophylaxis program, and to accelerate biomedical research related to conception and contraception.

A.I.D. technicians are assisting the Government of India's Demographic Training and Research Center, which carries out demographic and social research and is one of the principal institutions for evaluating the family planning program. A.I.D. staff also are helping the Government of India increase family planning efforts in geographical areas designated for "intensive implementation."

Since wide publicity is necessary for the education of the Indian people, A.I.D. is helping the Government adopt new approaches for informing the populace; A.I.D. is providing technician and commodity assistance to establish and operate a mailing system, and is financing equipment for radio coverage and film making.

A number of non-profit private organizations, including the Population Council, the Pathfinder Fund, Johns Hopkins University, and the World Assembly of Youth, are also providing assistance to various aspects of family planning programs in India.

FY 1971 Program: A.I.D. will continue efforts to

encourage the Government of India to undertake effective programs to provide assistance in: communications, training, demographic research and improvement, and intensive districts programs. A USAID advisor will work full time with non-governmental voluntary agencies and organizations engaged in family planning. A.I.D. also plans to intensify its contacts with the States as they are responsible for implementing the Government of India's family planning program.

U.S. Technicians: Fifteen long term direct: 5 supervisory planning and programming staff; 1 doctor; 1 nurse, 1 training specialist; 1 research advisor; 1 marketing advisor; 1 coordinator of voluntary agency programs; 2 communications specialists; 1 vehicle maintenance advisor; and 1 member of a two member team coordinating the 'intensive district' program. Five long term PASA: 4 demographers at the Chembur Demographic Training and Research Center; the second of the two member 'intensive district' team. Ten short term consultants on personal services contracts: 3 on oral contraceptives; 3 on training programs; and 4 on audiovisual techniques. Four short term consultants under PASA to work at Chembur and on special problems.

Participants: Twenty, both long and short term training in the U.S. or a third country in family planning and related fields.

Commodities: Training and audiovisual equipment.

Contract: Ten personal services contracts of up to 3 months each (\$70,000).

Country: INDIA

PROJECT DATA

TABLE III

PROJECT TITLE Nutritional Foods Development	ACTIVITY Health and Sanitation	FUNDS TA
PROJECT NUMBER 386-11-560-380	PRIOR REFERENCE Page 63, FY 1970 PDB	INITIAL OBLIGATION FY: 1969
		SCHEDULED FINAL OBLIGATION FY: 1972

Project Target and Course of Action: To reduce malnutrition through improvements in the quality of the Indian diet as India increases its per capita food production. A.I.D. provides technical assistance to various entities of the Indian Government and to the (private) Protein Foods Association in support of the following Government of India policy objectives: (1) To fortify popular food items with protein, vitamin, and mineral supplements; (2) To reformulate foods going into the child feeding programs to improve acceptability and nutritional value; (3) To create more nutritious commercial foods; (4) To develop indigenous sources of proteins, vitamins, and minerals; (5) To support nutritional research and education projects; and (6) To formulate national governmental nutrition policies and strategies on matters of agricultural production and food pricing and marketing which will foster the foregoing objectives.

Progress to Date: Particular emphasis has been put upon creating awareness of benefits of proper nutrition and upon encouraging the Government in the fortification of atta--a whole wheat flour consumed by 15 or 20 million urban poor--with vitamins, minerals and protein-rich peanut flour. Salt, purchased or bartered for by all Indians, is also receiving major attention as a potential medium for fortification with calcium and iron. Tea, which like atta and salt is widely consumed in India including by small children, may be the next to receive major fortification attention. A new "Bal Ahar" ("child food"), formulated from corn or bulgar wheat and soy

and peanut flour, is being tested in the school feeding program which presently reaches 15.6 million school and preschool children. A plant designed and operated by Dorr-Oliver, a US firm, is now producing from cotton seed a protein concentrate which can be utilized in human foods. This plant, the world's first, was assisted by a modest A.I.D. grant.

FY 71 Program: A state-wide, operationally oriented survey of the agriculture, distribution, price, dietary customs and other factors affecting a nutrition system in Tamil Nadu will be started. It will seek points where new policies and practices can best improve nutrition and increase its positive effect on family planning. Other activities will continue along lines described above including emphasis on integration of fortified salt and fortified atta into the national economic fabric.

U.S. Technicians: Two full-time contract technicians and about 6 short-term food technology consultants. Two additional contract technicians will assist in the Tamil Nadu nutrition system survey. PASA: One full-time and two short-term men from USDA.

Contract: To fund the contract with Sidney M. Cantor Associates for an additional year: \$319,000.

Commodities: Demonstration equipment and materials: \$2,000.

U.S. DOLLAR COSTS (In Thousands)						PRINCIPAL CONTRACTORS/AGENCIES	
	Obligations	Expenditures	Unliquidated	Cost Components	OBLIGATIONS		
					Estimated FY 1970		Proposed FY 1971
Through 6/30/69	227	134	93		Direct AID	Contract/Other Agency	Total
Estimated FY 70	240	195		U.S. Technicians	6	232	238
Estimated through 6/30/70	467	329	138	Participants ...	-	-	-
		Future Year Obligations	Estimated Total Cost	Commodities ...	2	-	2
Proposed FY 71	356	230	1,053	Other Costs ...	-	-	-
				Total Obligations	8	232	240
					2	354	356

Sidney M. Cantor Associates

Country: INDIA

PROJECT DATA

TABLE III

PROJECT TITLE	ACTIVITY		FUNDS
	Teaching of Science and Mathematics PROJECT NUMBER 386-11-660-226	Education	
PRIOR REFERENCE		INITIAL OBLIGATION	SCHEDULED FINAL OBLIGATION
	Page 67, FY 1970 PDB	FY: 1964	FY: 1972

Project Target and Course of Action: To improve the teaching of science and mathematics by assisting directly with India's priority program which calls for the development, preparation, and initial classroom use of "packages" of new science and mathematics curricular materials. Depending upon specific course needs, these will include textbooks, teacher's guides, workbooks or laboratory manuals, and demonstration or experimental apparatus. The project aims at science and mathematics curricular reform for secondary schools, universities, polytechnics, and engineering colleges; includes a pilot development activity for elementary schools science; and includes inservice training for teachers and educators of the sciences.

Progress to Date: Since 1964, A.I.D. has helped organize and conduct summer institutes to stimulate interest in curricular development by introducing new methodology and content to Indian science and mathematics educators. By 1969, some 25,000 Indian science and mathematics teachers, university and college faculty, and school officials had attended these institutes. In 1970, the Indian Government plans to hold 196 institutes for 6,200 persons and only 74 U.S. consultants will be used to support 80 institutes. The summer institutes to be held in 1970 will be the last for which A.I.D. will provide consultants.

The summer institutes stirred the Indian science and teaching communities to seek reform in the design and orientation of science and mathematics teaching. NSF curriculum consultants have assisted the Bombay elementary schools revise their entire science and mathematics curriculum based on new methodology used in the U.S. Revised science and mathematics syllabi, teacher handbooks, reference materials and other teaching aids have been prepared. As these materials are produced, tested and revised, they will be the subject of teacher training courses which will precede classroom adoption. This project is being used as a pilot activity. Since the Bombay schools serve 500,000 students in 10 languages, it is expected that a nationally adaptable model curriculum in elementary school science and mathematics will emerge.

FY 1971 Program: A.I.D. will continue to assist in re-designing India's science and mathematics curriculum at the elementary level and will expand the scope of work to the secondary and college level. A.I.D. advisors will emphasize the methodology for valid curriculum preparation so that the Indians can prepare textbooks, teaching aids, and classroom materials that relate to India's needs. Instructional materials will be field tested with reference to the ability of the teachers and the background of the students.

U.S. DOLLAR COSTS (In Thousands)						PRINCIPAL CONTRACTORS/AGENCIES				
	Obligations	Expenditures	Unliquidated	OBLIGATIONS						
				Estimated FY 1970			Proposed FY 1971			
Through 6/30/69	5,614	4,958	656	Direct AID	Contract/Agency		Total	National Science Foundation (NSF)		
Estimated FY 70	561	663		Direct AID	Contract/Agency	Total				
Estimated through 6/30/70	6,175	5,621	554	21	461	482	26		301	327
		Future Year Obligations	Estimated Total Cost	72	-	72	76		-	76
				-	7	7	-		10	10
				-	-	-	-		-	-
Proposed FY 71	413	420	7,008	93	468	561	102		311	413

Country: INDIA

PROJECT DATA (Continued)

TABLE IIIa

PROJECT TITLE	PROJECT NUMBER
Teaching of Science and Mathematics	386-11-660-226

To follow up on the interest in curriculum reform stimulated by the summer science institutes, about 20 short term experts in specific fields will go to India during the academic year in response to requests from the Indian government for assistance in particular aspects of materials development.

U.S. Technicians: Reduction during FY71 from 9 to 6 full time advisors from the National Science Foundation, and 20 short term contract consultants to assist on particular aspects of teacher training and materials development. One direct hire advisor (Project Manager).

Participants: A team of 20 Indian science and mathematics educators will study and participate with selected curriculum development groups in the United States for a maximum of three months each.

Commodities: Demonstration materials and supplies.

Country: INDIA

PROJECT DATA

TABLE III

PROJECT TITLE Development Training	ACTIVITY Public Administration and Public Safety	FUNDS TA
	PRIOR REFERENCE	SCHEDULED FINAL OBLIGATION
PROJECT NUMBER	INITIAL OBLIGATION FY: 1971	FY: Continuing

Project Target and Course of Action: This project will assist the Government of India in its efforts to strengthen and improve the planning, implementation and evaluation of its social and economic development programs by providing specialized training. Specifically, this project will finance: training in the U.S. for selected Indian participants in a variety of management, technical, and economic analysis skills not provided under other specific projects nor by institutions within India.

FY 1971 Program: A.I.D. will assist in both the public and private sectors, by providing specialized training in areas such as labor-management relations, financial and statistical training, and tax administration.

Participants: Thirty-five participants for short-term and academic training of varying durations in the U.S.

U.S. DOLLAR COSTS (In Thousands)						PRINCIPAL CONTRACTORS/AGENCIES						
Through 6/30/69	Obligations	Expenditures	Unliquidated	Cost Components	OBLIGATIONS							
	Estimated FY 70	Estimated through 6/30/70	Future Year Obligations		Estimated Total Cost		Estimated FY 1970			Proposed FY 1971		
							Direct AID	Contract/Other Agency	Total	Direct AID	Contract/Other Agency	Total
				U.S. Technicians	-	-	-	-	-	-		
				Participants . . .	-	-	-	170	-	170		
				Commodities . . .	-	-	-	-	-	-		
				Other Costs . . .	-	-	-	-	-	-		
Proposed FY 71	170		Continuing	Total Obligations	-	-	-	170	-	170		

Country: INDIA

PROJECT DATA

TABLE III

PROJECT TITLE Technical Support		ACTIVITY General and Miscellaneous		FUNDS TA	
PROJECT NUMBER 386-15-999-000		PRIOR REFERENCE Page 71, FY 1970 PDB		INITIAL OBLIGATION FY: 1952	
				SCHEDULED FINAL OBLIGATION FY: Continuing	

Project Target and Course of Action: This project finances the planning, coordination, evaluation, logistic support, and supervision for developing and implementing new and continuing activities of technical assistance, development loans, and PL 480. In addition to salaries and allowances for regular personnel, funds are provided: for U.S. consultants to advise the USAID on technical matters related to loan applications, implementation of loans, and development of new technical assistance projects; special economic studies for USAID program and planning purposes; and industry, agriculture, and other sector studies undertaken to provide information for decision-making such as weather crops, coal hydrogenation, and fertilizer bagging studies. USAID provides the dollar costs of selected international seminars and workshops in science and other subjects which are related to and support USAID's technical assistance and capital development activities. Residual costs of terminated projects are provided for in this project.

Commodities: Office supplies and furnishing, residential equipment and furnishings, transport equipment and spare parts, and other logistic support materials.

Contracts: Consultants under personal services contracts to carry out special studies. (\$185,000)

U.S. Technicians: The Direct-Hire staff of 47 includes: 14 Assistant Directors, Technical Division Chiefs, and Technical Specialists; 7 Program Analysts and Economists; 4 Development Loan Officers; 4 Engineers; 3 Food For Peace Officers; 2 Training Officers; 1 Auditor; 5 General Services Officers; and 7 Secretaries.

U.S. DOLLAR COSTS (In Thousands)							PRINCIPAL CONTRACTORS/AGENCIES				
Through 6/30/69	Obligations	Expenditures	Unliquidated	Cost Components	OBLIGATIONS						
	23,675	23,228	447		Estimated FY 1970			Proposed FY 1971			
					Direct AID	Contract/Other Agency		Total	Direct AID	Contract/Other Agency	Total
Estimated FY 70	1,518	1,530		U.S. Technicians	1,290	148	1,438	1,235	185	1,420	
Estimated through 6/30/70	25,193	24,758	435	Participants ...	-	-	-	-	-	-	
		Future Year Obligations	Estimated Total Cost	Commodities ...	80	-	80	290	-	290	
				Other Costs ...	-	-	-	-	-	-	
Proposed FY 71	1,710	Continuing		Total Obligations	1,370	148	1,518	1,525	185	1,710	

COUNTRY: INDIA

PROJECT DATA SUMMARY
(Dollar Amounts in Thousands)

TABLE IV
Part 2

Project Title	Project Number	FY of Initial Obligation	FY of Scheduled Final Obligation	Through FY 1969			Estimated FY 1970			Proposed Program FY 1971		Future Year Obligations	Estimated Total Cost
				Obligations	Expenditures	Unliquidated Obligation 6/30/69	Obligations	Expenditures	Unliquidated Obligation 6/30/70	Funds	Amount		
<u>LABOR</u>				1,872	1,783	89	61	150	-	-	-	-	1,933
Trade Union Development	386-15-410-109	1961	1970	214	194	20	61	81	-	-	-	-	275
Bombay Central Training Institute	386-11-420-179	1960	1969	1,189	1,160	29	-	29	-	-	-	-	1,189
Labor Ministry Training	386-11-450-161	1960	1970	469	429	40	-	40	-	-	-	-	469
<u>HEALTH AND SANITATION</u>				62,563	62,563	-	47	47	-	-	-	-	62,610
Malaria Eradication	386-51-511-135	1957	1970	62,563	62,563	-	47	47	-	-	-	-	62,610
<u>EDUCATION</u>				3,992	3,950	42	-	42	-	-	-	-	3,992
Multipurpose Secondary Education	386-11-650-063	1956	1969	3,992	3,950	42	-	42	-	-	-	-	3,992
<u>PUBLIC SAFETY & ADMINISTRATION</u>				2,530	2,493	37	-	36	1	-	-	-	2,530
Public Safety Participant Training	386-11-710-376	1967	1972	27	25	2	-	2	-	-	-	-	27
Government Operations	386-11-720-170	1959	1970	1,145	1,126	19	-	18	1	-	-	-	1,145
Management Control Systems	386-11-720-242	1964	1969	1,358	1,342	16	-	16	-	-	-	-	1,358
Total													
TC													
SA													
DL (grants)													

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: INDIA

Borrower: Industrial Finance Corporation

Funds: Development Loan

Title and Number of Loan:	
Industrial Finance Corporation - 386-H-062 (AID 36)	
Date Authorized: 3/23/62	Date Signed: 6/28/62
Loan Status as of 12/31/69	Loan Terms 1/
(In Thousands of Dollars and Equivalent)	
Authorized \$18,700	Duration 40 yrs
Disbursed \$15,809	Grace Period 10 yrs
Repayments -	Interest Rate 3/4%
Interest Collected 378	Currency of Repayment . . U.S.\$

IFC makes sub-loans to industries in categories acceptable to A.I.D., and loans in excess of \$500,000 are subject to A.I.D. approval. Loans exceeding \$3 million are not permitted and Indian Government's permission to make loans above \$2.1 million is also required.

Current Status: \$1.2 million of the loan was deobligated in Feb. 1970 reducing the total amount of the loan to \$17.5 million. The undisbursed balance reflects the amount needed for payments under outstanding Letters of Credit with terminal dates not exceeding December 31, 1970.

Purpose of Loan: To provide foreign exchange to the Industrial Finance Corporation (IFC) for relending to industrial concerns in the private sector for specific projects.

Background: IFC was established under the Industrial Finance Corporation Act, 1948 for the purpose of making medium and long-term credits more readily available to industrial concerns in India. IFC also now (a) underwrites public issues of shares and debentures, (b) guarantees deferred payments for import of plant and machinery, and (c) guarantees foreign currency loans raised by industrial concerns from foreign financial institutions.

Half of the share capital of IFC is held by the Industrial Development Bank of India (IDBI), which is a wholly-owned subsidiary of the Reserve Bank of India and the remaining 50% of the IFC's shares are held by (i) commercial banks (20%) (ii) insurance companies and other financial institutions (22%) and (iii) cooperative banks (8%). IDBI has the right to nominate four directors on the IFC's Board and each of the other three categories of shareholders elect two directors to the Board.

1/ Two-Step Terms: IFC will repay the loan to the GOI in rupees within 15 years at 5%.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: INDIA

Borrower: Government of India

Funds: Development Loan

Title and Number of Loan: Ramagundam Thermal Power 386-H-068	
Date Authorized: 6/29/62	Date Signed: 5/21/63
Loan Status as of 12/31/69	Loan Terms
(In Thousands of Dollars and Equivalent)	Duration 40 yrs.
Authorized \$7,900	Grace Period 10 yrs.
Disbursed 6,521	Interest Rate 3/4 %
Repayments -	Currency of Repayment.. US \$
Interest Collected 147	

Corporation - condenser; Combustion Engineering Corp. - feedwater steam generator; and Westinghouse Electric Company - outdoor switchgear equipment, and instruments and controls.

Approximately 95% of the civil works construction and 72% of the erection and installation of the mechanical and electrical equipment have been completed. The boiler has been erected. Turbine generator erection is nearing completion. The outdoor switchyard and indoor switchgear have been erected. Power piping installation is nearly complete. The contract for ash handling equipment was let in June 1969 and that for instruments and controls in July 1969. Project completion is expected by December 1970 and commissioning in early 1971.

Purpose of Loan: To finance the foreign exchange requirements of equipment and services for construction of a 60 megawatt thermal electric generating unit at the Ramagundam Power Station in the State of Andhra Pradesh. The unit will be installed in a new power station above 1/2 mile from an existing station with installed capacity of 37.5 megawatts.

Financial Status: Loan funds are being disbursed through the Letter of Commitment procedure and by reimbursing the Government of India for project costs advanced from its own resources. Approximately 83% of the loan had been disbursed as of December 1969. Full disbursement of the loan funds is not expected before the first quarter of 1971.

Physical Status: The major portion of design work is being done by the Andhra Pradesh Electricity Board (APSEB) in its offices in Hyderabad. Burns & Roe of New York served as consulting engineers on the project until the latter part of 1966, with responsibility for advising and assisting APSEB in the preparation of civil, electrical and mechanical drawings, and review and approval of these drawings. Tata Consulting Engineers of India are serving as consultants to APSEB for the balance of the design work and are supervising erection and installation of plant equipment.

Host Country Role and Procurement Source: Rupee costs are estimated at the equivalent of \$7.8 million, of which \$1.8 million are being met by a PL 480 Section 104(g) loan and the balance is being provided by the Andhra Pradesh State Government. All A.I.D. dollar loan funds will be spent in the United States.

Major suppliers of power station equipment are: General Electric Company - turbine generating unit; Worthington

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: INDIA

Borrower: Government of India

Funds: Development Loan

Title and Number of Loan: Tarapur Nuclear Power Project 386-H-091	
Date Authorized: 6/28/63	Date Signed: 12/7/63
Loan Status as of 12/31/69	Loan Terms
(In Thousands of Dollars and Equivalent)	Duration 40 yrs.
Authorized \$75,000	Grace Period 10 yrs.
Disbursed 68,610	Interest Rate 3/4%
Repayments -	Currency of Repayment . . US\$
Interest Collected 1,515	

to alleviate the power shortage in Gujarat and Maharashtra. By December, the plant was operating at about 70% of installed capacity. The plant was formally dedicated by the Prime Minister on January 19, 1970.

The General Electric Company was the prime contractor; Bechtel Corporation was the principal construction sub-contractor. Consulting engineering services were provided by a partnership of the Kuljian Corporation of Philadelphia, Nuclear Utility Services of Washington, D. C., and McLain Associates of Lafayette, Indiana.

Financial Status: Loan funds are being disbursed through the letter of commitment procedure and by reimbursing the Government of India for dollars advanced out of its own resources for the project. Approximately 91% of the loan has been disbursed. The balance covers: the last progress payment to General Electric Company to be made after bonus and liquidated damages have been determined; final payment to General Electric after expiration of the warranty period, which is expected to occur at the end of December 1970; and funds for meteorological, laboratory, and specialized equipment. The loan is expected to be fully drawn down by June 1971.

Purpose of Loan: To provide foreign exchange costs for the design, construction, and placing into operation of a 380 MW nuclear power station near Tarapur, on the coast of the Arabian Sea about 60 miles north of Bombay.

The station consists of two nuclear boiling water reactors using slightly enriched uranium fuel, plus turbines, generators and associated facilities, each rated at 190 MW net output. It is tied into the grid systems of the states of Maharashtra and Gujarat, which are integrated, and is assisting these two states to meet a portion of their rapidly growing demands for power.

Host Country Role and Procurement Source: The Government of India is providing an estimated \$40 million to finance local currency costs of the project.

Physical Status: The construction phase of the project was substantially completed in FY 1969. Due to the need for corrective work on some surface defects in the reactor vessels and secondary steam generators and delays in completing performance tests due to switchyard troubles, turnover of the plant to the Government of India was delayed until October 28, 1969 - a year later than originally scheduled. However, substantial commercial power generation began in the spring of 1969 and helped greatly

All procurement with A.I.D. loan funds is limited to material and services of U.S. source and origin.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: INDIA

Borrower: Government of India

Funds: Development Loan

Title and Number of Loan: Consulting Services 386-H-115	
Date Authorized: 6/26/64	Date Signed: 3/31/65
Loan Status as of 12/31/69	Loan Terms
(In Thousands of Dollars and Equivalent)	Duration 40 yrs.
Authorized \$900	Grace Period 10 yrs.
Disbursed 449	Interest Rate 3/4% Thereafter 2%
Repayments -	Currency of Repayment . . US\$
Interest Collected 8	

that they should apply to the IBRD for future financial assistance.

Financial Status: Letters of Commitment totaling \$572,743 are presently outstanding. A.I.D. is now taking steps to deobligate the uncommitted balance of \$327,257 from the presently authorized amount of \$900,000.

Host Country Role and Procurement Source: Logistical support for contract personnel and local expenses are being provided by the Government of India.

Procurement with A.I.D. dollar loan funds is limited to the United States.

Purpose of Loan: To finance the foreign exchange costs of hiring consulting firms and individual experts to provide assistance to agencies of the Borrower and to private firms in India. Consultants will be employed for such activities as sector studies, surveys, specialist assistance during design and construction of industrial plants. The services can be used in a wide range of fields including irrigation, mining, industrial projects, communications and transportation.

Physical Status: Five studies have been completed. A.I.D. has recently approved the cost of an emergency appraisal by the Bureau of Reclamation (as a sixth study) of serious leaks that have developed in the foundation of the Bhandaradara Dam (the construction of which A.I.D. did not finance).

The IBRD has become very much interested in the development of Indian phosphate deposits (whose discovery or delineation can be attributed in large part to one of the aforementioned five studies). The GOI is being advised

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: INDIA

Borrower: Government of India

Funds: Development Loan

Title and Number of Loan: Hindustan Motors Ltd. (Bedford Truck Engine) - 380-H-118	
Date Authorized: 6/15/64	Date Signed: 5/3/65
Loan Status as of 12/31/69	Loan Terms <u>1/</u>
(In Thousands of Dollars and Equivalent)	Duration 40 yrs.
Authorized \$23,000	Grace Period 10 yrs.
Disbursed 19,241	Interest Rate 3/4% Thereafter 2%
Repayments -	Currency of Repayment.. US\$
Interest Collected 332	

The project is rated as 87.4% completed, but is approximately 18 months behind schedule. The delay is attributable to late placement of orders and late finalization of engineering details with suppliers. Some delay was also encountered by the inability of U.S. machine tool manufacturers to adhere to promised delivery schedules.

All imported machine tools and equipment which have been shipped to the project had been installed and tested by the end of December 1969. Project completion is now estimated for June 1970.

Financial Status: Letters of Commitment have been issued to U.S. banks for the full amount of the loan, and 84% of the loan has been disbursed. All orders have been placed for equipment to be imported under the loan. Since some suppliers cannot effect delivery until late April 1970, it is not expected that the loan will be fully disbursed before June 1970.

Host Country Role and Procurement Source: The rupee costs of the project, equivalent of \$10.39 million, are being provided by the company. All procurement with the A.I.D. loan is restricted to goods of U.S. source and origin.

Purpose of Loan: To assist Hindustan Motors, Ltd., a private firm located in West Bengal, to increase its facilities to produce 15,000 Bedford engines per year and expand its production of truck chassis from 10,500 to 15,000 per annum. The firm manufactures Bedford engines for Hindustan trucks in collaboration with Vauxhall Motors, a British subsidiary of General Motors.

An increased number of motor vehicles, particularly trucks, is vital to meet India's expanding transportation needs. In the interior of the country, where railway lines have not yet penetrated, trucks often represent the only way of quickly moving food, fertilizer, and other goods. Expanding the capacity of Hindustan Motors, Ltd., one of four major truck producers in India, will make a significant contribution toward this end.

Physical Status: An earlier loan to this firm, No. 386-H-066 for \$15.6 million financed machinery and equipment to bring truck production up from 9,000 to 10,500 vehicles per year and to increase the indigenously manufactured content of the trucks from 74 to 90 per cent.

1/ Two-Step Terms: This is a two-step loan with Hindustan Motors, Ltd., repaying the loan in rupees to the Government of India in ten years (with a two-year grace period) at 5 1/2% interest.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: INDIA

Borrower: Government of India

Funds: Development Loan

Title and Number of Loan: Hindustan Motors, Ltd. (Shovel) 386-H-119	
Date Authorized: 6/15/64	Date Signed: 5/3/65
Loan Status as of 12/31/69	Loan Terms ^{1/}
(In Thousands of Dollars and Equivalent)	Duration 40 yrs.
Authorized \$2,950	Grace Period 10 yrs.
Disbursed 2,349	Interest Rate Grace 3/4% Thereafter 2%
Repayments -	Currency of Repayment . . US\$
Interest Collected 30	

only rupees, has been completed. By the end of December 1969, twenty-nine imported machines had arrived and twenty-seven were in production. The two other machines should be installed and in use before the end of March 1970.

Delays in completing engineering details with U.S. machine tool manufacturers for the five additional machines required to complete the project precluded suppliers from meeting promised delivery schedules. The project, therefore, is not expected to be completed until June 1970.

Financial Status: The full amount of the loan has been committed, and approximately 80% had been disbursed as of December 31, 1969. Loan disbursements should be completed by the end of June 1970.

Purpose of Loan: To assist this company in financing the foreign exchange costs of the acquisition, importation, and installation of equipment and materials necessary to increase the production of, and the percentage of indigenously manufactured components for, excavator shovels. Exploitation of natural resources such as coal, iron ore, and limestone represents one of India's major development potentials. The equipment produced will help develop these industries.

Host Country Role and Procurement Source: The local currency costs of the project, \$10.39 million (equivalent), are being provided by the Company.

Procurement under the A.I.D. loan is restricted to goods of U.S. source and origin.

The project has as its goal increasing the plant's annual manufacturing capacity from 9 to 36 shovels with indigenously produced components increased from 28% to 70%. The product being produced by Hindustan Motors, a private firm, is a 2½ cubic yard diesel-powered excavating shovel which is convertible to crane, dragline, clamshell, backhoe and lifting operations. The Marion Power Shovel Company, Marion, Ohio, is assisting the firm in the shovel program under a collaboration agreement.

1/ Two-Step Terms: This is a two-step loan with Hindustan Motors repaying rupees to the Government of India in ten years (including a 1½ year grace period) at 5½% interest.

Physical Status: The building construction phase of the project to house the machinery and equipment, requiring

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: INDIA

Borrower: Government of India

Funds: Development Loan

Title and Number of Loan: Beas Dam Project 386-A-126	
Date Authorized: 6/29/60	Date Signed: 6/16/66
Loan Status as of 12/31/69	Loan Terms
(In Thousands of Dollars and Equivalent)	Duration 30 yrs.
Authorized \$24,000	Grace Period 10 yrs.
Disbursed 10,244	Interest Rate 3½%
Repayments -	Currency of Repayment . . Rupees
Interest Collected 550	

Purpose of Loan: To assist India in the foreign exchange costs of developing irrigation and power on the Beas River.

In connection with the Indus Basin settlement between India and Pakistan, the Development Loan Fund in 1960 authorized a loan for the Beas Project. The IBRD committed \$23 million toward the project. The loan authorized by the DLF was subject to certain specified conditions which were met in 1966.

This loan is financing the foreign exchange costs of equipment and consulting services necessary to construct a 380-foot high, 42 million cubic yard earth-fill dam and appurtenant works on the Beas River at Pong, in the Punjab. Its prime purpose will be to regulate the flow of the Beas River for irrigation of vast areas in the State of Rajasthan. The IBRD loan will assist in financing an associated power plant with an ultimate capacity of 360 megawatts.

Physical Status: Five large diversion tunnels have been driven and are now being used for diversion. Dam embankment construction, spillway excavation and concreting are in

progress with completion expected by June 1973. At the irrigation works in Rajasthan, 134 miles of feeder canal are lined, 63 miles of lining have been placed for the main canal, and some 44 million cubic yards of earth have been excavated for the distribution system. Project construction on Beas Dam is scheduled for completion by the end of 1974.

The U.S. Bureau of Reclamation is providing technical advisory services to the Project Authorities through periodic field inspections, and, for five months during 1969, by assigning an earth dams engineer to the project. The dollar costs of these services are being financed out of the proceeds of the loan.

Financial Status: Loan funds are being disbursed by reimbursing the Government of India for dollars advanced out of its own resources to pay for eligible items procured for the project, and through the Letter of Commitment procedure. Approximately 43% of the loan had been disbursed as of December 31, 1969. Invitations for bids on additional heavy earthmoving equipment are being readied for release before the end of March 1970.

The growth of India's heavy industries has made it possible to utilize more locally-produced equipment than had been anticipated at the time of loan authorization, with the result that the loan was reduced to \$20 million in February 1970.

Host Country Role and Procurement Sources: Local currency costs of the project, estimated to be about \$190 million (equivalent), are being met from a PL-480, Section 104(f) grant of \$4 million (equivalent) and the balance by the Government of India.

Procurement financed by this loan is restricted to the United States.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: INDIA

Borrower: Government of India

Funds: Development Loan

Title and Number of Loan: Geophysical Survey and Mineral Exploration 386-H-141	
Date Authorized: 6/15/65	Date Signed: 5/25/65
Loan Status as of 12/31/69	Loan Terms
(In Thousands of Dollars and Equivalent)	Duration 40 yrs.
Authorized \$3,500	Grace Period 10 yrs.
Disbursed 2,294	Interest Rate Grace 1% Thereafter 2½%
Repayments -	Currency of Repayment.. US\$
Interest Collected 20	

continue the exploration of favorable areas for several years. As of the latest quarterly progress report, the project was deemed to have been 77% completed.

Financial Status: A Letter of Commitment has been opened for the full amount of the loan. Approximately 66% has been disbursed. Final payments to the U.S. contractor are scheduled to be completed during the fourth quarter of CY 70.

Host Country Contribution; Procurement Source: Total cost of the project is estimated at \$5.3 million of which the GOI will provide \$1.8 million (equivalent) for local costs.

Purpose of Loan: To provide for the financing of the foreign exchange costs of an airborne geophysical survey and follow-up mineral exploration activity including diamond drilling of selected areas of India and related training of Indian personnel, and construction or purchase of related facilities and equipment.

Physical Status: The Government of India (GOI) has placed the Secretary of Mines, Department of Mines and Metals, in charge of the project. Parsons Corporation, the prime contractor, subcontracted the airborne geophysical surveying to Aero-Service Corporation who completed the flying in May 1968. Over 3000 potentially attractive anomalies were found. Ground geophysical, geochemical and geological exploration is proceeding. Diamond drilling has commenced and some footages of copper-bearing rock have already been encountered. Whereas the project was originally scheduled for completion in December 1969, delays have ensued so that now the last Parsons technician is scheduled to leave India on August 1, 1970. The project as such will terminate then but the GOI expects to

All procurement with A.I.D. loan funds is limited to material and services of U.S. source and origin.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: INDIA

Borrower: Government of India

Funds: Development Loan

Title and Number of Loan: Dhuvaran Thermal Power 386-H-143	
Date Authorized: 6/26/65	Date Signed: 6/1/66
Loan Status as of 12/31/69	Loan Terms
(In Thousands of Dollars and Equivalent)	Duration 40 yrs.
Authorized \$24,750	Grace Period 10 yrs.
Disbursed 1,171	Interest Rate . . . Grace 1% Thereafter 2½%
Repayments -	Currency of Repayment . . US\$
Interest Collected 1	

power piping and instruments and controls, and contracts should be executed before the end of March. The feedwater heaters, circulating pumps, and condensers have been ordered from local sources.

Foundations for all major equipment are ready. One cooling tower is 35% complete and the other 10%. Boiler parts have started to arrive at site, but it is expected that delivery of the turbine-generator will be behind schedule due to the strike at the General Electric works. Project completion is scheduled for the third quarter of 1971.

Financial Status: Letters of Commitment totaling \$16.1 million have been issued, and 5% of the loan had been disbursed as of December 31, 1969. Loan funds are also being disbursed by reimbursing the Government of India for project costs (principally for ocean transportation) advanced from its own foreign exchange. The bulk of the disbursements should take place in the second and third quarters of 1970 when the major pieces of equipment are expected to be delivered.

Purpose of Loan: To assist in financing foreign exchange costs of the addition of two 140 MW units to the Dhuvaran Thermal Power Station, including the construction of transmission lines, substation and related facilities.

The shift from a U.S. to an indigenous source for some of the plant equipment has reduced the dollar costs of the project. \$5 million, therefore, was deobligated from the loan in February 1970 to a new total of \$19,750,000.

The Gujarat Electricity Board is responsible for the project. The Dhuvaran station will be the major generating unit on the electrical grid system of Gujarat State. It is being integrated with the electrical grid system in neighboring Maharashtra State to the south. Both states have been deficient in power supply.

Host Country Contribution; Procurement Source: Total cost of the project is estimated at \$40.7 million of which the Gujarat Electricity Board will provide \$21.0 million equivalent (at current rate of Rs. 7.5 = \$1) for local costs. Procurement with A.I.D. dollar loan funds is limited to the United States.

Physical Status: Tata-Ebasco Engineering Co. of India, in partnership with Ebasco Services, U.S., was engaged as consulting engineers for the project. The partnership was later dissolved. The new firm of Tata Consulting Engineers is now engineering the project with assistance by Ebasco Services for the major engineering work.

Contracts have been let for the turbine generators (General Electric), boilers (Babcock & Wilcox), and boiler feed pumps (Ingersoll Rand). Bids have been received for the

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: INDIA

Borrower: Government of India

Funds: Development Loan

Title and Number of Loan: Higher Education 386-H-164	
Date Authorized: 1/4/67 Date Signed: 6/2/67	
Loan Status as of 12/31/69	Loan Terms
(In Thousands of Dollars and Equivalent) Authorized \$9,000 Disbursed 826 Repayments - Interest Collected 33	Duration 40 yrs. Grace Period 10 yrs. Interest Rate Grace 1 % Thereafter 2½ % Currency of Repayment .. US \$

invitations for bids had been released for the balance. All purchase contracts are expected to be let by mid-May, and deliveries should be completed by the end of December 1970.

Financial Status: Funds are being disbursed by letters of commitment and by reimbursing the Government of India for foreign exchange advanced for the project from its own resources. The bulk of the shipments is expected to take place over the next four to six months, with full drawdown of the loan expected by the end of calendar year 1970.

Host Country Contribution; Procurement Source: Rupees required for the costs of shipping, insuring and clearing the goods through customs are being provided in the budgets of the recipient institutions.

Purpose of Loan: To finance the import of commodities needed to encourage the use of new techniques and methods in scientific and technical education being introduced in India on a nation-wide basis by the U.S. National Science Foundation and American Universities under other A.I.D.-financed technical assistance programs.

All A.I.D. loan funds will be used for purchases in the United States.

The Government of India has undertaken a long range program to upgrade and expand the teaching of science and technology in its pre-university and college programs, in its engineering colleges, and in its polytechnics. As these programs have expanded, the need for equipping laboratories and workshops and providing other institutional facilities has multiplied. This loan is to meet the most essential needs of those institutions.

Physical Status: Project implementation got off to a slow start because of the complexity of purchasing the more than 6,000 different items the institutions require. The procurement process has since been greatly accelerated. As of the end of January, the value of contracts placed totaled \$5 million, and requests for quotations or formal

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: INDIA

Borrower: Government of India

Funds: Supporting Assistance

Title and Number of Loan: Family Planning 386-K-185	
Date Authorized: 6/26/68	Date Signed: 6/29/68
Loan Status as of 12/31/69	Loan Terms
(In Thousands of Dollars and Equivalent)	Duration 40 yrs.
Authorized \$2,700	Grace Period 10 yrs.
Disbursed -	Interest Rate .. Grace 2% Thereafter 2½%
Repayments -	Currency of Repayment.. US\$
Interest Collected -	

Physical Status: This loan is part of a package of A.I.D. assistance to the Government of India for the Indian family planning program, including a rupee grant to assist in financing the vehicle acquisition cost. Release of the loan dollars and grant rupees is triggered by evidence of establishment of satisfactory maintenance organizations, State Health Transport Organizations (SHTOs), and evidence of staff in place ready to use the vehicles. Eleven SHTOs have been certified as fulfilling the requirements out of a total of 12 SHTOs now operating (eventually all 17 states will have SHTOs). We are seriously concerned about slow progress made in procuring vehicles and are reexamining means for speeding up implementation, including administrative and financial arrangements. Orders for at least 1300 vehicles are now in the final clearance stage before being placed. Delivery of most of these vehicles is expected prior to June 1970.

Purpose of Loan: The loan provides the equivalent of the foreign exchange costs required for the production of vehicles for the Indian family planning program. The family planning program requires about 6,200 locally manufactured vehicles to be procured by public authorities in India for activities in different states. Approximately 10% of the cost of each vehicle is attributable to imported components and raw materials. Because of the difficulty of identifying in advance specific components and raw materials with the specific vehicles that are purchased for the family planning program, we are financing the equivalent of these costs to permit India to use its own foreign exchange for the costs of the family planning vehicles.

Financial Status: Conditions precedent to disbursement have been met. The eleven states with now viable SHTOs will receive an initial allotment of about 1340 vehicles requiring a release of about \$650,000.

Host Country Contribution; Procurement Source: The Government of India has budgeted \$400 million equivalent in local currency for the India family planning program during the Fourth Plan period.

India's family planning program is extension oriented. Without these vehicles the program would be forced to focus its orientation on population centers, depending on self-motivated villagers to travel to centralized clinics for advice and medical assistance. The provision of vehicles will enable extending the program directly into villages which account for more than 80% of India's population.

All procurement with A.I.D. dollar loan funds is restricted to the United States.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: INDIA

Borrower: Government of India

Funds: Development Loan

Title and Number of Loan: Production Loan - Fertilizer Imports 386-H-188	
Date Authorized: 6/28/68 Date Signed: 7/19/68	
Loan Status as of 12/31/69	Loan Terms
(In Thousands of Dollars and Equivalent)	
Authorized \$23,000	Duration 40 yrs
Disbursed 20,041	Grace Period 10 yrs
Repayments -	Interest Rate .. Grace . 2% Thereafter 2½%
Interest Collected 40	Currency of Repayment.. U. S. \$

Host Country and Procurement Source: All rupee costs required to unload, handle and use the fertilizer purchased under this loan are to be borne by the appropriate private concerns.

All items financed under the loan must have their source in and be procured from the United States.

Purpose of Loan: To assist in financing fertilizer necessary to increase agricultural production.

This loan was totally earmarked for fertilizer imports needed to augment local production and ensure adequate in-country fertilizer availabilities to meet the anticipated growth of fertilizer consumption.

Physical Status: Imports financed by this loan include various manufactured fertilizers, such as ammonium sulphate, urea, and mixed chemical fertilizers. Due to operational problems experienced by U.S. fertilizer producers combined with the damage to U.S. Gulf Port facilities caused by the August 1969 hurricane, shipments under this loan were not completed until December 1969.

Financial Status: The full amount of the loan has been committed. As of December 31, 1969, 98% of the total loan funds had been disbursed. The balance will be disbursed by April 1970.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: INDIA

Borrower: Indian Farmers Fertilizer Cooperative Limited

Funds: Development Loan

Title and Number of Loan: Indian Farmers Fertilizer Cooperative Ltd., 386-H-201	
Date Authorized: 7/3/69	Date Signed: Being Negotiated
Loan Status as of 12/31/69	Loan Terms
(In Thousands of Dollars and Equivalent)	Duration 40 yrs.
Authorized \$15,000	Grace Period 4½ yrs.
Disbursed -	Interest Rate Grace 2% Thereafter 3%
Repayments -	Currency of Repayment . . US\$
Interest Collected -	

have pledged \$1.0 million in cash and expertise to support CFI.

Total project costs are estimated at \$110 million, with \$32 million being foreign exchange costs. A.I.D. will provide \$15 million for the purchase of U.S. equipment and services. The U.K. will provide the equivalent of \$17 million. IFFCO has solicited priced proposals for the construction of the plant from U.S. and U.K. engineering/construction firms. It is expected that these proposals will be submitted in April and awards made during the summer of 1970.

Financial Status: Since the authorization of the British loan on January 6, 1970, the proposed conditions of the A.I.D. loan agreement and those of the British loan are being coordinated for subsequent loan agreement signature.

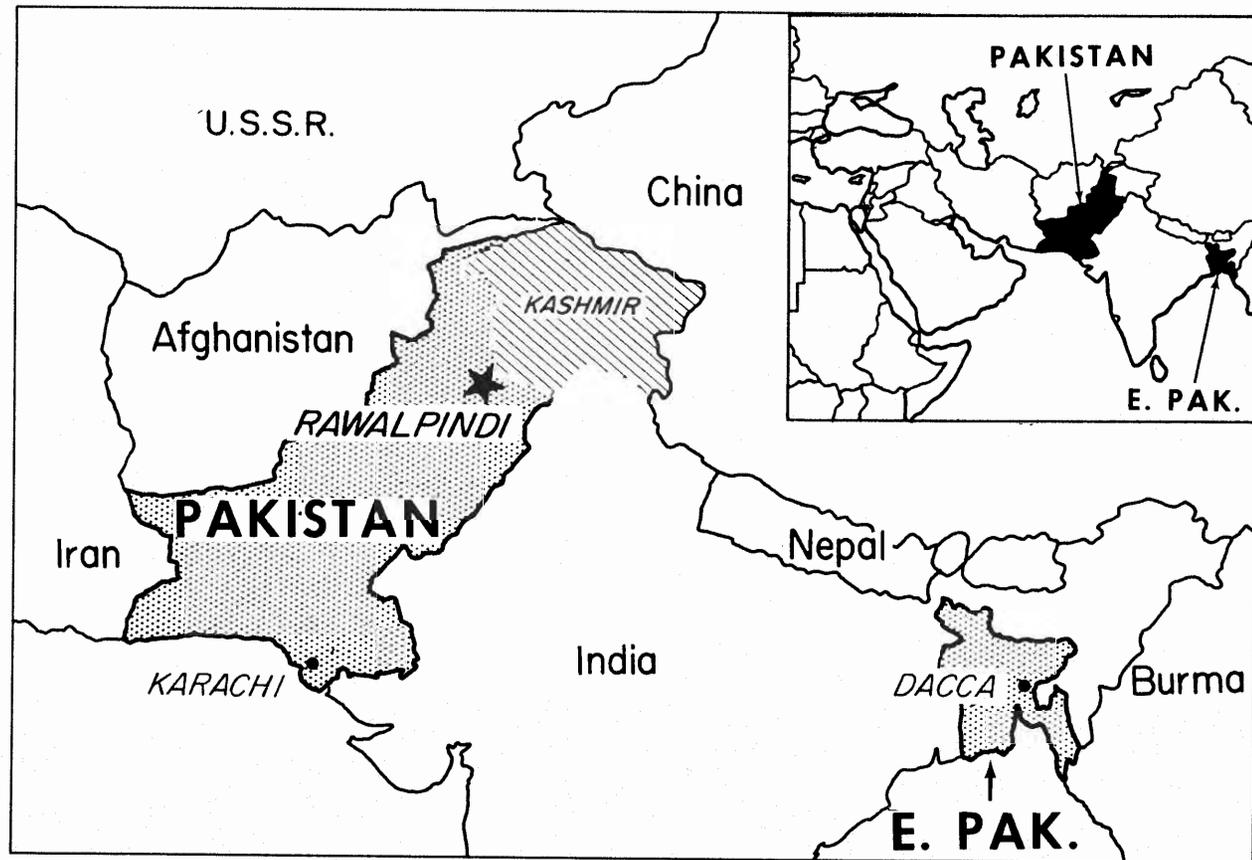
Purpose of Loan: To finance the dollar costs of the design and construction of modern petrochemical fertilizer facilities consisting of a 910 metric ton per day ammonia unit, a 1200 metric ton per day urea unit and a nitrogen-phosphate-potassium complex unit with a throughput capacity of up to 360 metric tons per hour of complex fertilizer.

The demand for fertilizer in India substantially exceeds production. Fertilizer is one of the critical agricultural inputs required to increase yields per acre of foodgrains and thereby narrow and eventually eliminate the gap between production and consumption of food in India. The annual fertilizer nutrient production from this project will be on the order of 260,000 metric tons of nitrogen, 130,000 metric tons of P₂O₅, and 66,000 metric tons of K₂O.

Physical Status: The Indian Farmers Fertilizer Cooperative Limited (IFFCO) is the Borrower. IFFCO was registered as a cooperative under Indian law on November 3, 1967. A minimum of 40,000 village level societies will be IFFCO shareholders, each with at least one vote. IFFCO is to be assisted in the construction of the facilities and in their initial operation by Cooperative Fertilizers International (CFI) which is owned by seventeen U.S. cooperatives who

Host Country Role and Procurement Source: The local currency costs, now estimated at \$78 million equivalent, will be partially financed by equity of \$36 million (\$12 million from IFFCO's members and \$24 million from the GOI as redeemable common stock to be purchased in 1985 by IFFCO). The balance of the local currency costs is expected to be covered by loans from the GOI and Indian financial institutions. The A.I.D. loan will be guaranteed by the GOI. Procurement with A.I.D. dollar loan funds is limited to the U.S.

Pakistan



BASIC DATA

Population (<i>millions – mid-1969</i>)	126.7
Annual Growth Rate (<i>percent</i>)	2.7
Area (<i>1000 square miles</i>)	365
Population Density Per Square Mile	347
Agricultural Land as % of Total Area	30
Percent of Labor Force in Agriculture	69

Per Capita GNP (<i>dollars</i>)	124*
Life Expectancy (<i>years</i>)	51
People Per Doctor	6,660
Literacy Rate (<i>percent</i>)	20
Students as % of 5-19 Age Group	22
<i>(Primary and Secondary)</i>	

* - 1969/70 in 1968/69 prices.

PAKISTAN

PROGRAM SUMMARY (In millions of dollars)				
	FY 1968 Actual	FY 1969 Actual	FY 1970 Estimated	FY 1971 Proposed
Development Loans	125.2	95.5	89.5*	119.3*
Technical Assistance	6.2	5.9	6.0	5.8
Supporting Assistance	0.8*	2.3*	-	-
Total A.I.D. Assistance	132.2	103.7	95.5	125.1

* Includes \$782,000 in FY 1968, \$2,297,000 in FY 1969, \$2,500,000 in FY 1970 and \$2,300,000 in FY 1971 for population programs under Title X of the Foreign Assistance Act.

U.S. AID OBJECTIVES

A.I.D. assistance is intended to support Pakistan's efforts to give high priority to its economic development; to distribute more widely the fruits of development; and to give the people of Pakistan greater participation in decisions affecting their welfare.

President Yahya, who succeeded President Ayub in March 1969, is seeking to reshape the constitution and government of the country and to place greater emphasis on social welfare objectives as an essential aspect of economic development. At the same time, the new Government recognizes that economic growth and efficiency are essential to its objectives and it continues to stress:

- increased agricultural production aimed at foodgrain self-sufficiency through economic incentives and the ready availability and widespread use of modern technology, such as improved seeds and fertilizer;
- expansion of private sector industrial production, with a central role for the free market system; and
- reduced population growth rates through a vigorous family planning program.

U.S. assistance for Pakistan's current program -- along with the assistance of other donors, most importantly the ten-nation Consortium led by the World Bank -- will help the Government to meet these objectives.

PROBLEMS AND PROGRESS

Pakistan's development strategy has produced a rapid increase in the total output of goods and services. The benefits of economic growth have been unevenly distributed, however, and recent social disturbances make it clear that Pakistan will have to deal more effectively with its social and income disparity problems. The problem is particularly acute for East Pakistan. President Yahya has recognized that Pakistan's future depends on developing a more representative political and economic order which is more responsive to the social and economic needs of East Pakistan and of the people at large. The development of a greater resource base and a continued rapid growth rate is essential if the Government is to have room for maneuvering in addressing these issues.

Political Leadership. The new Government has moved decisively to address Pakistan's problems. President Yahya has paved the way for parliamentary elections, which are scheduled for fall 1970. He has specifically addressed the problem of East Pakistan representation by agreeing that elections for the national assembly will be on basis of population rather than on the previous basis of East-West parity. He also announced the breakup of the Punjab dominated provincial government in West Pakistan, in order to give greater autonomy to local government. In addition, measures have been taken to meet the growing pressures for social reform. For example, the new Government has:

- launched a new labor policy, with a long overdue major increase in the minimum wage to about \$25 per month, while providing for more equitable resolution of labor disputes;
- announced guidelines for major reforms in education;
- introduced a budget which includes measures that provide a significant increase in support for housing and education, the poor, and further assistance to East Pakistan;
- extended financing for agriculture and small and medium sized industry, particularly in the less developed areas of Pakistan;
- introduced anti-monopoly legislation; and
- suspended Government officials suspected of corruption.

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These measures are important steps toward meeting popular grievances.

The political uncertainties of the last year contributed to an economic slowdown characterized by stagnation in some areas of the industrial sector, and accompanied by a decline of about 10% in total exports. The situation was aggravated by uncertainty over economic assistance prospects and the resulting cautious fiscal and import policies pursued by the Government. In the last few months, however, the new Government's actions have had a beneficial effect in building confidence. The downward trend in the economy appears to have been reversed. The recent expansion of private credit and the announcement in January of a new liberal and larger import policy is expected to generate increased production and exports.

Overall Economic Performance. During the past ten years Pakistan's economic growth has been impressive, well above the rate of population growth. In FY 1969, Pakistan achieved an overall economic growth rate of about 5%, although this progress was less rapid than the prior year, when a gain of over 7 percent was achieved.

Within one year (FY 1968-1969) West Pakistan was able to convert a food grain deficit of 1.4 million tons to a surplus 0.4 million tons. The key factors in the unprecedented growth of agricultural production have been the technological breakthrough in seed development and the availability of adequate agricultural inputs. In FY 1969 weather conditions seriously affected agriculture, particularly in East Pakistan. Even with poorer than average weather the wheat harvest in West Pakistan was about 5 percent larger than the previous year.

Disparity between East and West Pakistan. Unfortunately, the agricultural revolution now taking place in Pakistan has thus far been confined largely to the farmers of the West Wing. East Pakistan is not only more dependent on weather because of limited irrigation facilities, but the new high-response rice varieties can only be grown during the dry season on a relatively small percentage of its cultivated land because of the flood-waters.

In other areas of development, East Pakistan has also lagged behind the West Wing. In recent years disparity in personal income between the two wings has increased. This has created a major problem of national integration with the result that increased economic growth of East Pakistan has become a political imperative.

In addition to seeking ways to increase East Pakistan's agricultural production, the Government is also searching for a means to promote

industrial expansion. Past growth strategy emphasized the development of industries based on processing domestic agricultural raw materials, particularly jute. However, world markets for jute and jute products are limited and the demand for natural fiber is being reduced by the entry of competitive synthetic materials.

Aside from jute manufacturing, there is very little industrial activity in East Pakistan. In recent years, the Government has attempted to stimulate industrial growth through public investment and through fiscal incentives to investment in private industry. These efforts, however, have only been partly successful. Private investors (from both East and West Pakistan) have preferred to undertake industrial projects in the more developed West Wing. Consequently, in the mid-1960's only one-fourth of production and less than one-third of the employment in large scale private industry was located in East Pakistan. The Government is actively exploring ways to accelerate industrial growth in East Pakistan including additional support to financial institutions helping small-sized industries, tax incentive schemes, and other measures to improve the relationship of costs and profits.

Economic Policy Reforms. The Government continues to improve existing policies that played a major role in Pakistan's rapid development. Fertilizer continues its key role. During FY 1969 the Government allocated sufficient foreign exchange to permit a 25 percent increase in fertilizer consumption. Pakistan is encouraging foreign investors to help develop domestic fertilizer production, and is transferring the distribution of fertilizers and pesticides to the private sector. A dramatic increase in fertilizer sales has already resulted. The Government continues to rationalize its trade policies. The price of imported goods now more closely reflects real values, and the Government has relaxed administrative controls over imports. These measures permit greater reliance on pricing and market forces to assure better use of imports.

Defense Expenditures. The Government of Pakistan has demonstrated restraint in its budget allocations for defense. Defense expenditures in FY 1970 will be 3.5% of GNP, showing no increase over FY 1969 and FY 1968.

FY 1971 A.I.D. PROGRAM

U.S. assistance to Pakistan is provided through a Consortium, which includes ten donor nations and the World Bank. Consortium meetings -- chaired by the Bank -- are a forum for review and discussion of Pakistan's economic policies, progress and assistance requirements. The average U.S. development loan share was about

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45% in the past but was reduced sharply in FY 1969 and FY 1970. The proposed program for 1971 will put the U.S. share at about 30 percent.

For FY 1971 a loan program of \$117 million is proposed to finance industrial and agricultural raw materials in support of private sector development, to finance power projects in East Pakistan and assist with salinity control in West Pakistan. Technical assistance is planned at a level of \$5.8 million. In response to the problems of East Pakistan, special emphasis is being placed on agricultural technical assistance in the East to help develop agricultural research, to advise on ways to improve rice production, and to strengthen the management of supplies of fertilizer and pesticides. In the West, A.I.D. will continue to assist in improvement of agriculture extension and research, and to advise the government in the critical area of agriculture policy in order to sustain the production increases of the past few years and to diversify the farm economy. A.I.D. projects in the education sector will finance continuation of assistance to summer science teaching workshops in East Pakistan and will permit the application of new educational techniques to Pakistan's needs in education. In public administration and industry, A.I.D. will seek to train civil servants in modern management methods, and to stimulate small business by providing assistance to an East Pakistan institution which encourages the development of small industries. In both wings we will continue to provide extensive support for the family planning program.

Because of the slow growth of foodgrain production in East Pakistan, and the continuing increase in population, we anticipate in FY 1971 a PL 480 Title I foodgrain requirement of about 700,000 tons (\$40 million). In addition, Pakistan has requested under PL 480 non-foodgrain Title I commodities totalling an estimated \$53 million.

Industrial output which was adversely affected by the low FY 1969 import levels now needs additional raw material imports. The Government has recently increased the foreign exchange allocations for the private sector by 20%, to a level higher than at any time in the last three years. In order to support this increase, Pakistan looks both to foreign aid and to a significant drawdown in its foreign exchange reserves. In FY 1971, with the proposed U.S. aid level of \$117 million and the estimated assistance from the Consortium and other donors, Pakistan should be able to maintain the current overall growth rate of about 5%.

Agriculture

Pakistan currently is in a transition period, moving from past heavy dependence on food aid to a position of being able to meet its own foodgrain requirements in the near future. A.I.D. is providing development loan funds and technical assistance to support Pakistan's goal to achieve self-sufficiency in foodgrain production.

High-yield Seeds. The adoption of new high-yield wheat and rice seeds, which began as a movement among large farmers in West Pakistan, is now being extended to the small cultivators. In 1965, 12,000 acres were planted in the new high-yield wheat types. This increased to 6.2 million acres by 1969. Wheat and rice production in West Pakistan increased by almost 50% and 62% respectively between 1967 and 1969. Although earlier developed strains of "miracle" rice were not suited to East Pakistan, promising new rice varieties, particularly IRRI-20 are now being tested and a technologically more adaptable variety is expected to be commercially available within the next few years.

Fertilizer. Pakistan's agriculture strategy requires sharp increases in the use of fertilizer. Consumption has risen 13 times from the 65,000 metric tons used in FY 1960 to an estimated 845,000 metric tons in FY 1969. Nevertheless, fertilizer consumption is still short of recommended levels, particularly for the new high-response wheat and rice seeds.

Over the past five years, A.I.D. has provided about \$128 million in development loans for fertilizer imports with the understanding that Pakistan would move rapidly to expand domestic production and shift distribution to the private sector. Two projects for urea plants are being established with private U.S. partners.

Irrigation. The expansion of rice production in East Pakistan will depend to a great extent on improving water supply for the dry-season crop, 20 percent of which is now in IRRI variety. In many areas the introduction of a small pump can make it possible for a farmer to plant an additional crop during the dry winter season. A.I.D. is helping to finance imports for the construction of tubewells as well as spare parts for pump maintenance.

Pesticides. In a normal year, Pakistan loses an estimated one-fifth of its potential agricultural output to various kinds of pests and diseases. In FY 1970, A.I.D. will provide \$6 million to

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finance imports of pesticides. Based on the recommendations of a U.S. pesticide study team, the Government has moved the pest control programs to the private sector. This has resulted in a considerable improvement in the flow of pesticides to the farmer.

A.I.D. is reviewing its policy toward pesticide financing in light of possible ecological problems resulting from the misuse of certain DDT derivatives.

Research. In order to sustain long-run agricultural growth, Pakistan will have to strengthen its research effort, not only in areas of such technical importance as new seed varieties but also with regard to the coordination and proper dissemination of the results of research. A.I.D. is providing technical assistance to strengthen adaptive research programs and training at agricultural universities.

Looking to the Future. The sudden increase in food grain production in Pakistan has placed great strains on agricultural storage, marketing functions, transportation, and processing. In order for the agricultural sector to continue to grow, significant improvements will have to be made to modernize the physical and institutional infrastructure. This means greater emphasis on improving the distribution of agricultural inputs.

A.I.D. plans to provide technical assistance to improve policy planning and administration related to the second generation aspects of such problems as agricultural subsidies, taxation, pricing and crop diversification.

Industry

Despite the difficulty of developing an industrial base in East Pakistan, the record of the industrial sector for the country as a whole has been impressive. Starting from nothing two decades ago, industrial production now accounts for 12% of Pakistan's aggregate output of goods and services, and industrial investment represents one-fourth of total fixed capital formation. Between FY 1960 and FY 1968, industrial output rose at almost 12% per annum, faster than the average in either the developing or the developed countries.

During the last decade Pakistan has achieved a substantial diversification of the production structure with manufacturers other than jute goods and cotton textiles increasing at a very fast rate. This was the case with chemicals, paper, and paper products, and above all, engineering goods. Between FY 1960 and FY 1968 the

output of the engineering industries rose at almost 19 percent per year compared to the overall growth rate of industry of 12 percent. The fastest increase was recorded in the output of machinery, both non-electrical and electrical, followed by processing of basic metals.

The distinctive feature of much of Pakistan's industrial growth has been its export orientation. Between 1960 and 1968 aggregate exports rose at 7.9% per year. Almost all of this export growth was due to the expansion of sales of manufactured goods; and today manufactured exports account for one-half of Pakistan's aggregate merchandise exports.

Pakistan's current balance of payments position permits only a relatively small amount of raw material industrial imports. Before the government can allocate appreciable amounts of foreign exchange to imported industrial raw materials, it must first meet many fixed foreign exchange requirements such as debt service, essential non-luxury consumer goods and agricultural imports. These requirements have grown significantly in recent years with the dramatic increase in fertilizer imports. Thus better use of existing industrial capacity -- and, in turn, Pakistan's ability to increase exports -- depends heavily on the amount of foreign assistance available. The recent decline in aid levels and the associated shortage of imported raw materials have resulted in a decline in the growth rate of the manufacturing sector from 12 percent to about 7 percent during FY 1969.

Family Planning

Without a family planning program, Pakistan's population would double in about 20 years. The current program, started on a full scale in 1965, aims to reduce the birth rate 20% between 1965 and June 1970 which is commensurate with 5 million couples practicing family planning. As of July 1969, 3.4 million out of a total of 20 million fertile couples in Pakistan were reported to be practicing family planning, and the Government expects the 5 million target will almost be attained by June 1970.

The current program provides a variety of contraceptive methods, although the IUD and sterilizations have received the main emphasis. There are almost 100,000 people employed by the program and over 3,000 clinics are in operation. The program has received strong government financial support and the Fourth Plan (1970-1975) budget of \$120 million equivalent will be almost double the allocation for the Third Plan (1960-1965.)

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Since 1963 the program reached many couples who were easily convinced of the importance of family planning. In an effort to extend family planning services beyond this segment of the population to the people more difficult to reach and those who are more reluctant to accept the services, the Government is planning during the next five-year period to intensify efforts for modifying social attitudes and practices. A number of research studies and experimental projects are planned in an effort to influence attitudes.

In FY 1971, A.I.D. plans to provide \$2.3 million for contraceptive supplies, clinical and training equipment, technical advisors, and training of Pakistani personnel in the U.S. Pakistan is also receiving support from the Ford Foundation in research, evaluation, and training; transportation equipment from UNICEF; contraceptive supplies, as well as technical assistance in communications and training from Sweden.

SUMMARY OF PROGRAM BY FUNCTION

(Dollar Amounts in Thousands)

Country: PAKISTAN

TABLE II

Category	Actual FY 1969				Estimate FY 1970				Proposed FY 1971		
	Total	Tech. Coop.	Supp. Assist. ^{a/}	Conting. Fund	Total	Tech. Coop.	Supp. Assist.	Conting. Fund	Total	Tech. Coop.	Supp. Assist.
Development Loan Program	95,500	XXX	XXX	XXX	89,500 ^{b/}	XXX	XXX	XXX	119,300 ^{b/}	XXX	XXX
Programs Other than Devel. Loan											
Project Assistance											
U.S. Technicians	4,000	3,842	158		4,094	4,094			4,510	4,510	
Participants	1,253	936	317		493	493			480	480	
Commodities	2,904	1,082	1,822		970	970			460	460	
Other Costs	-	-	-		397	397			397	397	
Total Project Assistance	8,157	5,860	2,297		5,954	5,954			5,847	5,847	
Method of Financing											
Project Assistance											
Direct A.I.D.	6,271	4,011	2,260		4,354	4,354			3,897	3,897	
Other Agency	742	716	26		575	575			430	430	
Contract	1,144	1,133	11		1,025	1,025			1,520	1,520	
Program Assistance											
Total Other than Devel. Loan	8,157	5,860	2,297 ^{a/}		5,954	5,954			5,847	5,847	
Total Assistance	103,657	XXX	XXX	XXX	95,454	XXX	XXX	XXX	125,147	XXX	XXX

^{a/} Family Planning

^{b/} Includes \$2,297 thousand in FY 1969, \$2,500 thousand in FY 1970 and \$2,300 thousand in FY 1971 for population grants under Title X of the Foreign Assistance Act.

^{c/} Includes 19 Summer Science Consultants in FY 1969, 39 in FY 1970 and 35 in FY 1971.

^{d/} Includes 50 Family Planning in FY 70 and 44 in FY 71.

NUMBER OF U.S. TECHNICIANS (Program Overseas)

TYPE OF TECHNICIAN	On Duty At Close of Year		
	Actual FY 1969	Estimate FY 1970	Proposed FY 1971
A.I.D. employed	96	100	100
Participating agency	18	15	13
Contractor technicians	42 ^{c/}	57 ^{c/}	71 ^{c/}
Total	156	172	184

NUMBER OF PARTICIPANTS

TYPE OF PARTICIPANT	Programmed During Year		
	Actual FY 1969	Estimate FY 1970	Proposed FY 1971
Non-contract	188	124 ^{d/}	124 ^{d/}
Contract	92	30	43
Total	280	154	167

Country: PAKISTAN

PROJECT DATA

TABLE III

PROJECT TITLE	ACTIVITY	FUNDS	
Agricultural Organization - East Pakistan	Agriculture and Natural Resources	TA	
PROJECT NUMBER 391-11-110-143	PRIOR REFERENCE Page 109, FY 1970 PDB	INITIAL OBLIGATION FY: 1962	SCHEDULED FINAL OBLIGATION FY: 1971

Project Target and Course of Action: Achieving foodgrain self-sufficiency by 1975 is a prime Government of Pakistan goal for East Pakistan. New rice varieties are proving adaptable on test plots, thereby improving the possibility of increasing production through use of new seeds, combined with more fertilizer and pesticides.

The project has concentrated on helping the Government of East Pakistan develop a well-organized Agricultural Extension Service and upgrade the capabilities of the Agricultural Development Corporation to distribute fertilizer and improved seed, carry out irrigation work and allocate credit. Although considerable progress has been made in improving the extension service and ADC, production has not yet risen significantly. The need is for a coordinated, intensive rice production program which will focus the diverse agricultural services of the Government of East Pakistan on the urgent problem of rice output. Therefore, emphasis of the project in this, its final, year will be not only on the successful conclusion of current assistance activities, but also on assisting the Government of East Pakistan in planning a major new cooperative effort to accelerate the annual rate of increase in rice production.

Progress to Date: U.S. advisors have assisted the seven pre-service agriculture extension training institutes in staff and curriculum development; have trained Pakistanis

in irrigation; and have supervised the training of agriculture field staffs by Pakistani teams which in FY 1969 gave 540 staff members 18,000 man-hours of irrigation training. Emphasis has been on increased and more efficient use of production inputs and on improving organizational administration. Fertilizer sales totaled about 107,000 nutrient tons in FY 1969, up 5 percent from FY 1968. Increased use of new seed varieties should greatly raise fertilizer consumption in the future. More than 10,000 low lift pumps, nearly double the number in FY 1968, were in operation. A.I.D. advisors supervised pump assembly and the training of maintenance staff. High-yielding varieties of rice were planted on 361,000 acres of land in the irrigated winter cropping season as compared to 166,000 acres in FY 1968.

FY 1971 Program: U.S. advisors will continue to help upgrade the Agricultural Extension Service through better in-service training programs and more adequate overall administration. A.I.D. will also assist the Agricultural Development Corporation to improve its procedures for distribution of essential agriculture inputs. In addition, A.I.D. will assist the Government of East Pakistan Department of Agriculture in developing a new package of inputs, technology, and training for an intensive rice production program. In FY 1971, this program will pull together diverse agricultural services of the GOEP into a coordinated effort to (1) accomplish the multiplication of

U.S. DOLLAR COSTS (In Thousands)						PRINCIPAL CONTRACTORS/AGENCIES					
	Obligations	Expenditures	Unliquidated	Cost Components	OBLIGATIONS						
					Estimated FY 1970			Proposed FY 1971			
Through 6/30/69	1,896	1,659	237	U.S. Technicians Participants ... Commodities ... Other Costs ... Total Obligations	Direct AID	Contract/Other Agency	Total	Direct AID	Contract/Other Agency	Total	U.S. Department of Agriculture
Estimated FY 70	365	315			255	--	255	250	50	300	
Estimated through 6/30/70	2,261	1,974	287		100	--	100	110	--	110	
		Future Year Obligations	Estimated Total Cost		10	--	10	10	--	10	
Proposed FY 71	420	--	2,631		--	--	--	--	--	--	
					365	--	365	370	50	420	

Country: Pakistan

PROJECT DATA (Continued)

TABLE IIIa

PROJECT TITLE	PROJECT NUMBER
Agricultural Organization - East Pakistan	391-11-110-143

500 acres of the new rice variety IR 532-E-576 to provide 800 tons of seed; (2) establish organized in-service rice production training; and (3) provide technical advice in irrigation, plant protection, extension teaching and input distribution.

U.S. Technicians: Eight U.S. technicians will advise in rice agronomy and extension, irrigation, horticulture, plant protection, fertilizer distribution, seed improvement, and in-service and pre-service staff training. Short term consultant services will be secured under a PASA with the U.S.D.A.

Participants: Ten participants will receive one year of practical training in rice production at the University of the Philippines. Nine participants will study toward their M.S. in agronomy (rice) at the University of the Philippines. Two students will study for their M.S. in the United States in horticulture and two in irrigation. Practical courses for one year in the United States will be given to two participants in seed processing and three in groundwater development.

Commodities: Equipment and supplies will be provided for demonstration and training.

Country: Pakistan

PROJECT DATA

TABLE III

PROJECT TITLE Hydrological Monitoring and Research	ACTIVITY Agriculture and Natural Resources	FUNDS TA	
PROJECT NUMBER 391-11-120-257	PRIOR REFERENCE Page 111, FY 1970 PDB	INITIAL OBLIGATION FY: 1967	SCHEDULED FINAL OBLIGATION FY: 1971

Project Target and Course of Action: An intensive program to increase agricultural production is now underway in 23.5 million irrigated acres of the Indus Plain. The successful operation of this program requires an effective means of monitoring hydrological changes and carrying out associated hydrological research in a highly complex area involving surface and underground water supplies, a multitude of streams and ditches, and electrical power.

This project aims to develop by the end of FY 1971 the capabilities of the Water and Soils Investigation Division (WASID) of the West Pakistan Water and Power Development Authority to monitor and conduct research on the physical and chemical changes which have been occurring in the hydrology of the Indus Plain as a result of development of underground water resources. The information gathered and analyzed by WASID will be used to determine future development and management of hydraulic facilities for irrigation and drainage in the Indus Plain. This project finances advisory services from the United States Geological Survey (USGS) to assist WASID in its investigations and help train WASID staff.

Progress to Date: The principal organizational units of WASID have been established, staffed, and are performing their technical services as planned. These include (1) collecting and storing records of all water measuring points in West Pakistan; (2) storing and analyzing

hydrological data, and conducting analog model studies; (3) analyzing ground water systems, and (4) measuring physical and chemical properties of water with emphasis on problems of waterlogging and salinity control.

FY 1971 Program: USGS advisors, supplemented by short term consultants, will complete this assistance to WASID, stressing the further development of its review systems and research capability, with special emphasis on seven Salinity Control and Reclamation Project areas in the Indus Plain; research on groundwater reservoir permeability and capacity characteristics; and the application of computer techniques in analog models.

U. S. Technicians: Two USGS advisors for 20 man months of service, and three short-term consultants.

U.S. DOLLAR COSTS (In Thousands)				PRINCIPAL CONTRIBUTING AGENCIES						
	Obligations	Expenditures	Unliquidated	Cost Components	OBLIGATIONS					
					Estimated FY 1970			Proposed FY 1971		
					Direct AID	Other Agency	Total	Direct AID	Other Agency	Total
Through 6/30/69	161	145	16		--	110	110	--	75	75
Estimated FY 70	175	107			25	--	25	--	--	--
Estimated through 6/30/70	336	252	84	U.S. Technicians Participants . . .	--	40	40	--	--	--
		Future Year Obligations	Estimated Total Cost	Commodities . . .	--	--	--	--	--	--
Proposed FY 71	75	--	411	Other Costs . . .	25	150	175	--	75	75
				Total Obligations						

U. S. Geological Survey

Country: PAKISTAN

PROJECT DATA

TABLE III

PROJECT TITLE Agricultural Research	ACTIVITY Agriculture and Natural Resources	FUNDS TA	
PROJECT NUMBER 391-11-660-296	PRIOR REFERENCE Page 112, FY 1970 PDB	INITIAL OBLIGATION FY: 1969	SCHEDULED FINAL OBLIGATION FY: 1972

Project Targets and Course of Action: High-quality agriculture research is one of the principal requirements for both protecting and extending the agricultural production increases of recent years in Pakistan. The project will emphasize research development in East Pakistan which has not yet achieved self-sufficiency in its major foodgrain, rice. Research is critical in developing-high response rice varieties which will flourish in the unique climatic situation of the East. In the West, where foodgrain self-sufficiency has been achieved, research is necessary to ensure that the new varieties of wheat retain their disease-resistant qualities while continuing to provide high yields. Research can also pave the way for new departures beyond wheat self-sufficiency, in crop diversification and improvement in the nutritional content of various crops.

For the past two decades Pakistan has been carrying out agriculture research within a basically sound institutional framework. Pakistan's research effort, however, is still deficient in terms of administration, financial resources, and professional quality. In some research fields, activities of the universities and government research organizations overlap one another; in others, critical research topics have been neglected.

This project aims to strengthen original and applied agriculture research in Pakistan by improving (1) research administration and coordination, (2) academic

training for research scientists, and (3) the quality and usefulness of the research carried out. Also under the project, research will be carried out with the goal of adapting high-yield oil seeds to increase Pakistan's oilseed production. Recent studies indicate Pakistan may be particularly well suited for the production of certain oilseeds, and since the country must now import significant amounts of edible oils, increased domestic production could result in a large potential savings of foreign exchange.

Progress to Date: One advisor, assigned to the West Pakistan Agricultural University in July 1969, has helped design a pulse improvement research project. Several U.S. universities have been invited to make contract proposals for providing six resident Research Advisors in various disciplines at the East Pakistan Agricultural University beginning in July of 1970. Two direct-hire Research Administration Advisors and a direct-hire Oilseed Research Advisor are being recruited.

FY 1971 Program: Interdisciplinary research on pulses and other high-protein crops will continue at the West Pakistan Agricultural University. It is expected that a contract will be signed early in the fiscal year with a U.S. University to provide technical assistance to the East Pakistan Agricultural University. Research will commence in the East under the guidance of the U.S.

U.S. DOLLAR COSTS (In Thousands)				OBLIGATIONS			PRINCIPAL CONTRACTORS/AGENCIES
	Obligations	Expenditures	Unliquidated				
				Estimated FY 1970		Proposed FY 1971	
				Direct AID	Contract/Other Agency	Total	
Through 6/30/69	55	-	55				To be determined
Estimated FY 70	270	95		Direct AID	Contract/Other Agency	Total	
Estimated through 6/30/70	325	95	230	20	250	270	
		Future Year Obligations	Estimated Total Cost	80	225	305	
				--	--	--	
				--	--	--	
Proposed FY 71	380	350	1,055	20	250	270	
				155	225	380	

Country: PAKISTAN

PROJECT DATA (Continued)

TABLE IIIa

PROJECT TITLE	PROJECT NUMBER
Agricultural Research	391-11-660-296

contract advisors in the areas of insect control for rice crops, disease-resistant rice strains, new high-producing varieties of oil seeds and pulse, fisheries development, and production technology for jute and sugarcane. Research also will be conducted to develop new crops with the purpose of greater diversification in agricultural production. The direct-hire advisors will advise the newly created central Pakistan Agricultural Research Council.

U.S. Technicians: Three direct-hire and six contract technicians will be assigned to the project. In addition, the services of up to fifteen short-term consultants will be provided under PASA with USDA.

Participants: 11 participants will receive U.S. training in research design and administration.

Commodities: \$10,000 will be needed to purchase commodities to support research activities.

Contract: \$225,000 to forward fund six full-time advisors.

Country: PAKISTAN

PROJECT DATA

TABLE III

PROJECT TITLE Agricultural Policy and Technology		ACTIVITY Agriculture and Natural Resources		FUNDS TA	
PROJECT NUMBER 391-11-140-142		PRIOR REFERENCE	INITIAL OBLIGATION FY: 1971	SCHEDULED FINAL OBLIGATION FY: 1973	

Project Target and Course of Action: With the recent achievement of self-sufficiency in wheat, West Pakistan agriculture has entered upon a new and more complex phase of its development. Although foodgrain production will continue to be a major concern, it now is necessary to move beyond an exclusive emphasis on increased output. Potential exists for crop diversification, increased exports, improved human nutrition, expanded internal markets, and more equitable income distribution. The rapid increase in foodgrain has also raised a number of economic problems, such as the relative costs of different crops and the need to reduce agricultural subsidies and increased revenues. In addition, there are several critical areas that need more attention if Pakistan is to maintain a high agricultural growth rate, such as improved land management. This project will help the Government of Pakistan to develop policies and project initiatives that are responsive to the new problems now being encountered in the agriculture sector.

U.S. assistance will concentrate in the key area of government policy regarding the rural agricultural economy and farm technology. These policies will have a leading impact on Pakistan's agricultural development during the next five years. A.I.D. will help the Department of Agriculture's recently established Planning Unit to develop plans and guidelines in the areas of agriculture subsidies, prices, taxation, and crop diversification. The dramatic rise in production

has far outpaced the development of an adequate physical infrastructure. Therefore, we will also help develop policies and programs for improving the storage, distribution and marketing of agricultural production.

In order to continue to maintain a high rate of agricultural growth in West Pakistan, the new policies will have to be supported by a steady improvement in services to the individual farmers. As we identify these problems we will provide short-term consultants. In some areas, such as extension, Pakistan, with U.S. technical assistance has been building up strong institutional support; and we believe the Government can continue to strengthen these services without additional U.S. assistance. In other areas, however, we can significantly help with additional assistance.

Agricultural engineering is one such area of concern. A.I.D., under this project, will help the Government devise new programs involving land leveling, refined tillage practices, and improved application and management of water resources for smaller farm units. In the latter field, the A.I.D. advisor will complement and supplement research being carried out by Colorado State University under an AID research contract. The incumbent also will assist in the implementation of a local currency project designed to impart information on land leveling and improved irrigation techniques to farmers through on-the-job training programs on 10

U.S. DOLLAR COSTS (In Thousands)				OBLIGATIONS						PRINCIPAL CONTRACTORS/AGENCIES
	Obligations	Expenditures	Unliquidated	Estimated FY 1970			Proposed FY 1971			
				Direct AID	Contract/Other Agency	Total	Direct AID	Contract/Other Agency	Total	
Through 6/30/69										
Estimated FY 70										
Estimated through 6/30/70										
		Future Year Obligations	Estimated Total Cost							
Proposed FY 71	115	400	515				115	--	115	
				Cost Components						
				U.S. Technicians						
				Participants . . .						
				Commodities . . .						
				Other Costs . . .						
				Total Obligations						

Country: PAKISTAN

PROJECT DATA (Continued)

TABLE IIIa

PROJECT TITLE	PROJECT NUMBER
Agricultural Policy and Technology	391-11-140-142

selected demonstration areas.

FY 1971 Program: Advisory service will be provided (1) to help develop the capacity of the Planning Unit to analyze, formulate and develop policy plans and research study recommendations; (2) to identify specific areas for additional short-term technical assistance; and (3) to help develop programs for improved land and water management.

U.S. Technicians: One Agricultural Economist; one Plant Protection Advisor; and five short-term consultants in fields of agricultural economics and entomology.

Participants: Seven key project personnel will be sent to the United States for advanced academic and field study programs in agricultural economics.

Country: Pakistan

PROJECT DATA

TABLE III

PROJECT TITLE East Pakistan Small Industry Development	ACTIVITY Industry and Mining		FUNDS TA
	PRIOR REFERENCE Page 114, FY 1970 PDB	INITIAL OBLIGATION FY: 1967	SCHEDULED FINAL OBLIGATION FY: 1972
PROJECT NUMBER 391-11-240-258			

Project Target and Course of Action: Industrial development in East Pakistan continues to lag behind that of West Pakistan notwithstanding attempts to stimulate industrial growth in the East through the use of public investments and fiscal incentives. The issue of income disparity between East and West Pakistan has become a significant factor in the East's recent political unrest. The establishment of more small industrial units, preferably with local Bengali ownership, is important to the political stability and economic development of East Pakistan.

The problems being faced in developing industry in East Pakistan are difficult, and progress in many areas will be slow. There are a number of factors adversely affecting the industrial growth, including: (1) a low resource base and a traditional agricultural system which severely limits industrial project possibilities and capital formation; (2) a dearth of entrepreneurial experience; (3) low labor productivity (as compared to the West); and (4) inability of East Pakistan's development institutions to review and help develop small-scale project proposals that lack sufficient technical analysis.

The objective of this project, now extended to FY 1972, is to promote the development of small industries in the East by attacking this latter constraint on industrialization in East Pakistan -- the lack of technical

expertise in proposing and appraising projects. This will be accomplished by a program involving cooperation between the Small Investment Advisory Service of the East Pakistan Small Industries Corporation and commercial banks in project feasibility analysis, investment counselling, term lending, and loan follow-up. The project also will encourage private commercial banks to engage in term lending to small industry by assuring, through the Small Investment Advisory Service, the development of sound proposals for bank financing.

The achievement of the objectives of this project would offer considerable benefits for East Pakistan, the most significant of which would be the development of entrepreneurship and the consequent broadening of industrial ownership. In addition, new jobs will be created for the increasing numbers of people which are moving to urban areas, and foreign exchange will be saved through import substitution.

Progress to Date: A.I.D. technical assistance began in the latter part of FY 1968 with an evaluation of EPSIC operations and its relationship with the commercial banks. The AID financed contract advisor initiated a project evaluation procedure and developed a credit evaluation training program. He also started on-the-job training in project evaluation and feasibility analysis for the staff of the Small Corporation and for appropriate personnel in the commercial banks. In FYs 1968 and 1969 the East

U.S. DOLLAR COSTS (In Thousands)							PRINCIPAL CONTRACTORS/AGENCIES			
	Obligations	Expenditures	Unliquidated	Cost Components	OBLIGATIONS			Checci and Company		
					Estimated FY 1970	Proposed FY 1971				
Through 6/30/69	176	80	96		Direct AID	Contract/Other Agency	Total	Direct AID	Contract/Other Agency	Total
Estimated FY 70	130	90		U.S. Technicians	--	130	130	--	160	160
Estimated through 6/30/70	306	170	136	Participants ...	--	--	--	--	20	20
		Future Year Obligations	Estimated Total Cost	Commodities ...	--	--	--	--	--	--
Proposed FY 71	180	180	666	Other Costs ...	--	--	--	--	--	--
				Total Obligations	--	130	130	--	180	180

Country: Pakistan

PROJECT DATA (Continued)

TABLE IIIa

PROJECT TITLE

East Pakistan Small Industry Development

PROJECT NUMBER

391-11-240-258

Pakistan Small Industries Corporation and the commercial banks processed project loan applications which utilized \$2 million from A.I.D. Commodity Loans. As a result 72 loans have been made in 15 industrial categories including rice mills, fish-freezing plants, auto repair shops, printing shops, bakeries, ready made garments and cold-storage facilities. Borrowers generally provided 50% equity.

FY 1971 Program: AID-financed advisory services will help develop, through on-the-job training and guidance, a Pakistani cadre capable of conducting professional feasibility studies and project analyses without outside assistance. The East Pakistan Small Industries Corporation currently is negotiating with the World Bank for a \$3 million foreign exchange loan. Outside technical assistance also will help the Small Investment Advisory Service prepare feasibility studies and investment briefs for projects financed under the prospective bank loan. Additionally, the consultants, in cooperation with the Small Investment Advisory Service and the Government of East Pakistan, will study means for institutionalizing the present agreements between commercial banks and the Small Industry Advisory Service in order to provide a long-range program for small industry development.

U.S. Technicians: Three Checci and Company contract advisors: two industrial financial advisors and a general engineer, plus short-term consultants.

Participants: Up to eleven Pakistanis may be sent to the U.S. under the contract for short-term training in loan appraisal techniques.

Contract: \$160,000 to forward fund three full-time advisors, plus short-term consultants.

Country: Pakistan

PROJECT DATA

TABLE III

PROJECT TITLE Financial Legislation Improvement		ACTIVITY Industry and Mining		FUNDS TA	
PROJECT NUMBER 391-11-950-345		PRIOR REFERENCE	INITIAL OBLIGATION FY: 1971	SCHEDULED FINAL OBLIGATION FY: 1973	

Project Target and Course of Action: Pakistan has a free-enterprise based economy. While the contributions of the private sector have been a major factor in the expansion of Pakistan's economy, growth has been accompanied by a number of problems. A significant share of industrial and financial resources has been concentrated in a relatively few families; unfair, restrictive, and monopolistic trade practices have become common; public disclosure concerning the affairs of large corporations has been limited; adequate protection of shareholders rights has not existed; and the securities market has not been appropriately regulated. In past years, the Government of Pakistan's efforts to deal with the private sector have consisted, in large part, of a panoply of ad hoc regulations dealing with imports, production, pricing, and other aspects of the companies' business. This regulation has been both cumbersome and ineffective.

In June 1969, the Government of Pakistan announced a new Securities Exchange Ordinance and a draft Monopolies and Unfair Trade Practices Ordinance which constituted significant departures from this pattern of ad hoc regulation. The new laws, rather than regulating the details of business conduct and practices, attempt to set forth ground rules within which the free enterprise system can operate effectively and efficiently.

The Securities and Exchange Ordinance was based in part on advice provided by advisors furnished under the

successful, terminated Investment Corporation of Pakistan Project. The Investment Corporation of Pakistan, which provides investment banking and underwriting services, was established with AID assistance to help build and strengthen Pakistan's capital market and to broaden the ownership of corporate securities in Pakistan. The Government of Pakistan also requested assistance from A.I.D. in connection with the Monopolies Ordinance, and a short-term advisor was provided during November 1969. The advisor, drawing on his experience with U.S. monopoly legislation, was able to make a very significant contribution to the development of Pakistan's new statute.

This project is designed to assist the Government of Pakistan in implementing these two new laws. Semi-autonomous agencies will be established to enforce the laws. The project will provide advisors to assist in the organization of these agencies and in training their staffs. Participant training will also be provided.

FY 1971 Program: Three U.S. contract advisors will assist the proposed Capital Markets Commission and Monopolies Control Authority to implement and assist in training staffs of their respective agencies. It is anticipated that during FY 1971 the basic rules and regulations of the two administrative agencies will be issued and the first enforcement actions will be initiated. Implementation of the laws will begin on a case-by-case basis

U.S. DOLLAR COSTS (In Thousands)						PRINCIPAL CONTRACTORS/AGENCIES					
Through 6/30/69	Obligations	Expenditures	Unliquidated	Cost Components	OBLIGATIONS						
	Estimated FY 70	Estimated through 6/30/70	Future Year Obligations		Estimated Total Cost		Estimated FY 1970		Proposed FY 1971		
							Direct AID	Contract/Other Agency	Total	Direct AID	Contract/Other Agency
Proposed FY 71	170	340	510	Total Obligations	--			--	170	170	UNDETERMINED
				U.S. Technicians			--		140	140	
				Participants . . .			--		30	30	
				Commodities . . .			--		--	--	
				Other Costs . . .			--		--	--	

Country: Pakistan

PROJECT DATA (Continued)

TABLE IIIa

PROJECT TITLE Financial Legislation Improvement	PROJECT NUMBER 391-11-950-345
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with adequate attention being given to every case presented so that early enforcement efforts are successful. Also during FY 1971, participants will be selected for short-term training in law, accounting, economics, and financial analysis.

U.S. Technicians: Three contract advisors, two for the Monopolies Control Authority, and one for the Capital Markets Commission will be provided. Two will be lawyers experienced in antitrust or securities' law, and one will be an economist competent in the antitrust area.

Participants: We will consider six participants each year, three from each of the agencies, for both academic and practical training in the fields of law, accounting, economics and financial analysis.

Contract: Forward funding of technicians for 18 months.

Country: PAKISTAN

PROJECT DATA

TABLE III

PROJECT TITLE Malaria Eradication	ACTIVITY Health and Sanitation	FUNDS TA
PROJECT NUMBER 391-52-511-139	PRIOR REFERENCE Page 116, FY 1970 PDB	INITIAL OBLIGATION FY: 1963
		SCHEDULED FINAL OBLIGATION FY: 1975

Project Target and Course of Action: Malaria is a major debilitating disease that is an obstacle to economic and social development in Pakistan. It has seriously affected some 20 million people annually. The National Malaria Eradication Program undertaken in 1961 will enter its terminal phase during the Fourth Plan and is scheduled for completion in 1975. The project provides US advisory assistance (1) in planning, administration, and evaluation of the MEP and (2) in training MEP staff to carry out the program. Pakistan supports the project with personnel, equipment, supplies, and local currency (valued at approximately \$12 million equivalent in FY 1970). WHO supports the project with complementary medical advisory services and training of MEP staff.

Progress to Date: By September 30, 1969, MEP had covered the whole of West Pakistan in 35 operational zones, with 29.5 million people in the consolidation phase of the program. The infection rate has declined from 590 cases per 10,000 population at the inception of MEP to a range of 11-32 per 10,000 throughout the Province. A serious outbreak occurred in 1969 requiring additional intensified remedial action throughout the Province to maintain the program. In East Pakistan the whole population is covered by MEP in 31 operational zones, with 22.16 million persons in the consolidation phase. The infection rate has declined from 282 per 10,000 to 13.7 per 10,000. The program is on schedule in East Pakistan; however the unexpected urban epidemics

in West Pakistan have caused a lag in the program there.

FY 1971 Program: MEP activities will be continued in the preparatory, attack, consolidation, and pre-maintenance phases in accordance with the Plan of Operations. In West Pakistan this includes completion of intensified remedial respraying operations throughout the Province, and advancement of 3 additional zones containing 3.2 million people into the consolidation phase. In East Pakistan, 9 additional zones containing 19.2 million people will advance to the consolidation phase. Two zones containing 3.2 million persons will move into the final pre-maintenance phase. Due to the recent upsurge in the incidence of malaria in the urban areas, the program is expanding to include the urban areas. (Cities of 20,000 or more were originally outside the purview of the program.) U.S. specialists will continue to advise, assist and train MEP personnel at the National and Provincial levels in program organization, management and evaluation, as well as utilization of DDT, transport and laboratory and spraying equipment procured by GOP. In addition, they will coordinate activities with WHO medical advisors. The United States has a continuing commitment to this project and U.S. assistance will extend through FY 1975.

U.S. Technicians: One Chief Malaria Advisor, two Operations Specialists, and two Transport Supply Advisors.

U.S. DOLLAR COSTS (In Thousands)							PRINCIPAL CONTRACTORS/AGENCIES				
	Obligations	Expenditures	Unliquidated	Cost Components	OBLIGATIONS						
					Estimated FY 1970			Proposed FY 1971			
					Direct AID	Contract/Other Agency	Total	Direct AID	Contract/Other Agency	Total	U.S. Public Health Service
Through 6/30/69	859	828	31								
Estimated FY 70	175	190									
Estimated through 6/30/70	1,034	1,018	16	U.S. Technicians	--	175	175	--	145	145	
		Future Year Obligations	Estimated Total Cost	Participants ...	25	--	25	15	--	15	
				Commodities ...	--	--	--	--	--	--	
				Other Costs ...	--	--	--	--	--	--	
Proposed FY 71	160	640	1,834	Total Obligations	25	175	200	15	145	160	

Country: PAKISTAN

PROJECT DATA (Continued)

TABLE IIIa

PROJECT TITLE	PROJECT NUMBER
Malaria Eradication	391-52-511-139

Participants: Two senior malariologists for 12 months academic and field training in the U.S. Eight malaria specialists to attend a four month course at the Malaria Eradication Training Center in the Philippines.

Country: Pakistan

PROJECT DATA (Continued)

TABLE IIIa

PROJECT TITLE	PROJECT NUMBER
Family Planning	391-11-580-256

Ford's assistance is channeled through the Population Council and contracts with the University of California and Johns Hopkins University.

FY 1971 Program: Eight U.S. direct hire personnel will assist the government in expanding and improving its family planning program. The U.S. will advise on medical problems, use of economic incentives to promote family planning, selection and supply management of commodities, public health issues related to family planning, and education and publicity efforts in motivating people to practice contraception. PASA census specialists will assist in sample surveys designed to make the 1971 Population Census yield more relevant data for population programs. Four U.S. contract teams will advise the government in training, research and evaluation. One team will help to upgrade training programs for family planning field workers. Three teams will concentrate on research and evaluation -- one each in each province, and one in the central government family planning organization.

U.S. Technicians: Eight direct-hire including two at the Central level plus three in each Province; also three PASA Census advisors and four contract teams (13 contract technicians total) in training, research, and evaluation.

Participants: Twenty-two will receive training in the U.S. for one year, including five Health Department employees. Twenty will receive short-term training in population dynamics, family planning administration and census procedures. In addition, two participants will have provision for training under the university contracts.

Commodities: U.S. grant commodities will consist of contraceptives, pharmaceuticals and laboratory reagents, research supplies and equipment, and educational and publicity materials.

Country: PAKISTAN

PROJECT DATA

TABLE III

PROJECT TITLE Summer Science Institutes		ACTIVITY Education		FUNDS TA	
PROJECT NUMBER 391-11-660-278		PRIOR REFERENCE Page 120, FY 1970 FDB		INITIAL OBLIGATION FY: 1967	
				SCHEDULED FINAL OBLIGATION FY: 1972	

Project Target and Course of Action: The Government's effort to increase agricultural and industrial production during the sixties created manpower demands that could not be fulfilled by Pakistan's colleges, universities, and polytechnic institutions. Higher education, traditionally concentrated in the arts and letters, was not geared toward educating future scientists and technicians. The subject matter being taught in the schools in science and math during the sixties was becoming increasingly obsolete and the numbers of trained teachers in these subjects did not keep pace with the enrollment of science and math students. Confronted with this situation, the Government of East Pakistan requested U.S. assistance in improving science education by means of a series of four to six week summer science institutes (SSI's) for university level teachers. In 1968 ten summer institute programs were held and fifteen in the summer of 1969. This program is patterned on the programs carried out in the United States by the National Science Foundation and is designed to modernize teaching techniques and materials and improve the quality of the subject matter being taught in the universities. In addition to the summer program, the Government of East Pakistan has recently established the Institute for the Advancement of Science and Technology Teaching which uses the Summer Science program as a basis for launching other activities designed to improve science education. This institution will develop programs in advanced science subjects and conduct in-service teacher training programs

for future teachers in the summer science program. It will also convene seminars to review student and teacher receptivity to new teaching methods, assist in the development of professional science societies and journals and conduct teaching demonstrations in new techniques at various colleges and universities. The establishment of this institute demonstrates the Government's strong interest in the summer institute program and its belief that it should be continued as a regular aspect of the education system.

Progress to Date: Through FY 1970 forty-five Summer Science Institutes will have been held in the various fields of science, mathematics, and technology, using 80 short-term U.S. science professors as consultants. These Institutes will have provided training for 784 science teachers in East Pakistan's technical institutes, colleges, and universities. This represents 62% of all the science and mathematics teachers in the province. In addition, 20 outstanding graduate participants of East Pakistan SSIs have attended National Science Foundation (NSF) sponsored summer science institutes in the U.S. for advanced training. Three Curriculum Testing Instruction Centers, which will be coordinated by the new Institute, have been established to develop educational materials and to establish a system for evaluating the use of new materials. The Institute is responsible to the Department of Education, and its staff which has already been chosen, was drawn from the Department of Education, the

U.S. DOLLAR COSTS (In Thousands)				OBLIGATIONS						PRINCIPAL CONTRACTORS/AGENCIES
	Obligations	Expenditures	Unliquidated	Estimated FY 1970			Proposed FY 1971			
				Direct AID	Contract/Other Agency	Total	Direct AID	Contract/Other Agency	Total	
Through 6/30/69	836	564	272							
Estimated FY 70	285	341			285	285		320	320	
Estimated through 6/30/70	1,121	905	216					30	30	
		Future Year Obligations	Estimated Total Cost							
Proposed FY 71	350	180	1,651		285	285		350	350	

Country: PAKISTAN

PROJECT DATA (Continued)

TABLE IIIa

PROJECT TITLE	PROJECT NUMBER
Summer Science Institutes	391-11-660-278

Directorate of Technical Education, and Dacca and Rajshahi Universities.

In 1970, one full time U.S. advisor to the Institute will assist this organization in general administration and follow-up of the SSI program (including curricula and syllabus revisions and preparation of laboratory handbooks and teaching aids). Thirty-five short-term U.S. science consultants will conduct twenty SSIs in East Pakistan, an increase of 33% over 1969, while four short-term consultants will be provided to evaluate West Pakistan's Curriculum Modernization Program. Twenty of the top graduates of the 1969 East Pakistan SSI program will be sent to the U.S. to attend NSF summer science institutes.

FY 1971 Program: It is proposed to extend the SSI project from 1971 to 1972 in order to provide an opportunity for the Institute to become sufficiently well established to carry on the activities necessary for a continual upgrading of science education. In addition, to the administrative advisor to the Institute who will continue his services through FY 1972, five full-time subject matter advisors in FY 1971 will aid the Institute in curriculum revision begun during the previous summers but never fully accomplished due to lack of time and the pressure of teaching duties on the U.S. short-term consultants. In order for East Pakistan to have a system of modern science education, this revision of curriculum is essential. With a full-time advisor to work with a Pakistani counterpart in each of the scientific fields, this revision work, coupled with the extensive development of new texts and materials, will provide a strong basis for the continued effort in science education after the withdrawal of United States support. By 1972 the Institute will be able to continue the work of curriculum development, preparation of texts and journals etc., without the help of U.S. advisors. In addition, the 20 summer science institute programs which will be held in FY 1970 will continue requiring a steadily decreasing number of American short-termers through FY 1972.

U.S. Technicians: A full-time U.S. advisor will continue to aid the Institute in administration, and five full-time U.S. advisors in mathematics, biology, physics, chemistry and technology will work with Pakistani counterparts in the final revision of curriculum and the development of texts and workbooks for experimental use in selected universities in East Pakistan. In West Pakistan, four short-term United States consultants will be available to assist in evaluating West Pakistan's indigenous teacher training institutes for college level mathematics and science teachers. Thirty-one short-term science consultants working with 38 East Pakistan science and technology educators will conduct 20 summer science institutes.

Participants: Twenty outstanding teachers will be sent to the U.S. for advanced training under National Science Foundation sponsored summer science institutes previously funded.

Commodities: Educational publications, test and measurement materials, textbooks, teacher aids, and laboratory equipment amounting to \$2,150,000 for FY 1971 formerly funded under this project, will be funded under the development loan for Pakistan.

Contract: \$320,000 to fund 35 short-term consultants in the Summer of 1971 and to forward fund 6 full-time advisors.

Country: PAKISTAN

PROJECT DATA

TABLE III

PROJECT TITLE Low Cost Textbook Publishing	ACTIVITY Education	FUNDS TA	
PROJECT NUMBER 391-11-690-346	PRIOR REFERENCE --	INITIAL OBLIGATION FY: 1971	SCHEDULED FINAL OBLIGATION FY: 1972

Project Target and Course of Action: The low quality and limited availability of textbooks has created a serious problem for education in Pakistan. It has impeded the efforts of U.S.-trained professionals on the faculties of agricultural, medical, engineering and technical colleges. The Government currently controls the writing and publishing of all texts from grades one through twelve. The role of the private sector has been limited to higher education.

The primary goals of the project are: (1) to provide high quality American textbooks to Pakistan educational institutions which are currently or have in the past received U.S. assistance; and (2) to encourage the development and expansion of Pakistan's private publishing industry. The strategy for reaching these goals is to provide a subsidy from U.S.-owned PL 480 rupees which will reduce the copyright and royalty costs to Government and private Pakistani publishers for obtaining textbooks from U.S. publishers and reprinting them in Pakistan. Through the subsidy arrangement, new modern textbooks will be provided to many of Pakistan's universities. Further, the subsidy will encourage private publisher participation by allowing them to sell high quality U.S. textbooks at an acceptable price. The initial subsidy provided by A.I.D. should also help establish a basis for American and private Pakistani publishers to discuss reprints of American texts. In addition, we may be able to advise the Government on

textbook publishing.

FY 1971 Program: A contract will be negotiated for the services of two full-time advisors. Short-term experts will be contracted from major publishing houses in the United States. The two advisors and the short-term consultants will assist in negotiating contracts between the American publishers and the Government and private Pakistani publishers and generally help promote the commercial relationship. The advisors may also assist the Central and Provincial Governments in planning future requirements for textbooks and publishing materials.

U.S. Technicians: Two full-time advisors and up to four short-term experts.

Participants: Four participants, two each from East and West Pakistan, will be sent to the United States to study private textbook publishing, and the procurement methods of state and municipal education agencies.

Contract: \$110,000 to forward fund two full-time advisors and short-term consultants for 18 months.

U.S. DOLLAR COSTS (In Thousands)				Cost Components	OBLIGATIONS						PRINCIPAL CONTRACTORS Undetermined
Through 6/30/69	Obligations	Expenditures	Unliquidated		Estimated FY 1970			Proposed FY 1971			
					Direct AID	Contract/ Bank Agency	Total	Direct AID	Contract/ Bank Agency	Total	
Estimated FY 70								--	110	110	
Estimated through 6/30/70							--	10	10		
		Future Year Obligations	Estimated Total Cost				--	--	--		
Proposed FY 71	120	120	240	Total Obligations			--	120	120		

PROJECT TITLE	PROJECT NUMBER
Functional Literacy	391-11-690-348

experimental literacy programs. For example, what texts and teaching techniques are best suited to different occupational requirements, to different social environments (rural or urban), and to various regions of the country? Also, further experimentation is required to determine whether literacy training can be carried out best by regular primary school teachers in their off-hours, by literate young people organized into a special Literacy Corps, or by a combination of both. A.I.D. will assist the Ministry of Education in the pilot stages of its literacy program by helping to establish and advise the provincial literacy centers, to assist in development of literacy texts and materials, and to help plan and conduct trial runs of programs to teach illiterates. The possibility of creating a Literacy Corps, which would be comprised of 12th grade high school graduates, will be thoroughly explored.

Contract: \$115,000 to forward fund two full-time advisors and short-term consultants for 18 months.

FY 1971 Program: USAID will contract the services of two full-time literacy experts. These experts, in conjunction with selected short-term advisors, will assist the Government in establishing Functional Literacy Centers to develop appropriate materials and teacher-training programs, in establishing pilot functional literacy training programs in limited geographic areas, and in evaluating the practicability of a Literacy Corps. By FY 1973, the Government will be able to organize, on the basis of this groundwork, a functional literacy program on a national scale.

U.S. Technicians: Two full-time advisors and selected short-term advisors in functional literacy. These technicians will have had experience in administering special literacy programs in the U.S.

Participants: Six participants will come to the United States for short-term training in the administration of literacy programs.

Commodities: Sample texts and demonstration teaching aids.

Country: Pakistan

PROJECT DATA

TABLE III

PROJECT TITLE Statistical Services		ACTIVITY Public Administration and Public Safety		FUNDS TA	
PROJECT NUMBER 391-11-780-037		PRIOR REFERENCE Page 123, FY 1970		INITIAL OBLIGATION FY: 1955	
				SCHEDULED FINAL OBLIGATION FY: 1971	

Project Target and Course Action: The goal of this project is to strengthen the Central Statistical Office (CSO) and the two Provincial Bureaus of Statistics to enable them to become more effective data producing organizations. A.I.D. has provided U.S. Census Bureau specialists and trained Pakistan statisticians and data processors.

Progress to Date: Improved measurement procedures for reporting crop acreages and yields continue to produce more accurate estimates of major crops such as wheat, rice, corn, sugar cane and jute. Modern techniques, including aerial photography, have been adopted for early season forecasts of crops. The East Pakistan Bureau of Statistics now owns computer facilities; the West Pakistan Bureau relies on the computer bank of the West Pakistan Water and Power Development Authority. Consequently, the Bureaus are able to process and analyze statistical data quickly and accurately. Substantial improvements have been made in the pretesting for the annual census of manufacturing. Sample surveys are now being used. These changes rest in part on the increased numbers of well-trained field supervisors and field staff. Assistance to East Pakistan statistical agencies was completed in 1970.

FY 1971 Program: U.S. advisors will complete assistance in training Methods and Evaluation staffs of the Central

Statistical Office and the West Pakistan Provincial Bureau. Focus of assistance will be on refining statistical gathering and reporting techniques and improving the utilization and operations of data-processing equipment. In addition, U.S. advisors will help the statistical units of the provincial Departments of Agriculture to design and carry out a major Agriculture Census, which will compile and analyze information about the rural economy and population of Pakistan.

U.S. Technicians: Four advisors plus short term consultants from the U.S. Bureau of the Census as follows: one Senior Statistical Advisor, two Agricultural Statistics Advisors, and one Data Processing Advisor.

U.S. DOLLAR COSTS (In Thousands)				OBLIGATIONS						PRINCIPAL CONTRACTORS/AGENCIES
	Obligations	Expenditures	Unliquidated	Estimated FY 1970			Proposed FY 1971			
				Direct AID	Other Agency	Total	Direct AID	Other Agency	Total	
Through 6/30/69	2,270	2,233	37							U.S. Bureau of Census
Estimated FY 70	250	243								
Estimated through 6/30/70	2,520	2,476	44							
		Future Year Obligations	Estimated Total Cost							
Proposed FY 71	160	--	2,680							
				Total Obligations	50	200	250	--	160	

Country: Pakistan

PROJECT DATA

TABLE III

PROJECT TITLE Government Administrative Staff Improvement PROJECT NUMBER 391-11-760-299		ACTIVITY Public Administration and Public Safety PRIOR REFERENCE Page 129, FY 1970 PDB	FUNDS TA INITIAL OBLIGATION FY: 1969	SCHEDULED FINAL OBLIGATION FY: 1973
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Project Target and Course of Action: Most of the major administrative decisions of the Government of Pakistan are made by about 400 persons in the top ranks of the Civil Service of Pakistan (CSP). While well trained as administrators in the traditional sense, few have backgrounds in such fields as planning, finance, development project/program administration, or municipal administration. This project is designed to improve and strengthen the capabilities of both CSP and other administrators in such work. Major emphasis will be placed on strengthening mid-career training programs at the universities, the Civil Service Academy, and the National Institutes of Public Administration, and on the training of selected officers in the fields of development administration.

Division, National Training Council, and related institutions on reorganization questions and the development and implementation of essential civil service training programs.

Direct Hire: The services of three short-term advisors will be provided.

Participants: 20 key Pakistan civil servants will come to the U.S. for 12 months study at universities.

The division of the present West Pakistan Government into four states and other administrative changes being undertaken by the present Government are likely to result in adding to the demands made on Pakistan's limited administrative talent and to increase the need for the training contemplated by this project.

Progress to Date: Ten CSP officers and one instructor from the National Institute of Public Administration have come to the U.S. for advanced training.

FY 1971 Program: Short term consultants will be available for periods of 3 months to assist the Establishment

U.S. DOLLAR COSTS (In Thousands)				OBLIGATIONS						PRINCIPAL CONTRACTORS/AGENCIES
	Obligations	Expenditures	Unliquidated	Estimated FY 1970			Proposed FY 1971			
				Direct AID	Contract/Other Agency	Total	Direct AID	Contract/Other Agency	Total	
Through 6/30/69	30	--	30							
Estimated FY 70	50	70		5	--	5	20	--	20	
Estimated through 6/30/70	80	70	10	45	--	45	140	--	140	
		Future Year Obligations	Estimated Total Cost	--	--	--	--	--	--	
Proposed FY 71	160	330	570	50	--	50	160	--	160	
				Cost Components U.S. Technicians Participants ... Commodities ... Other Costs ... Total Obligations						

Country: Pakistan

PROJECT DATA

TABLE III

PROJECT TITLE Public Safety		ACTIVITY Public Administration and Public Safety		FUNDS TA	
PROJECT NUMBER 391-12-710-113		PRIOR REFERENCE Page 126, FY 1970 PDB		INITIAL OBLIGATION FY: FY 1960	
				SCHEDULED FINAL OBLIGATION FY: FY 1972	

Project Target and Course of Action: The project target is to increase the effectiveness of the internal security forces of Pakistan by (1) improvement of motor transport capability; (2) improvement of communications capability; (3) modernization of police training and training institutions; and (4) modernization of administrative and operational practices.

The course of action has entailed procurement of transport and communications commodities, the improvement of maintenance capabilities including the setting up of workshops and the training of their personnel. The curricula of several police training institutions are being revised and the quality of instruction is being improved.

The advisory team will remain in Pakistan through FY 1972 to assist in realizing optimum utilization of the equipment which has been provided.

Progress to Date: The procurement of motor transport has proceeded in accordance with funding availabilities. Improvement of motor maintenance capabilities has been satisfactory and deadlining of vehicles for mechanical defects remains at a minimum. Eight patrol/inspection launches have been constructed as the result of a joint endeavor under which the East Pakistan security forces have arranged for locally fabricated hulls and A.I.D. has furnished their engines. Modernization of communications

system continues with the installation of new equipment, the further development of maintenance and repair capabilities and the preparation of sites for new stations.

Continued improvement of police training, training institutions and administrative and operational practices has resulted from the development of planning and research units, instructor training courses and a reformed curriculum.

One hundred and forty one participants will have been sent to the U.S. and other countries for training.

FY 1971 Program: The final items of equipment to satisfy transport and communications requirements will be received and put into use. Installation of communications systems will continue as will refinements of maintenance and repair capabilities. Actions to improve police training and administrative/operational practices will be continued.

U. S. Technicians: A staff of six advisors: in the fields of communications, training, operations and investigative techniques.

U.S. DOLLAR COSTS (In Thousands)				Cost Components	OBLIGATIONS						PRINCIPAL CONTRACTORS/ AGENCIES
	Obligations	Expenditures	Unliquidated		Estimated FY 1970			Proposed FY 1971			
					Direct AID	Contract/ Other Agency	Total	Direct AID	Contract/ Other Agency	Total	
Through 6/30/69	7,324	6,747	577								
Estimated FY 70	705	645		U.S. Technicians	160	--	160	160	--	160	
Estimated through 6/30/70	8,029	7,392	637	Participants ...	45	--	45	--	--	--	
		Future Year Obligations	Estimated Total Cost	Commodities ...	500	--	500	--	--	--	
Proposed FY 71	160	160	8,349	Other Costs ...	--	--	--	--	--	--	
				Total Obligations	705	--	705	160	--	160	

Country: Pakistan

PROJECT DATA

TABLE III

PROJECT TITLE Technical Support	ACTIVITY Technical Support	FUNDS TA	
PROJECT NUMBER 391-11-999-000	PRIOR REFERENCE Page 130, FY 1970 PDB	INITIAL OBLIGATION FY: 1955	SCHEDULED FINAL OBLIGATION FY: Continuing

Project Target and Course of Action: This project provides supporting services for the development loan, technical assistance and PL 480 programs. The administration of the U.S. assistance program to Pakistan is made difficult by the division of the country into two areas (separated by 1,000 miles) each of which has its own government and administration. The establishment of the new national capital at Islamabad has placed a further burden on the Mission, and the impending breakup of West Pakistan into four provinces will add new problems. This Mission's central staff is located in Islamabad with a few people in Karachi. The Lahore and Dacca Offices handle AID operations in West and East Pakistan. In addition to supporting services, this project also finances the cost of short-term consultants, who carry out for USAID program and planning purposes such special study assignments as: private sector involvement in fertilizer and pesticide manufacture and distribution; oil seed production; sectoral planning and project development; housing and urban development; GOP educational policy formation; cereal fortification; nutrition education; and a number of program evaluation studies. All support costs which are payable in local currency, such as the wages of local personnel, housing and international travel of technicians are paid from the rupee Trust Fund provided by the Pakistan Government.

technical division chiefs, their deputies and staffs (36); program analysts and economists (8); loan officers and engineers (9); training officers (2); general services and other support officers (4); secretaries (13); and one personal services contractor. Short-term consultants under personal contracts or PASA.

Commodities: To fund essential commodities such as supplies and equipment, vehicles and parts.

Other Costs: Shared Administrative Support with Department of State.

U.S. Technicians: The technical support staff of the Islamabad, Lahore, Karachi and Dacca offices includes:

U.S. DOLLAR COSTS (In Thousands)				OBLIGATIONS						PRINCIPAL CONTRACTORS/AGENCIES
	Obligations	Expenditures	Unliquidated	Estimated FY 1970			Proposed FY 1971			
				Direct AID	Contract/Other Agency	Total	Direct AID	Contract/Other Agency	Total	
Through 6/30/69	28,768	27,899	869							
Estimated FY 70	3,037	3,240								
Estimated through 6/30/70	31,805	31,139	666							
		Future Year Obligations	Estimated Total Cost							
Proposed FY 71	3,262	CONTINUING								
Cost Components										
U.S. Technicians				2,020	200	2,220	2,075	355	2,430	
Participants . . .				--	--	--	--	--	--	
Commodities . . .				420	--	420	435	--	435	
Other Costs . . .				397	--	397	397	--	397	
Total Obligations				2,837	200	3,037	2,907	355	3,262	

PROJECT DATA SUMMARY
(Dollar Amounts in Thousands)

TABLE IV
Part 2

COUNTRY: PAKISTAN

Project Title	Project Number	FY of Initial Obligation	FY of Scheduled Final Obligation	Through FY 1969			Estimated FY 1970			Proposed Program FY 1971		Future Year Obligations	Estimated Total Cost
				Obligations	Expenditures	Unliquidated Obligation 6/30/69	Obligations	Expenditures	Unliquidated Obligation 6/30/70	Funds	Amount		
<u>Agriculture and National Resources</u>													
Agriculture Area Development - West Pakistan	391-11-110-145	1964	1970	1733	1572	161	240	275	126				
<u>Industry and Mining</u>													
Mining Technology and Development	391-11-210-243	1967	1969	190	155	35	-	35	-				
Mineral Resources Appraisal	391-11-210-253	1967	1970	288	256	32	50	70	12				
Investment Corporation of Pakistan	391-15-910-283	1967	1969	117	92	25	-	25	-				
<u>Education</u>													
Commercial Institutes East Pakistan	391-11-610-276	1967	1969	270	167	103	-	97	6				
East Pakistan Universities	391-11-660-144	1959	1970	2308	1967	341	160	308	193				
Agriculture University, West Pakistan	391-11-660-146	1961	1969	2073	1941	132	-	124	8				
Assistance to Peshawar University	391-11-660-220	1963	1968	459	445	14	-	14	-				
<u>Public Administration</u>													
Government Financial Management	391-11-780-303	1968	1970	155	-	155	37	150	42				
Training and Research, Local													
Administration East Pakistan	391-11-790-279	1968	1970	50	-	50	(Deobligated)						
Government Administration	391-11-720-140	1963	1969	1179	1081	98	-	98	-				
Total													
TC													
SA													
DL (grants)													

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: PAKISTAN

Borrower:

Pakistan Industrial Credit and Investment Corporation

Funds: Development Loan

Title and Number of Loan: Development Bank 391-A-032 (Section B) 2/	
Date Authorized: 4/13/66	Date Signed: 6/17/66
Loan Status as of 12/31/69	Loan Terms 1/
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$3,898	Grace Period 10 yrs
Disbursed 3,190	Grace 1%
Repayments -	Interest Rate
Interest Collected 48	Thereafter 2 $\frac{1}{2}$ %
	Currency of Repayment . . U.S. \$

Current Status: PICIC has made subloans to its private customers aggregating the full amount of the loan.

Financial Status: The loan is fully committed and approximately 80% of the loan has been disbursed. It is expected the loan will be fully utilized.

Additional United States Government Support: A total of Rs. 90 million (equivalent of \$19 million) was made available to PICIC under loans from PL 480 funds.

Purpose of Loan: To provide foreign exchange for financing subloans to private industrial entrepreneurs.

Background: The Pakistan Industrial Credit and Investment Corporation (PICIC) was created as a development bank in October 1957 with the sponsorship and support of the International Bank for Reconstruction and Development and the Government of Pakistan (GOP), and the help of Pakistani, U.S., British, German and Japanese private investors. PICIC functions effectively as both a lending and investment institution, although direct investments and underwritings constitute a relatively small share of its operations. PICIC extends loans exclusively to the private sector and seeks particularly to encourage industries based on raw materials found in Pakistan. This is the third A.I.D. loan to PICIC. Two previous loans totalling \$14.1 million are fully disbursed. In addition to A.I.D. loans totalling \$21.6 million PICIC received loans of \$144.5 million from IBRD and an additional loan of \$40 million from the same source was authorized in March 1969. Loans given by other countries exceed \$100 million. Additional loans by IBRD are under consideration. PICIC is one of the best managed and most successful development banks in the NESAs region.

1/ Two-Step Terms: PICIC will repay the loan to the Government of Pakistan in seven years in rupees at 5-3/4% interest.

2/ The full amount of the original loan was \$7.5 million repayable in rupees. In 1966, repayment in rupees was restricted to the amount then disbursed (\$3,602 million); that part of the loan was designated as "Section A". The remainder of the loan ("Section B") is repayable in dollars.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: PAKISTAN

Borrower: GOVERNMENT OF PAKISTAN

Funds: Development Loan

Title and Number of Loan: East Pakistan Power Distribution - 391-H-043	
Date Authorized: 1/19/62	Date Signed: 10/22/62
Loan Status as of 12/31/69	Loan Terms <u>1/</u>
(In Thousands of Dollars and Equivalent)	Duration 40 yrs.
Authorized \$6,67 $\frac{1}{2}$	Grace Period 10 yrs.
Disbursed 6,229	Interest Rate Grace 3/4%
Repayments -	Thereafter 2%
Interest Collected 149	Currency of Repayment . . U.S. \$

addition has improved the power supply to major load centers and has resulted in a more stable supply to consumers. Work on the low voltage system financed under this loan will be terminated by April 30, 1970, the terminal date of the loan. A.I.D. and EP/WAPDA have, however, agreed that it would be advantageous to retain the consulting engineer for continuing work on the low voltage system. These additional services will not be financed under this loan. Construction of some of the required distribution system changes is under way using materials procured by EP/WAPDA with funds from other sources.

The management services contract with Stone and Webster has been completed.

Financial Status: The increasing availability of domestic materials made it unnecessary to use funds from this loan for their purchase. Approximately \$1.4 million has, therefore, been deobligated in 1969. Letters of Commitment have been issued for the full amount of the loan and 93% has been disbursed. The remaining funds are expected to be needed for payments to the consultant.

Host Country Role and Procurement Source: EP/WAPDA financed from its own resources the local currency costs of the project, which exceeded \$3.9 million equivalent.

All materials, services and equipment financed by A.I.D. under the loan will be procured in the United States.

Purpose of Loan: This loan provides funds to cover the foreign exchange costs of (a) engineering services, equipment and materials to expand and improve the power distribution system in East Pakistan, particularly in the two main load centers of Dacca and Chittagong, and (b) management services to improve the organization and management of the East Pakistan Water and Power Development Authority (EP/WAPDA).

Using power generated by the A.I.D.-financed Karnafuli hydroelectric power station, the Siddhirganj Thermal Plant, and other generating plants serving the eastern grid, the project will contribute to Pakistan's efforts to provide reliable power to existing and new customers, thereby supporting industrial expansion and raising living standards, particularly in Dacca and Chittagong.

Physical Status: EP/WAPDA contracted with Black & Veatch International Company of Kansas City, Missouri for engineering services and with Stone and Webster Corporation (S&W) of New York, N.Y. for management advisory services.

The procurement of materials for and construction of the high voltage system has been completed. This system

1/ Two-Step Terms: The Government of Pakistan has relented the funds provided under this loan to EP/WAPDA for a period of 25 years, repayable in rupees, at an interest rate of 3 $\frac{1}{2}$ %.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: PAKISTAN

Borrower: GOVERNMENT OF PAKISTAN

Funds: Development Loan

Title and Number of Loan: Salinity Control & Reclamation SCARP 2-A, 391-H-055	
Date Authorized: 2/16/63	Date Signed: 3/22/63
Loan Status as of 12/31/69	Loan Terms
(In Thousands of Dollars and Equivalent)	Duration 40 yrs.
Authorized 9,527	Grace Period 10 yrs.
Disbursed 9,262	Interest Rate 3/4%
Repayments -	Currency of Repayment.. US\$
Interest Collected 231	

contracted with Tipton & Kalmbach, Inc. (T&K) of Denver, Colorado as consulting engineers. Engineering services for design and construction of power facilities were provided by Commonwealth Associates, Inc. (CAI) of Jackson, Michigan. Tubewell construction was done by a joint venture headed by the Southeastern Drilling Co. of Dallas, Texas.

The tubewell construction phase of the project consisting of 884 tubewells, all of which have been electrified, has been completed and turned over to the Irrigation Department. The local currency financed construction of the drainage and irrigation canals is continuing under the supervision of T&K.

Financial Status: \$1.3 million was deobligated in June, 1969 after a recosting of the project indicated these funds would not be needed. Letters of Commitment for the full value of the loan have been opened and 97 percent has been disbursed. The remaining funds are expected to be used for payments to the consultants whose services under this project will terminate during this fiscal year.

Host Country Role and Procurement Source: The total project costs \$19.2 million, of which \$9.7 million equivalent was provided by WP/WAPDA from its own resources.

All materials, services and equipment financed by A.I.D. under this loan were provided in the United States.

Purpose of Loan: To provide the foreign exchange costs of a salinity control and land reclamation project for approximately 623,000 acres in the Chaj-Doab section of West Pakistan between the Jhelum and Chenab Rivers in the Indus Plain. The funds were used to construct 884 tubewells from which groundwater will be pumped to the surface and used to irrigate crops and leach salt from the soil to lower strata below the root zone.

Waterlogging and salt accumulation has caused serious problems in much of the 23.5 million net irrigated acres in this most important agricultural area in West Pakistan which was once known as the bread basket of the sub-continent.

The construction of tubewells in this area is the most promising solution to the problem. They will prevent further damage to the land, reclaim damaged land, and provide additional water for irrigation and, therefore, contribute to the economy of the country by creating a promising base on which to build a successful agricultural program.

Physical Status: The West Pakistan Water and Power Development Authority (WP/WAPDA), which is the implementing agency,

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: PAKISTAN

Borrower: Government of Pakistan

Funds: Development Loan

Title and Number of Loan:	
Chalna Anchorage Project - 391-H-057	
Date Authorized: 2/11/63	Date Signed: 3/22/63
<small>Loan Status as of 12/31/69</small>	<small>Loan Terms</small>
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$2,410	Grace Period 10 yrs
Disbursed 2,167	Interest Rate 3/4%
Repayments -	Currency of Repayment . . U.S.\$
Interest Collected 23	

Delta Construction Ltd., a local Pakistani firm, for construction of a jetty on the Pusur River at Khulna and in July 1969 it retained Leedshill Deleuw, Inc. of San Francisco to supervise the final stages of construction. The jetty is scheduled for completion in May 1970.

Financial Status: After all contracts for materials, equipment, and services had been finalized, \$200,000 was deobligated during FY 70. Letters of Commitment for the full value of the loan have been opened and 90 percent has been disbursed. The remainder of the funds is needed for payments to the consulting engineers and for spare parts ordered but not yet delivered.

Host Country Role and Procurement Source: The total cost of the project will be \$5.3 million, of which \$2.9 million will be in local currency partly financed from PL 480 sales proceeds allocated to the Chalna Anchorage Port Authority and partly from the Port Authority's own resources.

All material, equipment and services financed by the loan have been procured from the United States.

Purpose of Loan: To provide the foreign exchange costs of materials, equipment and services to expand the capacity and improve the safety and operating efficiency of the Chalna Anchorage on the Pusur River in East Pakistan, and to improve the port facilities of Khulna, a major river port 32 miles upstream on the Pusur River.

The anchorage serves the areas of East Pakistan lying west of the Brahmaputra River, which is presently handling only 35 percent of the imports in this area and only a small part of the total imports of East Pakistan. The remainder of the imports must be trans-shipped from Chittagang, which is an additional burden on already over-taxed facilities. Completion of the project will double the capacity of the anchorage and enable it to relieve congestion at the Port of Chittagong.

Physical Status: The Chalna Anchorage Port Authority retained Frederic R. Harris, Inc. of New York as engineering consultants for the project. The consultants have completed designs and specifications for the construction work and procurement of construction equipment, vessels and navigation equipment. With the exception of spare parts for equipment, all purchases have been delivered. The Port Authority awarded a contract to

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: PAKISTAN

Borrower: GOVERNMENT OF PAKISTAN

Funds: Development Loan

Title and Number of Loan: Coastal Embankment, 391-H-059	
Date Authorized: 3/14/63	Date Signed: 8/15/63
Loan Status as of 12/31/69	Loan Terms
(In Thousands of Dollars and Equivalent)	Duration 40 yrs.
Authorized 4,330	Grace Period 10 yrs.
Disbursed 3,443	Interest Rate 3/4%
Repayments -	Currency of Repayment . . U.S. \$
Interest Collected 74	

amount originally authorized and at the same time expand the embankment construction program beyond that originally planned.

To date 1,834 miles of embankment, 558 sluices, 335 buildings and 48 maintenance units have been completed. According to recent detailed surveys, 765,000 acres are now fully protected and an additional 792,000 partially protected.

All procurement has been completed and all commodities will be delivered in the current fiscal year.

Financial Status: The entire loan amount has been committed and 79% has been disbursed. Remaining funds will be used to make payment to U.S. suppliers for equipment not yet delivered and to finance the consulting engineers contract.

Host Country Role and Procurement Source: The Government of Pakistan has contributed \$178.8 million equivalent in local currency and \$2.03 in foreign exchange. \$77.8 million equivalent in local currency was loaned to the project from PL 480 funds and \$12.5 million was granted from counterpart funds.

All material, equipment and services financed under this loan are being procured in the United States.

Purpose of Loan: The loan provides funds for the foreign exchange costs of materials, equipment and consultant services to construct earth work embankments for flood and salt protection of agricultural lands in the Khulna, Bakerganj, Noakhali and Chittagong Districts of East Pakistan.

On the basis of recent detailed reviews, the embankments will be 2,293 miles long, enclose 2,008,000 acres and cost \$278 million. In areas where embankments have been completed and the land protected for three years, agricultural production this year is expected to be more than double the pre-project levels.

Physical Status: The project was begun by East Pakistan Water and Power Development Authority (EP/WAPDA) in 1960. In 1962, EP/WAPDA contracted with the joint venture of Leedshill and Jewett and Deleuw-Cather for consulting services for the project. Consultant efforts have contributed significantly to the project's success. Increased utilization of equipment and materials available locally has contributed to savings of foreign exchange, thus making it possible to deobligate over \$2 million from the

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: PAKISTAN

Borrower: Government of Pakistan

Funds: Development Loan

Title and Number of Loan: Telecommunications - 391-H-071	
Date Authorized: 6/29/63	Date Signed: 10/23/63
<small>Loan Status as of 12/31/69</small>	<small>Loan Terms</small>
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$4,700	Grace Period 10 yrs
Disbursed 3,876	Interest Rate 3/4%
Repayments -	Currency of Repayment .. U.S.-\$
Interest Collected 31	

New Jersey under a \$240,000 contract. The equipment for sub-project (1) was provided by the International Telephone and Telegraph Company which also supervised installation work. This sub-project was completed and put in use in July 1968. General Telephone and Electronics, San Carlos, California, is supplying and installing the equipment for sub-project (2) under a \$2,194,550 contract. This activity is nearing physical completion and the performance test is scheduled to be completed in October 1970. Sanders Associates, Inc. of Nashua, New Hampshire, has completed supply and installation of electronic equipment for sub-project (3), and the performance test began in mid-February 1970.

Financial Status: Letters of Commitment have been opened for the entire loan amount and 82% has been disbursed. The remaining balance will be disbursed for engineering services and completion of installation. Final invoices are expected to be paid by the end of calendar year 1971 after expiration of guaranty periods.

Host Country Role and Procurement Source: The Government of Pakistan (GOP), through the Pakistan Telegraph & Telephone Department is responsible for the completion and continuing administration of this project. The GOP is providing all local currency costs of the project, estimated to be approximately \$5.0 million.

All equipment, materials and services to be financed by the A.I.D. loan will be procured in the United States.

Purpose of Loan: To assist in financing the foreign exchange costs of a project to overcome serious deficiencies in Pakistan's telecommunications system. The Pakistan Telegraph and Telephone Department (PT&T) is implementing the project. The loan is being used to pay for the equipment, materials and engineering services required for three sub-projects as follows: (1) provide telecommunications service for the cyclone-affected southern districts of East Pakistan; (2) replace existing Very High Frequency radio system of inadequate capacity between Chittagong, Dacca & Khulna with a broad band microwave system to improve and further expand domestic telecommunications in East Pakistan; and (3) expand high frequency terminal facilities in East & West Pakistan to improve inter-wing and international telecommunications.

Inadequate communications is a major constraint on Pakistan's continued economic development. The demand for service, caused by increased economic activity, had significantly exceeded capacity. This project is designed to expand facilities to meet existing demand.

Physical Status: Engineering services for the total project are being provided by the Telesis Company, of Newark,

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: PAKISTAN

Borrower: GOVERNMENT OF PAKISTAN

Funds: Development Loan

Title and Number of Loan: Consulting Services and Urban Water Supplies, 391-H-079	
Date Authorized: 3/31/64	Date Signed: 9/17/64
Loan Status as of 12/31/69	Loan Terms
(In Thousands of Dollars and Equivalent)	Duration 40 yrs.
Authorized 2,100	Grace Period 10 yrs.
Disbursed 1,488	Interest Rate Grace 3/4%
Repayments -	Thereafter 2%
Interest Collected 17	Currency of Repayment . . U.S. \$

responsibility. The consulting services in the areas of design, construction, management operation and maintenance of water and sewage systems to be provided under this loan will increase the PHED's capability and contribute to the infrastructure required for satisfactory urban and industrial development in West Pakistan.

Physical Status: PHED contracted with the Parsons Corporation of Los Angeles, California, for consulting services including procurement of commodities financed under this loan. All basic survey, planning and design work for the five urban water systems has been completed and construction of two of the sub-projects will be completed by April 1970. The Government plans to complete the remaining sub-projects with its funds.

Purpose of Loan: To finance the foreign exchange costs of (1) 44 man-years of consulting services over a period of four years to develop the capacity of the Public Health Engineering Department (PHED) of the Government of West Pakistan to design, construct, operate and manage water and sewage systems in West Pakistan; and (2) materials required for five municipal water supply systems to be constructed for demonstration purposes.

Financial Status: After a re-evaluation of the project costs, \$1.5 million was deobligated during FY 1970. Letters of Commitment have been opened for the full amount of the loan and 71 percent has been disbursed.

Rapid industrialization coupled with other factors have expanded West Pakistan's urban population by 60 percent between 1961 and 1970 but urban water supply facilities have not been provided at a rate commensurate with urban and industrial growth.

Host Country Role and Procurement Source: The total cost of the project is estimated at \$7.5 million, of which \$5,400,000 is local currency equivalent to be provided by the Government of West Pakistan.

PHED was established in April 1961 with responsibility for design, supervision and construction of engineering works in the field of public health, including water supply and sewage systems, and for technical assistance to the municipalities and other agencies in West Pakistan in the management, operation and maintenance of such works. The PHED will operate and maintain these works where necessary until the municipalities are able to undertake that

All of the equipment, materials and services to be financed by the loan will be procured in the United States.

1/ Two-Step Terms: The loan funds have been relent to PHED which will repay the loan in rupees over a period of 25 years, including a grace period of 5 years, at 3 1/2% interest.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: PAKISTAN

Borrower: GOVERNMENT OF PAKISTAN

Funds: Development Loan

Title and Number of Loan: Karnafuli Hydroelectric Unit III 391-H-081 and 391-H-081A										
Date Authorized: 4/22/64	Date Signed: 9/4/64									
Loan Status as of 12/31/69	Loan Terms 1/									
(In Thousands of Dollars and Equivalent)	Duration 40 yrs.									
Authorized 3,800 1,500	Grace Period 10 yrs.									
Disbursed 46	Interest Rate <table style="display: inline-table; vertical-align: middle;"><tr><td>Grace</td><td>081</td><td>081A</td></tr><tr><td></td><td>3/4%</td><td>1%</td></tr><tr><td>Thereafter</td><td>2%</td><td>2 1/2%</td></tr></table>	Grace	081	081A		3/4%	1%	Thereafter	2%	2 1/2%
Grace	081	081A								
	3/4%	1%								
Thereafter	2%	2 1/2%								
Repayments -	Currency of Repayment .. U.S. \$									
Interest Collected -										

engineers re-evaluated the size of the unit to be installed and recommended the installation of a 50 MW unit (instead of a 40 MW unit) which could be installed at a lower cost per MW unit. In June 1967, A.I.D. authorized an additional \$1.5 million available to cover the foreign exchange costs of the 50 MW unit.

Physical Status: A contract was signed with Sverdrup and Parcel & Associates, Inc. in March 1966 for engineering services. A turn-key contract for the supply and installation of turbines and generators was signed with Allis-Chalmers on May 31, 1969. Preparations for construction are proceeding satisfactorily and major items of equipment are being manufactured in the U.S. The project is scheduled for completion by December 1972.

Purpose of Loan: To finance the foreign exchange costs of procuring and installing a third hydroelectric power generating unit and auxiliary facilities at the existing Karnafuli power station in East Pakistan.

Financial Status: The loan is fully committed. One Letter of Commitment for \$291,000 has been opened to finance engineering services and another for \$5,004,000 has been opened to finance the construction and supply contract with Allis-Chalmers.

The primary objective of the Karnafuli project is to help meet the growing domestic and commercial electric power load in the Eastern Grid Sector; its secondary objectives are improvement of flood control and navigation.

Host Country Role and Procurement Source: The East Pakistan Water and Power Development Authority (EP/WAPDA) is responsible for management of the project and will provide the local currency requirements, estimated to be \$1,400,000 equivalent.

The United States contributed \$39,903,000 toward the cost of the Karnafuli dam and power station, including the foreign exchange costs of two 40 Megawatt hydro-generating units and auxiliary facilities for the power plant. In 1964, A.I.D. authorized a loan of \$3.8 million to finance the foreign exchange costs of a third 40 MW unit to meet the growing demand for electric power in the Eastern Grid system of East Pakistan (Loan 391-H-081).

All of the equipment, materials and services to be financed by the loan will be procured in the United States.

During the latter part of 1966, it became apparent that the cost of a 40 MW unit would exceed the funds available under the loan, principally because of escalation of costs of hydroelectric equipment in the United States from the time the original studies were made. The consulting

1/ **Two-Step Terms:** The loan funds are being relented to EP/WAPDA at 4 % interest with repayment over 25 years, including a 5 year grace period.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: PAKISTAN

Borrower: GOVERNMENT OF PAKISTAN

Funds: Development Loan

Title and Number of Loan: Siddhirganj Thermal Plant, 391-H-082	
Date Authorized: 4/22/64	Date Signed: 8/28/64
Loan Status as of 12/31/69	Loan Terms 1/
(In Thousands of Dollars and Equivalent)	Duration 40 yrs.
Authorized \$8,500	Grace Period 10 yrs.
Disbursed 6,818	Interest Rate Grace 3/4%
Repayments -	Thereafter 2%
Interest Collected 69	Currency of Repayment .. U.S. \$

Recipients of contract awards for the supply of major equipment, materials and services include: (a) Fischback and Moore, Dallas, Texas, mechanical and electrical construction (\$2,035,000); (b) Combustion Engineering, Windsor, Conn., steam generator and other equipment (\$1,002,000); (c) Worthington Corporation, Harris, N.J., surface condenser and pumps (\$599,000); (d) International General Electric Co., N.Y., turbine generator and other equipment (\$1,577,000); (e) Bailey Meter Company, Cleveland, Ohio, control and instrument equipment (\$184,000).

Civil construction work is completed. Mechanical work is approximately 87% completed and electrical work 90% completed. A twelve-week training course for plant personnel has been completed. All construction and installation work on the plant will be completed by March 1970. On-the-job training by the engineering consultant will continue through September 1971.

Financial Status: Letters of Commitment for the full amount of the loan have been opened and 80% has been disbursed.

Host Country Role and Procurement Source: The total cost of the project is estimated at \$12.9 million of which \$4.4 million equivalent in local currency will be provided by EP/WAPDA from its own resources.

All equipment, materials and services financed by A.I.D. under this loan will be procured in the United States.

Purpose of Loan: To provide the foreign exchange costs of building a 44/50 MW gas-fired thermal electric power plant and auxiliary facilities at Siddhirganj in East Pakistan. This plant will enable the East Pakistan Water and Power Development Authority (EP/WAPDA) to meet the load demands in its eastern grid, which includes the rapidly developing economic centers at Dacca and Chittagong. Together with the existing 30 MW steam generating station at Siddhirganj and the two generating units of the Karnafuli Hydroelectric Power Plant at Kaptai which are connected by a 166.4 mile 132 KV double circuit transmission line, the new Siddhirganj plant will increase the eastern grid capacity from 110/122 MW to 154/172 MW and give it the capacity to meet anticipated system loads in the near future.

Physical Status: EP/WAPDA contracted with the firm of Black & Veatch International (BVI) of Kansas City for engineering consultant services. Under BVI's guidance, all specifications were prepared and approved by EP/WAPDA and A.I.D. Tenders were issued and contracts awarded for all materials and services. All major procurement is completed.

1/ **Two-Step Terms:** The GOP has relented the loan funds to EP/WAPDA at 4% interest with repayment over 25 years, including 5 years grace.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: PAKISTAN

Borrower: GOVERNMENT OF PAKISTAN

Funds: Development Loan

Title and Number of Loan:	
Lyallpur Thermal Power Plant - 391-H-083	
Date Authorized: 4/22/64	Date Signed: 7/10/64
Loan Status as of 12/31/69	Loan Terms 1/
(In Thousands of Dollars and Equivalent)	Duration 40 yrs.
Authorized \$16,417	Grace Period 10 yrs.
Disbursed 15,801	Interest Rate Grace 3/4%
Repayments -	Thereafter 2%
Interest Collected 351	Currency of Repayment . . U.S. \$

the gas-fired boilers designed to utilize natural gas from nearby gas fields are performing satisfactorily. The decision to employ gas-fired boilers for this station introduced natural gas from the Sui gas field to Lyallpur, thus making gas available for the first time to other industrial users in the Lyallpur area.

A training program in operation and maintenance is being formulated by the U.S. consultants.

Financial Status: Letters of Commitment have been opened for the full value of the revised loan amount and 96% has been disbursed. The remaining funds will be used to finance the consultant contract through March 30, 1970.

Purpose of Loan: To provide the foreign exchange costs of building a 132 MW thermal electric power station at Lyallpur, West Pakistan.

Host Country Role and Procurement Source: The cost of the project is estimated at \$26.4 million, of which \$10.0 million equivalent was provided from WP/WAPDA's own resources.

This station will help to meet increasing power needs arising from rapid industrialization, land reclamation, and rural electrification in the area served by West Pakistan's main grid system. Later, when the hydroelectric power station at the Mangla Dam is in full operation, the Lyallpur plant will serve as an essential "peaking station" for the system. It is an integral part of a long-range program of the West Pakistan Water and Power Development Authority (WP/WAPDA) to provide the necessary power to support increased agricultural and industrial development.

All materials, equipment and services financed under the loan will be procured in the United States.

Physical Status: Commonwealth Associates, Inc. (CAI) of Jackson, Michigan was selected by WP/WAPDA as consultant engineer. Under the guidance of the CAI, specifications have been prepared, tenders issued, and contracts awarded, and deliveries of all major items of equipment completed. All construction has been completed and the spare parts essential to the continued operation of the plant will be delivered by the end of March. Both generating units and

1/ Two-Step Terms: The loan funds have been relented by the GOP to WP/WAPDA for repayment in rupees over a period of 25 years at 4% interest, including 5 years grace period.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: PAKISTAN

Borrower: GOVERNMENT OF PAKISTAN

Funds: Development Loan

Title and Number of Loan: Railway VI, 391-H-085	
Date Authorized: 5/28/64	Date Signed: 4/23/65
Loan Status as of 12/31/69	Loan Terms 1/
(In Thousands of Dollars and Equivalent)	Duration 40 yrs.
Authorized 7,530	Grace Period 10 yrs
Disbursed 6,001	Interest Rate Grace . . . 3/4%
Repayments -	Thereafter 2%
Interest Collected 98	Currency of Repayment . . U.S. \$

A contract with Booz, Allen & Hamilton (BAH) for modernization of PWR's accounting system was funded under this loan until November 1969.

Financial Status: Letters of Commitment have been issued for the full value and 80% has been disbursed. The balance of the loan is required for payments to W&K and to the inspecting engineers.

Host Country Role and Procurement Source: The total cost of the activities which this loan helps to finance is estimated at \$35.8 million of which \$14.3 is the foreign exchange costs and the remaining \$6.8 million was provided by the United Kingdom and International Development Association. The PWR will provide \$21.5 million equivalent in local currency.

Purpose of Loan: To provide the foreign exchange costs of equipment, materials, and services to rehabilitate, modernize, and expand the Pakistan Western Railway (PWR).

All equipment, materials and services financed under the loan will be procured in the United States.

The funds are being used to replace four wrought iron bridges, provide spare parts for U.S.-made diesel electric locomotives now in use by the PWR, convert 41.5 miles of track from meter gauge to broad gauge, construct and remodel passenger and equipment facilities, enable the PWR to manufacture freight cars in its own shops, improve employee and employee dependents' facilities, and modernize PWR's accounting system.

Physical Status: All materials have been ordered and delivered with the exception of the 17-span bridge being fabricated by Whitehead and Kales (W&K) of River Rouge, Michigan, who received the \$3.7 million contract. A disagreement between PWR and W&K resulted in a halt in fabrication which has delayed delivery of the bridge. Based on a revised fabrication schedule, delivery is now expected in early 1971. The firm of Robert W. Hunt, of New York, was retained by PWR to inspect the bridge materials.

1/ Two-Step Terms: The loan funds have been relent to PWR for repayment in rupees over a period of 25 years, including 5 years grace, at 4% interest.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: PAKISTAN

Borrower: GOVERNMENT OF PAKISTAN

Funds: Development Loan

Title and Number of Loan: Salinity Control and Reclamation SCARP 2-B, 391-H-087	
Date Authorized: 5/29/64	Date Signed: 12/30/66
Loan Status as of 12/31/69	Loan Terms 1/
(In Thousands of Dollars and Equivalent)	Duration 40 yrs.
Authorized \$14,100	Grace Period 10 yrs.
Disbursed 3,630	Interest Rate . Grace . . . 3/4%
Repayments -	Thereafter 2%
Interest Collected 11	Currency of Repayment . . U.S. \$

will result in lowering the underground water level and thereby prevent waterlogging and the accompanying formation of saline soils. The pumped water also provides additional irrigation supplies to supplement surface water and thus contributes to increased agricultural production. The GOP expects eventually to apply this technique to the entire irrigated area of West Pakistan.

Physical Status: WP/WAPDA has contracted with the firm of Tipton & Kalmbach, Inc. (T&K) of Denver, Colorado for consulting services for the civil works, and with the firm of Commonwealth Associates, Inc. (CAI) of Jackson, Michigan for the electrical works. A contract for construction of 800 tubewells was awarded in August 1968 to Harold T. Smith, Inc., of Washington, D. C. The remaining 250 tubewells are to be installed by a local contractor not yet selected. To date about 200 tubewells have been drilled and developed; installation of the first pumping equipment has begun.

Purpose of Loan: To finance the foreign exchange costs of a salinity control and land reclamation project in the lower Jhelum sub-project section of the Chaj Doab area of West Pakistan (SCARP 2-B). The funds will be used to install and electrify approximately 1050 irrigation and drainage tubewells; to remodel canals, surface water and surface drainage systems; and to procure basic transport and maintenance equipment for project operations in an area comprising approximately 561,000 gross acres of agricultural land overlying a fresh groundwater zone. Loan funds will also finance investigations and studies to be used in the development of plans for salinity control and reclamation of approximately 600,000 acres of additional SCARP 2-B land which overlies a saline groundwater zone.

Construction of electrification facilities will be by local contractors. Tendering for these contracts as well as contracts for procurement of equipment and materials from U.S. suppliers is under way.

Financial Status: Letters of Commitment for \$7.7 million have been issued for engineering and construction services and for procurement of materials and equipment. The balance of the loan funds will be committed as contracts are awarded.

Waterlogging and salt accumulation in the northern zone of West Pakistan's Indus Plain have destroyed some 2.5 million acres of cultivable land and further destruction is proceeding at an estimated rate of 50,000 to 100,000 acres per year. To curb and arrest this loss of productive land, the GOP through the West Pakistan Water and Power Development Authority (WP/WAPDA) has initiated an extensive program of Salinity Control and Reclamation Projects (SCARPs). The projects, through systematic pumping of underground water, are aimed at restoring a water balance in the area which

Host Country Role and Procurement Source: The total project cost is equivalent to \$38.6 million. This loan provides \$14.1 million in foreign exchange and the GOP is providing the balance of \$24.5 million equivalent in local currency.

All of the equipment, materials and services to be financed by the loan will be obtained in the United States and are not available in Pakistan.

1/ **Two Step Terms:** Loan funds have been relent to WP/WAPDA at 4% interest repayable in rupees in 25 years, including 5 years grace.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: PAKISTAN

Borrower: GOVERNMENT OF PAKISTAN

Funds: Development Loan

Title and Number of Loan: West Pakistan Power Distribution, 391-H-090	
Date Authorized: 6/24/64	Date Signed: 12/30/64
Loan Status as of 12/31/69	Loan Terms 1/
(In Thousands of Dollars and Equivalent)	Duration 40 yrs.
Authorized 12,500	Grace Period 10 yrs.
Disbursed 11,426	Interest Rate 3/4%
Repayments -	Thereafter 2%
Interest Collected 106	Currency of Repayment . . U.S. \$

Financial Status: Letters of Commitment for the entire loan amount have been issued and 91% has been disbursed. The undisbursed funds are expected to be used to pay for materials ordered but not yet delivered.

Host Country Role and Procurement Source: The total project was estimated to cost \$91 million, of which \$78.5 million equivalent in local currencies was provided by WP/WAPDA.

All equipment, materials and services financed under this loan will be procured from the United States.

Purpose of Loan: This loan finances the foreign exchange costs of equipment, materials and services to repair and expand the West Pakistan Water and Power Development Authority's (WP/WAPDA) electric power distribution.

The expansion and rehabilitation of West Pakistan's power distribution facilities has not kept pace with the expansion of generation and transmission capacity. Many of the existing distribution systems are badly over-loaded and provide sub-standard service, and other areas remain without any service at all. Demand over the five year period through 1970 was expected to increase by 180 million KWH and 500,000 new customers would be added. An adequate and reliable system of power distribution is critically important to continued agricultural and industrial development, as well as the domestic needs of West Pakistan. Although the facilities financed by this loan are a very small part of WAPDA's overall power distribution system, they will improve existing systems and bring power to some presently unserved areas.

Physical Status: Over 95% of all equipment and materials have been delivered and installed, and project construction has been completed. Delivery of spare parts will be completed by March 1970.

1/ Two-Step Terms: The loan funds have been relent to WP/WAPDA for repayment in rupees over a period of 25 years at 25% interest, including 5 years grace period.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: PAKISTAN

Borrower: GOVERNMENT OF PAKISTAN

Funds: Development Loan

Title and Number of Loan: Transmission System for Comilla and Noakhali 391-H-091	
Date Authorized: 6/25/64	Date Signed: 9/17/64
Loan Status as of 12/31/69	Loan Terms <u>1/</u>
(In Thousands of Dollars and Equivalent)	Duration 40 yrs.
Authorized \$2,800	Grace Period 10 yrs.
Disbursed 272	Interest Rate Grace 3/4% Thereafter 2%
Repayments -	Currency of Repayment .. U.S. \$
Interest Collected 1	

pumping. Industrial development based on agricultural raw materials also requires power.

Physical Status: After protracted discussions with several engineering firms, a contract with Commonwealth Associates, Inc. (CAI) was signed on January 28, 1967. The Project Implementation Plan was submitted and approved in July 1968. Design work has been completed and line routes have been surveyed and plotted. Site preparation at sub-station locations is under way. During 1970, 19 tenders were issued for equipment, materials and local construction and fabrication contracts. EP/WAPDA has made awards or issued letters of intent against ten tenders. The remaining two tenders for equipment will be issued and all awards completed by the end of FY 1970.

Purpose of Loan: To finance the foreign exchange costs of equipment, materials and services required for constructing two electric power transmission lines and associated sub-stations in the Comilla and Noakhali districts of East Pakistan. This loan will make it possible for the East Pakistan Water and Power Development Authority (EP/WAPDA) to provide necessary facilities for transmission of an adequate supply of power to satisfy the demand in the key towns and areas of the Comilla and Noakhali Districts. It will enable EP/WAPDA to install transmission and distribution systems which will provide efficient and reliable service and permit further expansion as power demands increase.

Financial Status: Letters of Commitment totalling \$2,031,000 for engineering services and equipment have been opened. Additional letters of commitment for the balance of the loan will be opened as contracts are awarded.

Host Country Role and Procurement Source: The EP/WAPDA is responsible for management of the project and provision of local currency requirements, estimated to be about \$2.3 million equivalent.

All equipment, materials and services to be financed by the loan will be obtained from the United States.

The Comilla and Noakhali Districts lie between the two important commercial centers of Dacca and Chittagong and are linked to these two cities by railway. The highway passing through these districts is being improved to much higher standards. Chandpur, in the Comilla District, is an important inland port which is being expanded to accommodate larger ships. The principal source of employment is agriculture. Further development of drainage and irrigation requires significant amounts of power for

1/ **Two-Step Terms:** The GOP has relented the loan funds to EP/WAPDA at 4% interest with repayment over 25 years, including 5 years grace.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: PAKISTAN

Borrower: Government of Pakistan

Funds: Development Loan

Title and Number of Loan: Dacca-Aricha Road - 391-H-092	
Date Authorized: 6/27/64	Date Signed: 1/11/65
Loan Status as of 12/31/69	Loan Terms 1/
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$14,000	Grace Period 10 yrs
Disbursed 6,437	Grace 3/4%
Repayments -	Interest Rate
Interest Collected 31	Thereafter 2%
	Currency of Repayment U.S.\$

Physical Status: The project originally envisaged the construction of a highway and necessary structures from Tongi on the Dacca-Mymensingh road to Aricha and two short roads with ferry connections to Aricha. The GOEP contracted with Louis Berger, Inc. of East Orange, New Jersey, in a joint venture with Consulting Engineers (Pakistan) Ltd., to provide engineering services for the project. During the design phase it became apparent that preliminary cost estimates would have to be revised upward. To keep the project within the loan ceiling, it was decided that the GOEP would utilize its own forces to perform the road construction phases of the project. The work is within the GOEP's capabilities and is now underway. The A.I.D. loan will be utilized solely for bridges, approaches, and other related facilities. The GOEP reviewed and evaluated the bids received in November 1968 and selected a joint venture consisting of the Vinnell Corporation, H. B. Zachry Company, and Perini Corporation (VZP), as the lowest responsive bidder. A contract with VZP was signed on May 9, 1969. The contractor has largely completed mobilization for the project and actual construction began in November 1969. Camps are under construction and equipment is arriving in East Pakistan. The project is scheduled for completion by June 1974.

Purpose of Loan: To finance foreign exchange costs of designing and constructing structures on the 56-mile Dacca-Aricha and connecting roads including: (1) culverts and bridges and their approaches between Mile 22 and Aricha, (2) the Mirpur and Bangshi bridges and their approaches, (3) the ferry approaches at Aricha-Nagarbari and Goalunda, (4) the Turag and Bamail bridges and their approaches at Mile 23 of the Dacca-Mymensingh road, (5) two short sections of road, one each across the Jamuna and Padma Rivers from Aricha.

Financial Status: \$13,620,000 has been committed for engineering services and the construction contract.

Pakistan's Five-Year Plans have provided for reasonably comprehensive development of the transportation sector in East Pakistan. Although much remains to be accomplished, substantial improvements have been realized in development of deep water ports, inland waterways and railway systems. A basic, modern system of roads is essential for short haul freight movements, distribution of foodstuffs, marketing of industrial and agricultural products, transportation of people, and internal security. This project provides a basic link in the road network and will help the Ministry of Highways, Waterways and Road Transport of the Government of East Pakistan (GOEP) develop an ability to design, construct, and maintain an adequate highway system.

Host Country Role and Procurement Source: The revision of the scope of the project brought foreign exchange costs within the \$14.0 million authorized. \$20.5 million in local currency will be provided by the GOEP.

All equipment, materials and services to be financed by the loan will be procured in the United States.

1/ **Two Step Terms:** The loan funds have been relent to the Government of East Pakistan at the same terms as those of our loan to the Central Government.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: PAKISTAN

Borrower: GOVERNMENT OF PAKISTAN

Funds: Development Loan

Title and Number of Loan:	
Chittagong Port Facilities, 391-H-094	
Date Authorized: 6/29/64	Date Signed: 10/14/64
Loan Status as of 12/31/69	Loan Terms 1/
(In Thousands of Dollars and Equivalent)	Duration 40 yrs.
Authorized \$3,400	Grace Period 10 yrs.
Disbursed 74	Interest Rate Grace . . . 3/4%
Repayments -	Thereafter 2%
Interest Collected 2	Currency of Repayment . . U.S. \$

F. R. Harris, Inc., then prepared new specifications and tender documents for procurement of construction equipment and services. Both U.S. and local construction firms were invited to bid but no bids were received, and the local firm of Haydari Construction, Ltd. (Pakistan) was selected and a contract has been signed. Haydari has signed an agreement with Raymond International of Delaware, Inc. to provide supervisory personnel. It is presently estimated that the project will be completed by August 1972.

Financial Status: A Letter of Commitment for \$281,000 was issued to finance the dollar costs of the consultants' contract. Additional Letters of Commitment for procurement of equipment and services will be opened after A.I.D. approval of contracts for services to be supplied by Raymond and for the purchase of construction equipment.

Purpose of Loan: To finance the foreign exchange costs of materials, equipment and services required for the reconstruction of six jetties at the port of Chittagong.

Host Country Role and Procurement Source: Based on the final construction contract, local costs are now estimated at \$14.7 million equivalent to be provided by the CPT in addition to the foreign exchange provided by the A.I.D. loan.

Chittagong Port is a severely congested facility. While delays in loading and unloading ships have been somewhat alleviated by using lighters to unload bulk cargo at the outer anchorage, the reconstruction of the jetties is required to permit Chittagong Port to handle ever-increasing quantities of general cargo.

All materials, equipment and services to be financed by the A.I.D. loan will be procured in the United States.

Physical Status: The Chittagong Port Trust (CPT) is responsible for implementing the project. Frederic R. Harris, Inc. of New York is providing engineering services. Bids for construction services from U.S. firms were received in 1965 and were rejected because the foreign exchange components of these bids far exceeded the amount of the loan. A modified, simpler design was then selected to permit construction to be under taken by a Pakistani firm. This was done in order to reduce the foreign exchange costs to an amount which could be covered by the loan. This alternative design, on the other hand, substantially increased local currency costs.

1/ Two-Step Terms: The loan funds have been relented to the Chittagong Port Trust, to be repaid in rupees over a period of 25 years, including a grace period of 5 years, at 6 percent interest.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: PAKISTAN

Borrower: GOVERNMENT OF PAKISTAN

Funds: Development Loan

Title and Number of Loan: Mangla Dam Transmission Lines - 391-H-102	
Date Authorized: 6/14/65	Date Signed: 1/19/66
Loan Status as of 12/31/69	Loan Terms 1/
(In Thousands of Dollars and Equivalent)	Duration 40 yrs.
Authorized \$7,506	Grace Period 10 yrs.
Disbursed 6,743	Interest Rate Grace 1%
Repayments -	Thereafter 2 1/2%
Interest Collected 122	Currency of Repayment .. U.S. \$

Under the guidance of CAI, progress on the project has been satisfactory. WP/WAPDA, with the advice and assistance of CAI, has prepared specifications, invited bids, and made awards for the procurement of all items of major equipment and materials to be imported from the U.S. It has completed the award of construction contracts to local firms. CAI has trained five Pakistani engineers at its headquarters in the U.S.

All major equipment for Phases I, II and III of the project has been delivered. Phase I consisting of four miles of 132 KV double circuit line has been completed. Construction of the transmission lines for Phases II and III including about 132 miles of 220 KV double circuit line and two 100 MVA substations has been delayed due to poor performance of a Pakistani contractor responsible for the construction work on the lines. A more effective Pakistani contractor is now on the job.

The Major portion of the line is complete and part of the line is operating at 132 KV. The balance of line and the two substations are expected to be completed in the first half of 1970.

Financial Status: After a re-evaluation of the project costs, \$695,000 was deobligated in June 1969. Letters of Commitment have been opened for \$7,356,000 of which 96% has been disbursed. The undisbursed balance will be utilized for continuation of the consulting engineer's contract and to procure some additional items of equipment.

Host Country Role and Procurement Status: The total cost of this project is estimated at \$18.3 million, of which \$10.8 million equivalent will be in local currency provided by WP/WAPDA from its own resources.

All materials, equipment, and services financed under this loan will be procured in the United States.

Purpose of Loan: To finance the foreign exchange costs of engineering services and equipment to construct transmission lines, including transformation and terminal facilities, to connect the first three hydroelectric generating units at the Mangla Dam with the West Pakistan high tension grid. The Mangla Dam was financed by the Indus Basin Development Fund at a cost of \$367 million, but no funds were provided by the Fund to connect these units with the main power grid.

Dependable low cost electric power is essential for a viable economy. One of the main sources of low cost power is the Mangla Hydroelectric Power Project. The transmission facilities financed under this loan have the capacity to feed over 300 MW (300,000 KW) of power from the Mangla generators into the main transmission grid. This is over 30% of West Pakistan's power demand.

These facilities together with those in AID Loan 391-H-126 will provide Pakistan's first effective high voltage transmission grid. It will span a distance of over 300 miles.

Physical Status: The West Pakistan Water and Power Development Authority (WP/WAPDA) selected Commonwealth Associates, Inc. (CAI) of Jackson, Michigan as consultant engineer.

1/ Two Step-Terms: The loan funds have been relent by the GOP to WP/WAPDA for repayment in rupees over a period of 25 years, at 4% interest, including 5 years grace period.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: PAKISTAN

Borrower: GOVERNMENT OF PAKISTAN

Funds: Development Loan

Title and Number of Loan: General Investigation and Consulting Services - 391-H-107	
Date Authorized: 6/25/65	Date Signed: 6/27/66
Loan Status as of 12/31/69	Loan Terms 1/
(In Thousands of Dollars and Equivalent)	Duration 40 yrs.
Authorized \$6,000	Grace Period 10 yrs.
Disbursed 4,612	Interest Rate Grace 1%
Repayments -	Thereafter 2 1/2%
Interest Collected 60	Currency of Repayment .. U.S. \$

Purpose of Loan: To finance the foreign exchange costs of general consulting services for the West Pakistan Water and Power Development Authority (WP/WAPDA). These services are needed to develop the technical and managerial capability of WP/WAPDA. A.I.D. has financed general consulting services for WP/WAPDA since July 1963 under Loan 391-H-069.

These services include (1) assistance in the preparation of the second phase of a master plan for the long-range development of water and power resources of West Pakistan; (2) review of design and surveillance of construction projects being executed by WP/WAPDA; (3) assistance in all WP/WAPDA's irrigation facilities and electric power system; (4) assistance in developing regional project plans for salinity control and reclamation of the Punjab region in West Pakistan; and (5) specialized training of WP/WAPDA personnel. The loan also provides for accessory costs, including technical equipment and transport needed to conduct the above services.

The responsibility for executing the project rests with WP/WAPDA. With the help of the U.S. consultants, WP/WAPDA's ability to plan, design and construct extensive power and

water systems and to operate, maintain and manage its power facilities has been improved.

Physical Status: Two U.S. engineering consultant firms, Harza Engineering Co. International, Chicago, Illinois, and Tipton and Kalmbach (T&K), Denver, Colorado, are continuing to provide consultant services to WP/WAPDA. The project is progressing satisfactorily with Harza's expatriate strength at approximately 23 U.S. personnel, and Tipton and Kalmbach's at 4. Both firms are supported by sizable staffs of host country nationals who are paid in local currency by WP/WAPDA.

Financial Status: Letters of Commitment have been opened in the full value of the loan and 77% has been disbursed. The undisbursed balance will be used for payments to the consultants.

Host Country Role and Procurement Source: In addition to the A.I.D. loan, \$2.8 million in local currency will be provided by the Government of Pakistan.

All of the services, equipment and materials financed by the A.I.D. loan will be procured in the United States.

1/ Two-Step Terms: The GOP passed on the loan to WP/WAPDA on the same terms and conditions on which it was obtained from A.I.D.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: PAKISTAN

Borrower: GOVERNMENT OF PAKISTAN

Funds: Development Loan

Title and Number of Loan: EP/WAPDA Consultants - 391-H-124	
Date Authorized: 6/21/67	Date Signed: 2/8/68
Loan Status as of 12/31/69	Loan Terms 1/
(In Thousands of Dollars and Equivalent)	Duration 40 yrs.
Authorized \$2,400	Grace Period 10 yrs.
Disbursed 709	Interest Rate Grace 1%
Repayments -	Thereafter 2 1/2%
Interest Collected 5	Currency of Repayment U.S. \$

and engineering. Services are now being rendered by another firm financed by the World Bank. Specialized consulting services for the Dredger Fleet and the Mechanical Equipment Organization administered by EP/WAPDA, and for the development within EP/WAPDA for the training of power plant operators are the other components of the project.

Physical Status: Negotiations with a U.S. firm which would assist in the development of the program to train power plant operators are in progress. A contract for technical services to be provided to the Dredger Organization is also being negotiated and contract negotiations relating to the Mechanical Equipment Organization are expected to begin in the near future.

Purpose of Loan: To assist in financing the dollar cost of general and specialized consulting services for the East Pakistan Water and Power Development Authority (EP/WAPDA).

Financial Status: 30% of the loan has been disbursed. Letters of Commitment covering the balance of the loan will be issued as contracts are finalized.

EP/WAPDA was established in 1959 and has responsibility for the unified and coordinated development of the water and power resources of East Pakistan. Its tasks include: (a) preparation of long-range plans for the systematic control and development of the waters of East Pakistan, including three large rivers--the Ganges, Brahmaputra and Meghna; (b) execution of works to control and use the waters of these rivers; (c) planning, execution and operation of power generation, transmission and distribution facilities to meet the rapidly increasing needs of East Pakistan.

Host Country Role and Procurement Source: EP/WAPDA financed the local costs of the IECCO contract and will finance the local costs of the power plant training and other consultant activities.

All services financed under this loan have been and will be procured from the United States.

A contract between EP/WAPDA and the International Engineering Company (IECCO) of San Francisco, was financed by A.I.D. under an earlier loan (391-H-062) beginning in 1963 and under this loan from 1967 to the termination of the contract in February 1969. Under that contract, IECCO provided general consulting services related to planning

1/ Two-Step Terms: The loan has been relent by the GOP to EP/WAPDA for 25 years, with 5 years grace, at 4% interest.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: PAKISTAN

Borrower: GOVERNMENT OF PAKISTAN

Funds: Development Loan

Title and Number of Loan: Mangla Transmission II - 391-H-126	
Date Authorized: 6/23/67	Date Signed: 2/9/68
Loan Status as of 12/31/69	Loan Terms <u>1/</u>
(In Thousands of Dollars and Equivalent)	Duration 40 yrs.
Authorized \$3,700	Grace Period 10 yrs.
Disbursed 1,185	Interest Rate Grace 1%
Repayments -	Thereafter 2%
Interest Collected -	Currency of Repayment.. U.S. \$

Purpose of Loan: To finance the foreign exchange costs of the engineering services and equipment required for construction of approximately 78 miles of 220 KV double circuit transmission line in West Pakistan from Lahore to Lyallpur together with related 220 KV terminal facilities. This project will complete the 220 KV transmission line from Mangla Dam to Lyallpur and provides for effective utilization of the hydroelectric power generating units at Mangla Dam.

The project is being implemented by the West Pakistan Water and Power Development Authority (WP/WAPDA) which has complete responsibility for the development of the water and power resources of the Province. Its activities include construction, operation and maintenance of all government-owned facilities for generation, transmission and distribution of power throughout West Pakistan.

WP/WAPDA's long-term plans for the development of its generating capacity include 10 hydroelectric power units with a total capacity of 1,000 megawatts (MW) at the site of the Mangla Dam on the Jhelum River. The Indus Basin Development Fund has provided the equivalent of \$367 million in various foreign currencies to finance the

construction of the Mangla Dam and the first three hydro-generating units with a capacity of 100 MW each. The Fund did not provide financing for the necessary transmission lines to connect the Mangla generating plant with WP/WAPDA's main grid system. The transmission facilities required for the first three units are being financed under A.I.D. Loan 391-H-102 in the amount of \$7.5 million. The fourth unit was completed in 1969. The additional transmission facilities financed under this loan are required to make full use of the power to be generated at Mangla.

Physical Status: Commonwealth Associates, Inc. is the project engineer. Construction will be performed by a Pakistani contractor under a contract which is now in the bid stage. Designs and specifications have been completed. The project is expected to be completed in June 1971.

Financial Status: Letters of Commitment for \$2,783,432 have been issued. The loan is 32% disbursed. Additional letters of commitment will be opened as awards for the remaining equipment are made.

Host Country Role and Procurement Source: The total project cost is \$8.4 million. The Government of Pakistan is providing local currency equivalent to \$4.7 million through WP/WAPDA.

All commodities financed under the loan will be procured from the United States.

1/ **Two-Step Terms:** The loan funds have been relented by the GOP to WP/WAPDA at an interest rate of 4% with repayment over 25 years, including 5 years grace.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: PAKISTAN

Borrower: Government of Pakistan

Funds: Development Loan

Title and Number of Loan: Commodity Imports 391-H-127	
Date Authorized: 6/28/67	Date Signed: 10/20/67
<small>Loan Status as of 12/31/69</small>	<small>Loan Terms</small>
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$25,000	Grace Period 10 yrs
Disbursed 22,234	Interest Rate .Grace. . . 1% Thereafter 2½%
Repayments -	Currency of Repayment . . U.S. \$
Interest Collected 120	

Host Country Contribution: The GOP continues to make great strides toward self-sufficiency in food grain production. Total distribution of fertilizer increased from 191,000 nutrient tons in FY 1967 to 291,000 nutrient tons in FY 1968. Estimated distribution of fertilizer in FY 1969 was 412,000 nutrient tons.

Procurement Source: All fertilizer financed under this loan will be from United States source.

Purpose of Loan: To provide foreign exchange for the import of fertilizer required by Pakistan in its attempt to meet self-sufficiency in food grain production.

Physical Status: Approximately 90% of the fertilizer to be purchased under the loan has arrived in Pakistan. Contracts have been placed with U.S. suppliers for the remaining purchases, and shipment is expected to be completed by January 31, 1970. Shipment was considerably delayed by the 1969 dock strike and the congestion in U.S. ports occurring after, and as a result of, this strike.

Financial Status: The loan is completely committed and approximately 90% disbursed. Disbursements will be completed by January 31, 1970.

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STATUS OF DEVELOPMENT LOANS

TABLE V

Country: PAKISTAN

Borrower: GOVERNMENT OF PAKISTAN

Funds: Development Loan

Title and Number of Loan: Pakistan Western Railways - 391-H-129	
Date Authorized: 6/29/67	Date Signed: 1/25/68
Loan Status as of 12/31/69	Loan Terms 1/
(In Thousands of Dollars and Equivalent)	Duration 40 yrs.
Authorized \$15,100	Grace Period 10 yrs
Disbursed -	Interest Rate Grace 1%
Repayments -	Thereafter 2 ³ / ₈ %
Interest Collected -	Currency of Repayment .. U.S. \$

Financial Status: A Letter of Commitment for the entire loan amount has been opened. The full amount will be disbursed by the time deliveries are completed.

Host Country Role and Procurement Source: The PWR is the implementing agency. The total project cost is equivalent to \$20.2 million, of which PWR will provide \$5.1 million equivalent in rupees.

All equipment, materials and services being financed by the loan will be procured from the United States.

Purpose of Loan: To finance the procurement of 65 broad gauge diesel-electric locomotives including an initial supply of major components to assist the Pakistan Western Railway (PWR) to meet expanding traffic demands and to replace some of the 248 over-age steam locomotives still in service.

In spite of improvements in other transport modes, particularly roads, passenger and freight traffic in West Pakistan remains heavily dependent on rail transport. Approximately 70% of inter-city freight moves via the PWR.

A.I.D. has previously provided about \$97.0 million in loans to the PWR. In addition, the World Bank, West Germany and the U.K. provided a total of about \$180.0 million in foreign exchange loans during the period 1960-1966.

Physical Status: Bids from the three U.S. locomotive manufacturers were received on 6/4/68. Award was delayed until May 1969 because of a dispute over responsiveness of the various bids to the bid specifications. The contract with International General Electric was signed 8/18/69. Delivery of the locomotives was expected to begin early in 1970 and to be completed by December 1970. This has not been delayed because of the recent, prolonged GE strike.

1/ **Two-Step Terms:** The loan funds have been relent by the GOP to the PWR. The PWR will repay the loan in rupees over a period of 25 years, including a 5 year grace period, at 4% interest.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: PAKISTAN

Borrower: Government of Pakistan

Funds: Development Loan

Title and Number of Loan: Malaria Eradication Program 391-H-135	
Date Authorized: 6/7/68	Date Signed: 6/29/68
Loan Status as of 12/31/69	Loan Terms
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$6,400	Grace Period 10 yrs
Disbursed 2,705	Interest Rate . Grace . . 2%
Repayments -	Thereafter 2½%
Interest Collected 17	Currency of Repayment . . U.S. \$

All commodities procured for the CY 1969 program have arrived in Pakistan and are being utilized. All conditions precedent for the CY 1970 program have been met. Contracts for the procurement of DDT have been signed, with deliveries to begin in February 1970.

Financial Status: The loan funds are totally committed. Disbursement will be completed during CY 1970.

Host Country Role and Procurement Source: The Government of Pakistan is financing local currency costs of the MEP which over the 14-year period will be equivalent to \$67 million, or approximately 60% of the total cost of the program. The Government has provided local currency budgets for CY 1969 and 1970 totaling approximately \$19.1 million equivalent.

Purpose of Loan: To finance the foreign exchange costs of the Pakistan Malaria Eradication Program (MEP) for calendar years 1969 and 1970. The loan proceeds are being used to procure DDT and transportation, laboratory and spraying equipment.

All commodities financed under the loan will be procured from the United States.

The MEP is a 14 year plan (1961-1974) designed to eliminate malaria in Pakistan and prevent its re-emergence. The Program is based on a Plan of Operations designed by the World Health Organization (WHO) and is evaluated annually by a panel which includes members of the National Communicable Disease Center of the U.S. Public Health Service.

A.I.D. has now provided \$18,455,000 in dollar loans, the equivalent of \$19.9 million in rupee loans, and about \$4 million equivalent in rupee grants to the MEP. The WHO provides technical assistance.

Physical Status: The incidence of malaria has been dramatically reduced in the protected zones of the country which include approximately 96.0 of the 127.0 million people in Pakistan.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: PAKISTAN

Borrower: Government of Pakistan

Funds: Development Loan

Title and Number of Loan: General Advisory Services Public Health Engineering, East Pakistan - 391-H-136	
Date Authorized: 6/7/68	Date Signed: 6/29/68
Loan Status as of 12/31/69	Loan Terms 1/
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$970	Grace Period 10 yrs
Disbursed 639	Grace 2%
Repayments -	Interest Rate Thereafter 2½%
Interest Collected 2	Currency of Repayment .. U.S.\$

are being developed by other agencies. Water systems have been placed in operation in 23 municipalities with staff trained by DPHE. The water supply in these urban centers has been increased by 200%.

One hundred technicians have been trained in construction, operation and maintenance of water systems, and 30% of DPHE's engineering staff have been or are receiving advanced academic and practical training in the U.S. With CDM assistance, the DPHE has established and trained staffs for a new Central Technical unit to prepare feasibility studies, plans and designs and supervise construction; a Groundwater Division to investigate and develop sources of underground water; and two quality control laboratories.

Purpose of Loan: To provide the foreign exchange costs of the services of U.S. technical and management specialists (1) to assist the Directorate of Public Health Engineering (DPHE) of the Government of East Pakistan to develop its capacity to plan, design, install, manage, operate and maintain water and sewage systems, and (2) to help develop a private sector manufacturing capability to produce the materials needed for such installations.

Increasing numbers of people are migrating to cities in East Pakistan which are ill-prepared to meet the resulting water and sewage needs. This project is part of a long-range plan to improve the health of the people by providing adequate facilities to meet the growing demands.

Physical Status: Camp, Dresser and McKee (CDM) of Boston, Mass., selected by DPHE under a previous A.I.D. loan (391-H-068) continue to provide technical and advisory service under this loan. CDM's present staff, consisting of ten specialists, is supplemented by engineers from the DPHE offices. Cost estimates based on a comprehensive survey were drawn up and priorities established for providing 95% of the Province's urban population, other than Dacca and Chittagong, with water and sewage facilities. In Dacca and Chittagong water and sanitary sewage systems.

The consultants have also promoted the local manufacture of a variety of materials of acceptable standard for use in water and sewage systems. The combination of locally produced materials and improved installation practices has substantially reduced the cost of providing water in urban centers.

Financial Status: A Letter of Commitment for the entire loan amount has been issued and 66% has been disbursed. The remaining funds will be used during CY 1970 for payments to CDM as they become due.

Host Country Role and Procurement Source: The local currency contribution for the consulting services contract is \$590,000 equivalent and the contribution for water and sewage schemes amount to approximately \$13 million equivalent.

All equipment, materials and services financed under the loan have been procured in the United States.

1/ Two-Step Terms: The loan has been passed on by GOP to GOEP on the same terms and conditions under which it was received from A.I.D.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: PAKISTAN

Borrower: Government of Pakistan

Funds: Development Loan

Title and Number of Loan:	
Seed Potato Multiplication - 391-H-139	
Date Authorized: 6/26/68	Date Signed: 8/10/68
Loan Status as of 12/31/69	Loan Terms <u>1/</u>
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$420	Grace Period 10 yrs
Disbursed -	Grace 2%
Repayments -	Interest Rate 2½%
Interest Collected -	Thereafter
	Currency of Repayment .. U.S.\$

next. The loan will also finance imported equipment, engineering services and the cost of an American horticultural advisor for two years. The advisor will assist EPADC to develop the seed multiplication aspects of the project, using carefully selected farmers in the five regions.

Physical Status: EPADC has negotiated a contract with Bovay Engineers of Spokane, Washington for design and supervision of construction of the five cold storage units. Sites have been selected and site plans drawn up. Final design of the cold storage units is in process and tenders for material and equipment are expected to be issued by March 1970. A well-qualified candidate for the horticultural advisor's position has been identified and negotiations are underway.

Purpose of Loan: To finance the foreign exchange costs of goods and services for construction of five seed potato cold storage units and to provide technical assistance to the East Pakistan Agricultural Development Corporation (EPADC) in planning and implementing a seed potato multiplication and storage project.

Financial Status: A Letter of Commitment for \$40,600 to finance the Bovay Engineers contract has been established. The balance of the loan will be committed in 1970 for procurement of the cold storage units and the services of the horticultural advisor.

Potatoes represent an important dietary supplement to rice and other food grains in East Pakistan. They are particularly suitable for production in East Pakistan as they do not, for the most part, compete with rice for land. To obtain higher levels of production, EPADC now imports limited quantities of high yielding seed potatoes and sells these to commercial potato farmers. The benefits of this procedure are marginal because scarce foreign exchange must be used and the imported seed represents only five to six percent of the total annual seed planted.

Host Country Role and Procurement Status: The A.I.D. loan will cover foreign exchange costs. EPADC will provide local currency equivalent to \$1,330,000.

All goods and services financed under this loan will be procured in the United States.

This loan will permit EPADC to increase the availability of improved varieties of seed potato while reducing the quantity of imported seed required each year. This will be done by importing smaller quantities of seed potatoes, multiplying them seven fold from one growing season to the

1/ Two-Step Terms: The loan funds will be relent to the East Pakistan Provincial Government to be repaid in rupees at the same terms as the A.I.D. loan to the Central Government.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: PAKISTAN

Borrower: Government of Pakistan

Funds: Development Loan

Title and Number of Loan: Commodity Assistance 391-H-140	
Date Authorized: 12/5/68	Date Signed: 3/11/69
Loan Status as of 12/31/69	Loan Terms
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$71,000	Grace Period 10 yrs
Disbursed 21,179	Interest Rate 2% Grace 3%
Repayments -	Thereafter 3%
Interest Collected -	Currency of Repayment . . U.S. \$

Financial Status: The loan is 98% committed and 35% disbursed.

Host Government Role and Procurement Source: In continued support of its import liberalization policy the Government of Pakistan has agreed to take all actions as may be feasible, including making available additional foreign exchange.

All commodities under this loan have been and are being procured from the United States.

Purpose of Loan: To finance foreign exchange costs in support of Pakistan's import liberalization program and to enable private and public sector importers to import commodities necessary to increase agricultural and industrial production.

This loan has supported private sector imports in iron and steel mill products, pharmaceuticals, petroleum non-fuels, chemicals, nylon twine, wood pulp, agricultural and industrial equipment and public sector commodities such as technical publications, industrial air conditioning equipment, laboratory and scientific equipment, specialized tools and fertilizer pesticides.

Physical Status: Loan funds will be fully committed by April 1970. Principle items include chemicals and dyes (\$5.8 million), farm, marine, and scientific equipment (\$2.7 million), lubricants (\$4 million), iron, steel, and non-ferrous metals (\$21 million), pesticides (\$19 million), fertilizers (\$17 million).

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: PAKISTAN

Borrower: Government of Pakistan

Funds: Development Loan

Title and Number of Loan:	
Consulting Services - 391-H-142	
Date Authorized: 6/27/69	Date Signed: 8/5/69
Loan Status as of 12/31/69	Loan Terms
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$3,000	Grace Period 10 yrs
Disbursed -	Grace 2%
Repayments -	Interest Rate
Interest Collected -	Thereafter 3%
	Currency of Repayment . . U.S.\$

Physical Status: The first sub-project has been approved for financing under this loan and five others are being prepared for A.I.D. approval. The first sub-project is a feasibility study on development of a port in the Shahjadpur area of Pabna District, East Pakistan, which is being done by Commonwealth Transport Consultants, Inc., of Washington, D. C. Other projects expected to be approved total more than \$1 million and their implementation is expected to start in 1970.

Financial Status: All general conditions precedent to disbursement of the loan have been met. The first letter of commitment is being processed.

Host Country Role and Procurement Source: The loan will be implemented through various agencies of the Central and Provincial Governments who will provide all local currency needed by the various sub-projects.

Services and equipment financed under the loan will be procured from the United States.

Purpose of Loan: To finance the foreign exchange costs of hiring U.S. consulting firms, organizations, and individual experts and small quantities of special equipment to provide assistance and advice to agencies of the GOP and private Pakistani firms. This assistance will be for various types of technical advice, sectoral and industrial studies, feasibility studies, and market surveys in areas of water and power, transportation, industry, agriculture, and other fields.

Pakistan has experienced reasonably steady and satisfactory growth since it became independent in 1947, particularly in the period since 1958. A significant amount of this progress is attributable to the large number of foreign experts in many areas who have assisted GOP agencies and private firms. The country's own professional resources remain inadequate to provide the quantity and quality of manpower needed to support growth and modernization in many areas. This loan will provide financing for consultants in high priority areas where local expertise is inadequate.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: PAKISTAN

Borrower: GOVERNMENT OF PAKISTAN

Funds: Development Loan

Title and Number of Loan: Groundwater Survey - East Pakistan - 391-H-1143	
Date Authorized: 6/27/69	Date Signed: 10/2/69
Loan Status as of 12/31/69	Loan Terms 1/
(In Thousands of Dollars and Equivalent)	Duration 40 yrs.
Authorized \$1,500	Grace Period 10 yrs.
Disbursed 0	Interest Rate Grace 2%
Repayments	Thereafter 3%
Interest Collected 0	Currency of Repayment .. U.S. \$

cropping on a larger scale and thus increase agricultural production. The World Bank is considering financing a water well drilling program which will complement and support this loan and will be partly dependent on information gathered during these investigations.

Physical Status: Technical assistance provided under this loan will come from the U.S. Geological Survey (USGS). The services provided by USGS will be required for about five years. This time estimate is based on a series of groundwater survey activities, which will serve as the vehicle for developing the new groundwater investigation agency. The implementation plan calls for annual reviews of project progress to reassess on a continuing basis the time required to achieve project objectives.

Purpose of Loan: To finance the foreign exchange costs of a project for the development of a groundwater investigation agency within the East Pakistan Water and Power Development Authority (EP/WAPDA) capable of collecting, analyzing and disseminating data on the Province's groundwater resources. In the process of developing this organization, the overall groundwater potential of the Province will be surveyed and intensive studies of promising areas undertaken. The loan will finance technical assistance to the new organization, participant training for its key personnel, and equipment to permit it to carry out investigations.

The USGS has agreed to provide a team of advisors for this project. Field work is expected to get under way in the last half of FY 1970.

Financial Status: No financial commitments or disbursements have as yet been made. The initial commitment will be made to the USGS after finalization of an inter-agency agreement.

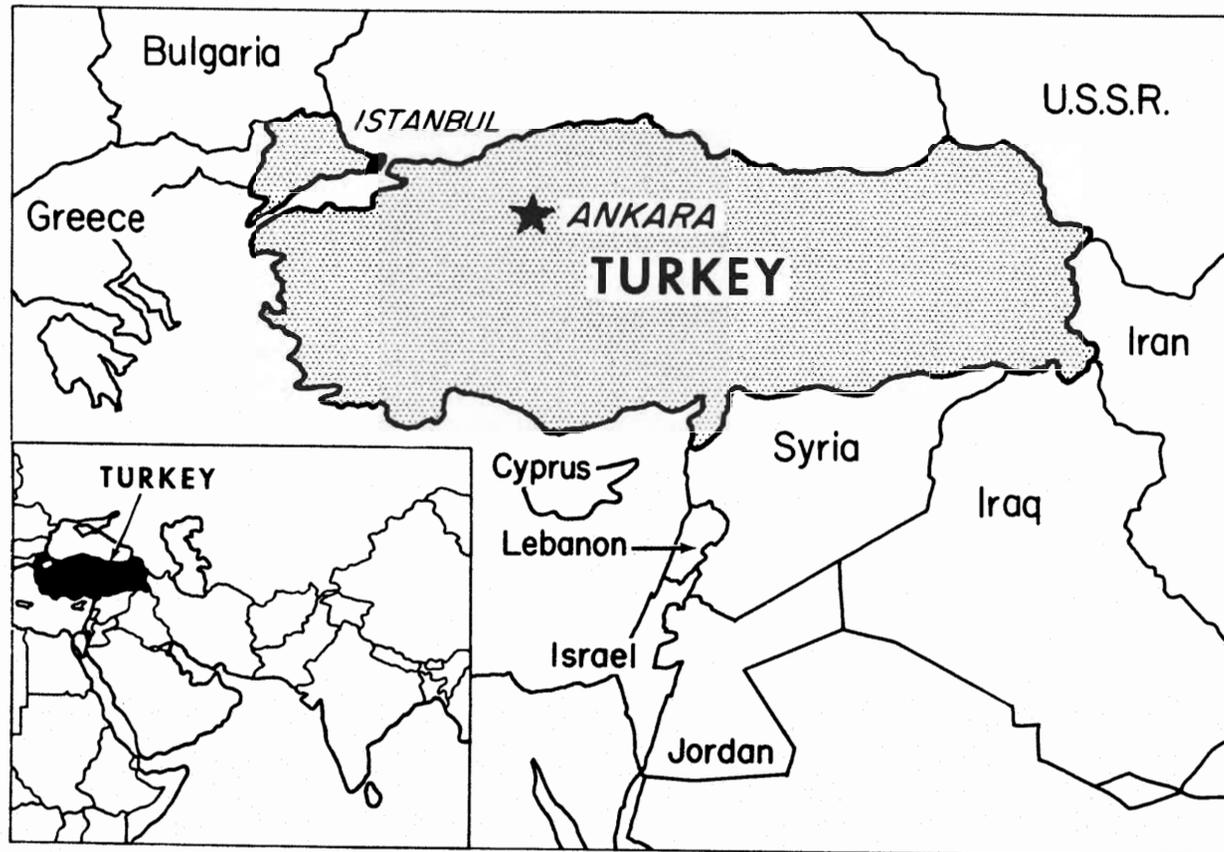
Host Country Role and Procurement Source: The project will be implemented by EP/WAPDA. The GOP will provide the equivalent of \$2,168,000 in local currency for the project through the A.I.D. Trust Fund and the EP/WAPDA budget.

The project is designed to develop knowledge of East Pakistan's groundwater resources and to create a Pakistani organization qualified to undertake work of this type. The importance of the project through its potential impact on the agricultural sector is expected to be substantial. On much of East Pakistan's 22 million cultivated acres only one crop is grown. Lack of adequate water for irrigation is one major constraint preventing multiple cropping since surface water is available only on a seasonal basis. Effective utilization of the Province's groundwater, to which this project is essential, will permit multiple

All goods and services financed by this loan will be procured from the United States.

1/ **Two-Step Terms:** The loan funds will be relent by the GOP to EP/WAPDA on terms and conditions acceptable to A.I.D. Submission of these terms is a condition precedent to disbursement.

Turkey



BASIC DATA

Population (<i>millions – mid-1969</i>).....	34.4
Annual Growth Rate (<i>percent</i>).....	2.6
Area (<i>1000 square miles</i>).....	301
Population Density Per Square Mile.....	114
Agricultural Land as % of Total Area	67
Percent of Labor Force in Agriculture.....	72

Per Capita GNP (<i>dollars</i>).....	360*
Life Expectancy (<i>years</i>).....	48
People Per Doctor	2,820
Literacy Rate (<i>percent</i>)	47
Students as % of 5-19 Age Group	39
<i>(Primary and Secondary)</i>	

* - 1969 in 1968 prices.

TURKEY

PROGRAM SUMMARY (In millions of dollars)				
	FY 1968 Actual	FY 1969 Actual	FY 1970 Estimated	FY 1971 Proposed
Development Loans	68.0	40.0	40.0	50.0
Technical Assistance	4.2	3.5	3.7	4.2
Total A.I.D. Assistance	72.2	43.5	43.7	54.2

U.S. AID OBJECTIVES

A.I.D. is working with the other members of the Organization for Economic Cooperation and Development (OECD)-led Turkey Consortium --who now provide over 80% of all Consortium aid--to help Turkey become an economically self-sustaining nation within a free and democratic society.

The A.I.D. program supports Turkish efforts to sustain a high level of economic growth with relative price stability and helps Turkey concentrate on the major problems now preventing that growth momentum from becoming self-sustaining. The major areas of concern are:

- increased foreign exchange earnings from tourism and exports, particularly livestock and fresh fruits and vegetables;
- increased agricultural output to provide for domestic needs and realize the export potential of the country's varied agricultural resources;
- modernization of business, industry and government management practices by introducing new managerial and organizational techniques, providing U.S. training to private and governmental leaders, and assisting educational institutions and other organizations to train a labor force needed for continued industrialization.

PROBLEMS AND PROGRESS

The Turkish economy has done remarkably well in recent years. The record since the early 1960's sharply contrasts with Turkish performance in the late 1950's when rampant inflation and political turmoil retarded economic growth.

The Turkish Government's determination to bring about social and economic improvements took form in the First Five-Year Plan (1963-1967). With greater political stability, economic development progressed at a rapid rate and private enterprise began to grow.

The Demirel Government, first elected to office in 1965, and returned to power in the national elections held in October 1969 is currently faced with a parliamentary crisis over its 1970 budget. While this makes uncertain the near term outlook, it should not prevent the strengthening of democratic institutions which has characterized Turkish political development in the 1960's.

The Second Five-Year Plan which began in 1968 places heavy emphasis on private enterprise, and continues the work begun under the First Plan. Preliminary figures for 1969 (the second year of the Second Five-Year Plan) show that Turkey is sustaining the high rate of economic progress achieved during the First Five-Year Plan.

- Fixed investment rose 12%, which is approximately the average rate of increase of the First Plan.
- Domestic savings rose to over 18% of GNP and financed 91% of fixed investment, whereas at the start of the First Plan domestic savings were only 12% of GNP and financed only 73% of fixed investment.
- Government revenues increased by 22%, rising to 20% of GNP, compared with only 15% of GNP in 1964.
- Exports increased by \$34 million, whereas they had declined in 1968.
- Industrial production increased 9% compared to the First Plan average of 9.6%.
- GNP increased 6.8% in 1969, equal to the First Plan average.

Despite this rate of progress, some stubborn economic problems persist. They are largely the product of such rapid growth. Between 1962 and 1967 wholesale prices rose approximately 4.4% per year. In recent years Government efforts to realize the Plan's investment target increased the strain on domestic resources and increased the inflationary pressures. New legislation increasing import and corporation taxes was passed in March 1969 to reduce the budget deficit but, nevertheless, wholesale prices rose approximately 6% in 1969.

TURKEY

As the domestic investment program has gained momentum, the shortage of foreign exchange has become a major deterrent to continued economic progress. Imports must increase at a relatively rapid rate for Turkey to sustain a high rate of economic growth, but foreign exchange earnings have not kept pace with the country's demand for imports, despite an almost \$50 million improvement in export earnings and workers' remittances in 1969. As a result, in November 1969 the Turkish Government had to suspend for the second consecutive year issuance of import licenses on a variety of items in order to finance the backlog of licenses previously issued.

FY 1971 PROGRAM

For FY 1971 a Development Loan program of \$50 million and a Technical Assistance program of \$4.2 million are planned.

U.S. assistance will continue to be a part of the multilateral effort of aid donors in the OECD-sponsored Consortium (in 1969, for example, the U.S. contributed \$40 million to a total Consortium commitment of \$280 million) and will relate to Turkish efforts to sustain the development momentum and to increase export earnings.

A proposed \$40 million production loan will provide imports of essential raw materials, spare parts and investment goods. This loan, added to similar assistance from other donors and to the expected increase in Turkey's own earnings, will support the increase in essential imports needed to use to best advantage Turkey's growing industrial and agricultural capabilities. Without this loan support, imports cannot expand sufficiently to meet growth needs for both production and investment. Inflationary pressures would increase. The pace of development will decline thus delaying Turkey's progress toward independence of outside aid.

Although the other Consortium members, particularly the IBRD, are giving increased attention to project assistance, some U.S. project lending will be required. Loans for development banks, the Eregli Steel Mill and fruit and vegetable processing are among those to be considered.

The proposed Technical Assistance program will continue to concentrate on agriculture and education. In agriculture, the focal point will be increased production of foodgrains, while in education, emphasis will be on longer term manpower development.

Agriculture

Uneven performance in the agricultural sector continues to be one of the critical restraints on Turkish development. In spite of many technical and managerial improvements, bad weather the last two years has forced the importation of wheat under PL 480 and any repetition of such conditions would necessitate additional imports.

A.I.D. assistance concentrates on increasing cereals output by the introduction of new seed varieties and improved practices and diversifying and expanding agricultural exports by developing new marketing techniques, increasing farmer participation in development programs and encouraging agro-business enterprise.

The 1968 harvest from the A.I.D.-assisted new wheat seed program vividly demonstrated to thousands of farmers the potential benefits of adopting new agricultural inputs and techniques. Credit policies were revised; fertilizer usage was increased; new equipment was introduced and research was accelerated. The lessons learned by farmers and government will have a lasting effect on Turkish agricultural development.

The seed varieties commercially introduced by the wheat program were only applicable to the irrigated and high rainfall areas of Turkey where approximately 20% of Turkish wheat is grown. This program is essentially self-sustaining now and our attention has turned to the Anatolian Plateau where 80% of Turkish wheat is grown. This is an arid winter wheat area requiring more extensive modification of farming practices and seed testing than was necessary to introduce the warm weather varieties to the coastal area. In FY 1971, a three-man Oregon State University contract team will continue to work with A.I.D. advisors and Turkish agriculturists in adapting new wheats to the Plateau. Primary emphasis will be on devising and adapting new techniques and equipment to conserve moisture and control weeds.

If successful, the program of improved practices and better seeds could make it possible to produce a wheat crop annually in many parts of the Plateau where farmers now leave fields fallow in alternate years. This Technical Assistance activity, which will cost \$224,000 in FY 1971, will be coordinated with long-range research programs of the regional wheat breeding center which the Rockefeller Foundation is establishing in Turkey.

TURKEY

Efforts to increase private enterprise and farmer participation in development also characterize the On-Farm Water project, which will cost \$183,000 in Technical Assistance in FY 1971. This activity focuses on training Turkish technicians to help farmers prepare their fields for optimum use of irrigation water. A.I.D. technicians have developed prototypes of simple land-shaping equipment, and a number of private firms have begun to manufacture and sell this machinery. Farmers participate in both the planning and application of these new techniques which have reduced land-levelling costs by almost two-thirds. The concept of farmers' participation has been so enthusiastically adopted by both the Government and the farmers that the project is to be extended from the pilot region to an additional six regions (out of a total of 16) in March, 1970.

Stimulation of private enterprise is also the focus of A.I.D.'s efforts to diversify and increase fresh fruit and vegetable exports. With A.I.D. advisory assistance private Turkish groups have conducted market surveys, developed production standards, production facilities, and transportation and marketing operations necessary to compete in the European markets. Preliminary estimates indicate foreign exchange earnings increased approximately \$2.8 million during a five month period in 1969 over 1968. As a direct result of this success, research on new and improved varieties of fruits and vegetables is being carried out, additional marketing cooperatives are being formed and several private enterprises to can fruits and vegetables are being established.

Manpower Development

Increasing productivity requires a growing supply of skilled manpower, development of new and improved managerial techniques and strengthening of the institutional apparatus. Technical Assistance funds will provide foreign training, consultants and contract services.

The primary emphasis is on developing professional and technical skills by assisting education at the university level. The Middle East Technical University and Hacettepe University will

continue to receive assistance to train faculty, develop curriculum and improve facilities. These universities are a major source of technical, scientific, and medical manpower. Since 1967 A.I.D. Development Loans totaling \$9 million and Technical Assistance grants of \$1,677,000 have been provided to these institutions to cover the foreign exchange costs of advisory services, visiting professors, training of Turkish staff in the United States and procurement of books and equipment. In FY 1971, an additional \$625,000 of Technical Assistance is proposed to continue this program.

The Academies of Economics and Commerce, similar to U.S. business schools, will also continue to receive Technical Assistance amounting to \$548,000 in FY 1971 with the emphasis shifting from foreign advisory services to faculty development through training in the United States. The Academies are almost the only source of middle-level managerial talent in Turkey.

A.I.D. is helping improve the Government's capacity to guide manpower development through a project focused on developing new planning and budgeting techniques within the Ministry of Education. Technical Assistance totaling \$257,000 is proposed for this purpose in FY 1971.

Training of private business and industrial leaders will be supported by broadening government participant training programs to include more private participants selected by the Turkish Educational Foundation. A.I.D. will help the Foundation provide U.S. training in various business fields for young Turks who will return to assume management positions. Other leadership training programs, including trade union leadership, will continue. In FY 1970 these training programs received \$736,000 in Technical Assistance and in FY 1971, \$674,000 is planned.

A portion of the Technical Assistance program is also concentrated on strengthening the managerial capacity of governmental agencies. Increased emphasis will be given to improving budget processes. Tax administration improvement will continue. In addition, A.I.D. will continue to support the State Institute of Statistics in its effort to apply modern techniques of data gathering and evaluation.

SUMMARY OF PROGRAM BY FUNCTION

(Dollar Amounts in Thousands)

TABLE II

Country: TURKEY

Category	Actual FY 1969				Estimate FY 1970				Proposed FY 1971		
	Total	Tech. Coop.	Supp. Assist.	Conting. Fund	Total	Tech. Coop.	Supp. Assist.	Conting. Fund	Total	Tech. Coop.	Supp. Assist.
Development Loan Program	40,000	XXX	XXX	XXX	40,000	XXX	XXX	XXX	50,000	XXX	XXX
Programs Other than Devel. Loan											
Project Assistance											
U.S. Technicians	2,041	2,041			2,234	2,234			2,422	2,422	
Participants	1,460	1,460			1,455	1,455			1,788	1,788	
Commodities	11	11			11	11			10	10	
Other Costs	-	-			-	-			-	-	
Total Project Assistance	3,512	3,512			3,700	3,700			4,220	4,220	
Method of Financing											
Project Assistance											
Direct A.I.D.	2,327	2,327			2,463	2,463			2,413	2,413	
Other Agency	302	302			233	233			273	273	
Contract	883	883			1,004	1,004			1,534	1,534	
Program Assistance											
Total Other than Devel. Loan	3,512	3,512			3,700	3,700			4,220	4,220	
Total Assistance	43,512	XXX	XXX	XXX	43,700	XXX	XXX	XXX	54,220	XXX	XXX

NUMBER OF U.S. TECHNICIANS (Program Overseas)

TYPE OF TECHNICIAN	On Duty At Close of Year		
	Actual FY 1969	Estimate FY 1970	Proposed FY 1971
A.I.D. employed	48	46	49
Participating agency	9	6	6
Contractor technicians	10	25	30
Total	67	77	85

NUMBER OF PARTICIPANTS

TYPE OF PARTICIPANT	Programmed During Year		
	Actual FY 1969	Estimate FY 1970	Proposed FY 1971
Non-contract	285	248	231
Contract	103	92	116
Total	388	340	347

Country: TURKEY

PROJECT DATA

TABLE III

PROJECT TITLE On Farm Water Development	ACTIVITY Agriculture and Natural Resources	FUNDS TA
PROJECT NUMBER 277-11-120-426	PRIOR REFERENCE Page 174, FY 1970 PDB	INITIAL OBLIGATION FY: 1968
		SCHEDULED FINAL OBLIGATION FY: 1972

Project Target and Course of Action:

TOPRAKSU (Farm Irrigation and Soil Conservation Agency) needs to improve its ability to manage irrigation systems so as to assure equitable water distribution and efficient usage by farmers through techniques such as leveling of irrigated fields, design and construction of on-farm water distribution structures and systems, selection of crops responsive to intensive irrigated farming, and improve methods of cultivation. Turkey has constructed dams and canals to furnish water to about four million acres. The lack of the above services results in wastage of a large part of this water which ideally should be available to the country's best land.

TOPRAKSU has two multi-million dollar projects, financed by the IBRD and the European Investment Bank, to carry out land leveling and on-farm water distribution in two major irrigated areas. Both projects use large-scale equipment to do all of the land leveling and construction work. In contrast to these projects which can be carried out efficiently only on large plots of land, this project is aimed at introducing small, locally-produced equipment so that small farmers can improve their own individual plots with advice of TOPRAKSU experts. The thrust of this project is to train TOPRAKSU staff to provide the technical and

organizational assistance to farmers so that they can use efficiently the available irrigation water. Thus a dynamic, service relationship between TOPRAKSU and the private sector, farmers, manufacturers, distributors and contractors is being developed.

Progress to Date:

Turkish private farm equipment makers, with A.I.D. help, have designed and produced three types of low-cost scrapers which can be drawn by farm tractors. Farmers and contractors have purchased about 225 of these small scrapers to date and the Government has bought another 75 for demonstration. These scrapers, which permit fields to be leveled and prepared for irrigation at a cost significantly less than under the large projects mentioned above, have been a major factor in increasing TOPRAKSU's ability to level land by 50% this year.

Handbooks, technical guidelines, and construction standards have been prepared and published by TOPRAKSU with the assistance of USAID and USDA/Soil Conservation Service Technicians. Completed publications are: Earth Dam Standards, Sprinkler Irrigation Standards, Land Leveling Standards, Drainage Standards, and Concrete Quality Control Standards. Demonstrations of improved irrigation practices, including land leveling,

U.S. DOLLAR COSTS (In Thousands)							PRINCIPAL CONTRACTORS/AGENCIES				
	Obligations	Expenditures	Unliquidated	Cost Components	OBLIGATIONS						
					Estimated FY 1970			Proposed FY 1971			
					Direct AID	Contract Other Agency	Total	Direct AID	Contract Other Agency	Total	USDA/Soil Conservation Service
Through 6/30/69	537	445	92								
Estimated FY 70	212	203									
Estimated through 6/30/70	749	648	101	U.S. Technicians	74	40	114	77	19	96	
		Future Year Obligations	Estimated Total Cost	Participants . . .	97	-	97	86	-	86	
				Commodities . . .	1	-	1	1	-	1	
Proposed FY 71	183	162	1,094	Other Costs . . .	-	-	-	-	-	-	
				Total Obligations	172	40	212	164	19	183	

PROJECT TITLE	PROJECT NUMBER
On Farm Water Development	277-11-120-426

improvement of water distribution systems and improved cultural practices, have been carried out on private farms.

Training of staff and demonstrations of land leveling are taking place in a pilot region in Southwestern Turkey. The results of the Buyuk Menderes region demonstration project (including increased yields, lower labor and water costs, more timely operations, etc.) have been so dramatic that farmers are demanding similar help from TOPRAKSU, even though they know they have to bear the full cost of the land shaping and earth moving, whereas the Government has borne the cost under the EIB and IBRD projects.

Perhaps the most significant event during the past year was that at a conference of TOPRAKSU officials September 1969 who reviewed progress of all projects conducted by the agency, it was decided to introduce on-farm-water concepts into six additional regions (out of a total of 16) in March 1970. Forty-two TOPRAKSU staff members trained in the Buyuk Menderes region have been assigned to these additional regions.

FY 1971 Program:

The practical field training for TOPRAKSU technicians and sub-professional personnel in on-farm-water system design and irrigation farming will be extended to all sixteen regions of Turkey by Turks previously trained under this project. Demonstrations to introduce the new equipment and to improve farmer and local private contractor capability to do land development work will be emphasized. Great care must be used since these additional regions have a wider range of climatic, soil and land-use conditions than were found in the initial project area. The four American technicians will move from region to region to assist in solving organizational, training, equipment and agronomic problems at the provincial as well as at the central levels. Seminars and area

demonstrations on equitable and efficient water management systems will continue to be used as a tool in the development of more effective operational techniques for managing small cooperative irrigation projects. Emphasis will be placed in the training course for TOPRAKSU technicians on making maximum use of the farmer's own capabilities.

U.S. Technicians:

Three direct-hire technicians (water resources, agricultural engineering and equipment) and one agronomist from the Soil Conservation Service (PASA).

Participants:

Eight TOPRAKSU technicians and officers in agriculture economics, farmer organization, pumping for irrigation, soil classification, operation and maintenance of equipment and of irrigation systems. Two participants will begin academic training in the U.S. Training also will be given to seven high level officers in organization and management, development planning and project implementation. One academic participant will be extended for one year.

Commodities:

Demonstration supplies and technical publications.

Country: TURKEY

PROJECT DATA

TABLE III

PROJECT TITLE Cereals Production	ACTIVITY Agriculture and Natural Resources	FUNDS TA
PROJECT NUMBER 277-11-130-444	PRIOR REFERENCE Page 176, FY 1970 PDB	INITIAL OBLIGATION FY: 1967
		SCHEDULED FINAL OBLIGATION FY: 1973

Project Target and Course of Action:

In 1967 the Turkish Government undertook a major program to bring cereals production into balance with population growth and rising incomes; and to diversify agricultural production in order to increase farm incomes, export earnings and to improve nutrition.

As a first step the Turkish Government, with A.I.D. assistance, introduced semi-dwarf Mexican (spring) wheat in the warm coastal areas. Results of these initial efforts have been most encouraging. This coastal effort is being followed by a program to test, select and introduce higher yielding, winter wheat varieties and modern agricultural practices on the colder Anatolian Plateau, Turkey's traditional bread-basket. As this program progresses it will be possible for the Turks to shift attention to the introduction and improvement of livestock and other crops. In this way the country will be able to achieve and maintain self-sufficiency in food and feed grains and, at the same time, increase the production of meat, fruits and vegetables.

Progress to Date:

In the fall of 1968, 1.6 million acres were planted with the high yielding seed varieties compared to

415,000 acres in fall 1967, the first year the new wheat seed was used. Because of bad weather and a shortage of fertilizer, yields of all wheat varieties were lower in 1969 than in 1968, requiring substantial wheat imports. However, over a million tons more wheat were harvested than would have been produced had only native varieties been used; new varieties yielded about 38 bushels per acre in 1969 compared to 15 bushels per acre from native varieties.

With the continuing success of the new wheats in the coastal areas, more attention has been given to the problems facing wheat producers on the Plateau. Higher yielding varieties for use in this region have been identified and seeds are being produced by both contract farms and the State seed farms. Over 60% of the seed wheat being produced on the State farms during the fall-winter of 1969-70 is of high yielding U.S., Mexican, Turkish and Russian varieties that were unknown in Turkey prior to 1967.

U.S. technicians, working with Turks, have established six sites for testing and demonstrating improved water conservation and tillage methods needed to grow the new varieties on the Plateau. Seed drills capable of placing the seed deep enough to be in contact with moist

U.S. DOLLAR COSTS (In Thousands)				OBLIGATIONS			PRINCIPAL CONTRACTORS/ Oregon State University		
	Obligations	Expenditures	Unliquidated	Estimated FY 1970		Proposed FY 1971			
				Direct AID	Contract/Other AGENCIES	Total		Direct AID	Contract/Other AGENCIES
Through 6/30/69	511	329	182						
Estimated FY 70	167	215							
Estimated through 6/30/70	678	554	134						
		Future Year Obligations	Estimated Total Cost						
Proposed FY 71	224	450	1,352	150	17	167	122	102	224

PROJECT TITLE	PROJECT NUMBER
Cereals Production	277-11-130-444

soil are being tested, and extensive tests are being made of several different weed control methods involving chemical, mechanical and cultural techniques.

FY 1971 Program:

U.S. technicians will continue to provide some guidance to the improved seed program in the coastal areas, but emphasis will be on the Plateau through improved (1) moisture conservation, (2) planting methods, (3) weed control, (4) timing and (5) varieties. The adaptive research and extension assistance to accomplish the above will be continued.

U.S. Technicians:

Three direct-hire technicians (research agronomist, general agronomist and agricultural engineer) and one short-term agronomy consultant. Three full-time contract advisors (moisture conservation, weed control and extension) and two short-term consultants on special problems from O.S.U.

Participants:

Five participants will start one-year programs in adaptive research, farm management, agricultural engineering and seed production techniques.

Contract:

To fund the contract with Oregon State University for one year and to fund a short-term personal services contract for an agronomy advisor.

Country: TURKEY

PROJECT DATA

TABLE III

PROJECT TITLE Agriculture Administration and Planning PROJECT NUMBER 277-11-190-594	ACTIVITY Agriculture and Natural Resources	FUNDS TA	
	PRIOR REFERENCE -	INITIAL OBLIGATION FY: 1971	SCHEDULED FINAL OBLIGATION FY: 1975

Project Target and Course of Action: This project focuses on two aspects fundamental to Turkey's agricultural development efforts: (1) the formulation of sound policies for the agricultural sector and (2) the organization and management of government programs and projects to implement these policies. Drawing on our experience with the wheat program and, more specifically, our work in Denizli Province, the major focus will be on the Central Ministry staff in Ankara -- particularly the Agricultural Planning and Economic Research Office (AP&ERO), which performs the program review and evaluation function for the Ministry.

In order to infuse a degree of flexibility into the compartmentalization of present Turkish Government organizations, the project strategy envisions a combination of (a) providing ideas, advice and training to the leadership of key directorates at the Central Ministry level, (b) forming several "task forces" composed of GOT's decision makers, together with selected U.S. expertise to formulate and implement new policy directions and to develop new projects to support these policies, (c) demonstrating new administrative as well as agricultural techniques through appropriate central and provincial activities and giving central and provincial offices an opportunity to observe and evaluate the results of the demonstrations.

The substantive issues with which this project will be concerned include the following:

1. Allocation of resources within agriculture.
2. Price, tax, subsidy, credit and other policies as they relate to agriculture.
3. Stocks management and marketing, with special attention to exports.
4. Organization and management for developing, introducing and evaluating new programs and innovations.
5. Decentralization of government management functions and development of local institutions for coordination and farmer management.

The proposed course of action of the project has four related components:

A. Direct Advisors: Working with the AP&ERO as well as other sections of the Ministry -- one agricultural economist concentrating on areas concerning agricultural policy and one general agriculturist assisting with organization, management and implementation, will work full time on the substantive areas outlined above. They will be supported as necessary by short-term advisors.

B. Institutional Support in Agricultural Administration: Using either a PASA or a U.S. university consortium, a series of executive seminars in management, organization and problem solving will be conducted, which would be limited to high-level officials including assistant secretaries, general directors and above. Based on the experience derived from these seminars, a full year academic program would be developed in the U.S. for

U.S. DOLLAR COSTS (In Thousands)				Cost Components	OBLIGATIONS						PRINCIPAL AGENCIES United States Department of Agriculture	
	Obligations	Expenditures	Unliquidated		Estimated FY 1970			Proposed FY 1971				
					Direct AID	Other Agency	Total	Direct AID	Other Agency	Total		
Through 6/30/69												
Estimated FY 70				U.S. Technicians				71	46	117		
Estimated through 6/30/70				Participants . . .				93	-	93		
		Future Year Obligations	Estimated Total Cost	Commodities . . .				-	-	-		
Proposed FY 71	210	690	900	Other Costs . . .				-	-	-		
				Total Obligations				164	46	210		

PROJECT TITLE	PROJECT NUMBER
Agriculture Administration and Planning	277-11-190-594

middle management.

C. Institutional Support for Agricultural Economics: Discussions involving the Director of AP&ERO and some of the agricultural economists at the Turkish universities indicate a strong interest in coordinating the institutional resources for agricultural economic research within Turkey. These led to a request to establish an exchange relationship between this group of local institutions and an agricultural university in the U.S. The U.S. university relationship is conceived to include:

1. Development of the planning, analysis and evaluation capabilities of the AP&ERO so that it can function as the primary agricultural economics institution within the Ministry of Agriculture.

2. The provision of technical expertise to appropriate universities or other institutions on a consultant basis in agricultural economics to support selected research or analytical studies.

3. The exchange of five to ten graduate students annually between Turkish and American institutions, including the AP&ERO.

D. Special Policy Task Forces: To date discussions with the GOT have identified two policy questions to be addressed via the task force approach:

1. Fertilizer Policy: In 1966 the TVA assisted the Turkish State Planning Organization with a study of Turkish fertilizer requirements. This report is already outdated. Using the 1966 report as a starting point, this activity would serve as a combination training and survey program to both update the old report and to develop within Turkey the capability for keeping it current.

2. Agricultural Prices - Price Intervention - Product Handling and Storage: There is interest in three aspects of the problem: (a) reducing Government costs, (b) letting the market forces play a more prominent part in the farmers' decision-making process, and (c) reducing storage losses, considering quantity and quality losses as well as normal operational costs. Current thinking centers on the use of an intra-agency team composed of senior Government of Turkey officials and several U.S. experts.

FY 1971 Program: The initial phase of executive and middle management training programs will be developed in cooperation with the U.S. Department of Agriculture and a U.S. educational institution. Task forces composed of senior officials in the Turkish Government and U.S. experts will be assembled to review and recommend modifications of critical government policies such as: agricultural pricing, fertilizer production/import requirements, and product handling and storage.

U.S. Technicians: Two direct-hire advisors, an agricultural policy economist and an agricultural advisor will be headquartered in Ankara. Approximately 20 man-months of short-term consultancy services in agriculture policy and in agriculture economics research will be funded in FY 1971.

Participants: Seventeen new participants, including five academic trainees in agricultural economics and twelve short-term participants in administration and management, are programmed.

Country: TURKEY

PROJECT DATA

TABLE III

PROJECT TITLE	ACTIVITY	FUNDS	
		TA	SCHEDULED FINAL OBLIGATION
Industrial Relations Training	Labor		
PROJECT NUMBER 277-13-410-356	PRIOR REFERENCE Page 178, FY 1970 PDB	INITIAL OBLIGATION FY: 1961	FY: 1972

Project Target and Course of Action: This project encourages responsible labor participation in Turkish development by assisting the Confederation of Turkish Trade Unions (Turk-Iş) to promote and maintain worker education as a major activity, and to strengthen orientation of national and local trade union leaders in the theory and practice of democratic trade unionism.

The project finances organized visits by Turk-Iş trade union leaders to U.S. unions, industries and community organizations, and provides technical advice in support of an extensive union leadership training program in Turkey.

Progress to Date: U.S. assistance has supported the tremendous growth of the Turkish trade union movement which has made spectacular gains since 1963 when the Government of Turkey passed legislation giving the workers the right to organize and to bargain collectively. Turk-Iş has grown from 200,000 in 1961 to approximately 800,000 in 1969, and now represents 90% of organized labor. In this period Turk-Iş (a) acquired a permanent headquarters building; (b) developed a well-organized administrative staff; (c) hired and trained a competent staff in fields of education, press and publicity, research, and accounting; and (d) established a permanent Trade Union Labor College.

Approximately 600 Turk-Iş unionists, including practically all federation leaders, a majority of national union leaders and close to a quarter of local officers, have benefited from U.S. participant programs.

Turk-Iş and its affiliates have sponsored basic labor education programs varying from one or two days to two weeks in length for approximately 70,000 union leaders and rank and file members. Since 1966, a total of 496 leaders have attended the one to three months long resident training programs conducted by the Labor College.

FY 1971 Program: A U.S. advisor will continue to assist the Turk-Iş labor education efforts, coordinate the selection of labor participants and assist in their orientation.

U.S. Technicians: One Labor Education Advisor to work with Turk-Iş and to maintain liaison with the Ministry of Labor.

Participants: Thirty-three Turk-Iş leaders for six to eight weeks participant training in the U.S.

U.S. DOLLAR COSTS (In Thousands)						PRINCIPAL CONTRACTORS/ AGENCIES				
	Obligations	Expenditures	Unliquidated	Cost Components	OBLIGATIONS					
					Estimated FY 1970		Proposed FY 1971			
					Direct AID		Contract/ Other Agency	Total		
Through 6/30/69	1,445	1,304	141							
Estimated FY 70	125	220								
Estimated through 6/30/70	1,570	1,524	46							
		Future Year Obligations	Estimated Total Cost							
Proposed FY 71	102	55	1,727	Total Obligations	125	-	125	102	-	102
				U.S. Technicians	21	-	21	21	-	21
				Participants . . .	104	-	104	81	-	81
				Commodities . . .	-	-	-	-	-	-
				Other Costs . . .	-	-	-	-	-	-

Country: TURKEY

PROJECT DATA

TABLE III

PROJECT TITLE Labor Relations Services	ACTIVITY Labor	FUNDS TA	
PROJECT NUMBER 277-15-490-397	PRIOR REFERENCE Page 179, FY 1970 PDB	INITIAL OBLIGATION FY: 1966	SCHEDULED FINAL OBLIGATION FY: 1972

Project Target and Course of Action: To develop effective labor dispute settlement procedures based on mediation and voluntary arbitration which would contribute to holding costly work stoppages to a minimum while preserving basic strike and bargaining rights assured by Turkish law. This is to be accomplished by building support among government, business and labor leaders for these procedures.

Progress to Date: Proposals have been made by labor, management and government to improve the existing system by establishing organizations to provide mediation and arbitration services. These proposals have not yet received support from all parties. But there have been developments which indicate an encouraging change in these attitudes.

Labor and management leaders are now discussing the formation of a jointly supported private organization, which would serve as a source of experienced private conciliators and arbitrators, and provide a focal point for training in these skills.

Efforts to improve the existing legal procedures were delayed by the fall 1969 national elections and the subsequent appointment of a new Minister of Labor. The new Minister created a committee to formulate modifications in the present Collective Bargaining Law, including the dispute settlement procedures. Also, the Ministry is considering a proposal prepared by the U.S. advisor and his Turkish counterparts recommending desirable changes in

practice, pending revision of the law.

Participant training in the U.S., and local seminars have provided training in mediation and arbitration techniques. These skills are being successfully applied in the resolution of disputes by conciliators under existing procedures, and by government officials who are called upon for supplemental mediation assistance. There has been an increase in the number of contracts providing for voluntary arbitration of grievance disputes.

FY 1971 Program: The primary efforts will continue to be directed at developing Turkish institutions designed to provide dispute settlement services and develop skilled mediators and arbitrators. Emphasis will be placed on developing local leadership for these organizations, and formulating and conducting mediator and arbitrator development programs.

U.S. Technicians: One Labor Management Relations Advisor.

Participants: Two three-man groups to study arbitration and mediation procedures for three months; and four participants to study administration of mediation and arbitration organizations in the U.S. for six months.

U.S. DOLLAR COSTS (In Thousands)				Cost Components	OBLIGATIONS						PRINCIPAL EXECUTING AGENCIES
	Obligations	Expenditures	Unliquidated		Estimated FY 1970			Proposed FY 1971			
					Direct AID	Contract Other Agency	Total	Direct AID	Contract Other Agency	Total	
Through 6/30/69	243	168	75								U.S. Department of Labor
Estimated FY 70	84	125									
Estimated through 6/30/70	327	293	34	U.S. Technicians	-	27	27	-	35	35	
		Future Year Obligations	Estimated Total Cost	Participants ...	57	-	57	43	-	43	
				Commodities ...	-	-	-	-	-	-	
				Other Costs ...	-	-	-	-	-	-	
Proposed FY 71	78	66	471	Total Obligations	57	27	84	43	35	78	

Country: TURKEY

PROJECT DATA

TABLE III

PROJECT TITLE	ACTIVITY	FUNDS	
Academies of Economics and Commerce	Education	TA	
PROJECT NUMBER 277-11-770-357	PRIOR REFERENCE Page 180, FY 1970 PDB	INITIAL OBLIGATION FY: 1962	SCHEDULED FINAL OBLIGATION FY: 1973

Project Target and Course of Action: The Academies are the major source of accounting, commercial, financial and administrative middle management personnel for both the public and private sectors. This project assists four Academies, at Adana, Ankara, Eskisehir and Istanbul, modernize and improve the quality of their curriculum and teaching. The fifth A.I.D.-supported Academy, at Izmir, became part of Ege University last year and no longer receives U.S. assistance.

During its first four years (1963/4 - 1966/7), the project concentrated on the introduction of modern concepts through classroom teaching and the preparation of text materials by visiting professors from Michigan State University.

The chief thrust of the second stage is to raise the quality of young faculty members at the Academies, by sending competitively selected candidates for faculty appointment to study for master's degrees in business administration. During this second phase two MSU professors will advise the Academies on the progressive implementation of curriculum and administrative reform plans.

Progress to Date: Reforms introduced by MSU advisors at all Academies include new courses in marketing, statistics, management, and personnel management. Ten new textbooks have been written (or co-authored) by MSU advisors, and eight have been published. Junior faculty

members who have returned from the U.S. with MBA degrees have been instrumental in persuading senior members to adopt the proposed changes. In the present academic year plans have been developed to strengthen graduate research programs. Eight Academy administrators were sent to the U.S. for a short-term study and observation on college-level business education.

FY 1971 Program: The two MSU professors will continue to advise Academies on course structure, teaching methods, administration; will supervise graduate research; and will institute a program to collect Turkish case material for classroom use. Twenty-five participants will return during this period and will strengthen the quality of the faculties. An equal number of new participants will be sent to the States to begin graduate study.

U.S. Technicians: Two full-time contract advisors and six man months of consultants services from MSU.

Participants: Twenty-nine new participants will begin academic training in the U.S. to obtain M.B.A.s: 14 to MSU (contract) and 15 to other Universities (direct). 48 participants (38 funded under the MSU contract, and 10 at other Universities) continue for a second year.

Contract: To fund Michigan State University contract for one year.

U.S. DOLLAR COSTS (In Thousands)							PRINCIPAL CONTRACTORS/ XXXXXXXX				
	Obligations	Expenditures	Unliquidated	Cost Components	OBLIGATIONS						
	Through 6/30/69	1,524	1,152		372	Estimated FY 1970		Proposed FY 1971			
						Estimated FY 70		428	365		Direct AID
Estimated through 6/30/70	1,952	1,517	435	U.S. Technicians	-	157	157	-	153	153	Michigan State University
		Future Year Obligations	Estimated Total Cost	Participants ...	71	200	271	172	222	394	
				Commodities ...	-	-	-	-	1	1	
				Other Costs ...	-	-	-	-	-	-	
Proposed FY 71	548	675	3,175	Total Obligations	71	357	428	172	376	548	

Country: TURKEY

PROJECT DATA

TABLE III

PROJECT TITLE National Education Research and Planning	ACTIVITY Education	FUNDS TA
PROJECT NUMBER 277-11-680-398	PRIOR REFERENCE Page 182, FY 1970 PDB	INITIAL OBLIGATION FY: 1967
		SCHEDULED FINAL OBLIGATION FY: 1972

Project Target and Course of Action: The Ministry of Education designated the Research and Planning Office (RPO) in 1968 as its central research and planning agency. U.S. assistance will help the RPO train its professional staff, design a data system and initiate operational programs to gather and supply information for the Ministry's use in formulating national educational policies, plans and program budgets. U.S. assistance will also help RPO cooperate with the State Planning Organization in developing educational plans for Turkey's Third Five Year Plan. An effort is also being made to link the RPO to University programs in the field of education.

Progress to Date: A joint A.I.D.-Ministry of Education project review was held in April 1969. The review resulted in the Minister's approval of 16 additional permanent staff positions for the Research and Planning Office (RPO). Establishing these positions was a significant, although belated, breakthrough toward achieving project goals. These 16 staff members have now been chosen; 12 are enrolled in intensive English language classes so that they can be sent to the U.S. for training. Three participants departed in June 1969 and four additional ones will begin training in the U.S. in June 1970. The 12 remaining participants are expected to begin U.S. training in September 1970. The delay caused by the lack of qualified English speaking candidates requires a one year extension of the project.

Four new RPO members are now enrolled in MSU-led seminars designed to introduce them to the principles of educational planning, program budgeting and electronic data processing. Both Hacettepe University and Ankara University have expressed an interest in incorporating similar courses into their curricula. The intensive study of the present data collection system has been completed. The report is now in the hands of the Hacettepe University Computer Center, which will provide the data processing services for RPO. In cooperation with the A.I.D.-assisted budget reform group in the Ministry of Finance, the RPO staff has assumed responsibility for designing a program budgeting system for the Ministry of Education. A study of regional distribution of secondary school services has begun.

FY 1971 Program: Studies and in-service training relating to efficient data management will be continued, together with programs relating to computer application. September 1970 has been set as a testing date for the Computer Center's pilot model for collection, storage and retrieval of data on the secondary school system. Program budgeting practices for the Education Ministry based upon electronic data processing will be further developed with the cooperation of the A.I.D./Ministry of Finance budget team. Curricula proposals for developing a local base of instruction in educational research and planning will be discussed with Hacettepe and Ankara Universities.

U.S. DOLLAR COSTS (In Thousands)							PRINCIPAL CONTRACTORS				
	Obligations	Expenditures	Unliquidated	Cost Components	OBLIGATIONS						
					Estimated FY 1970			Proposed FY 1971			
					Direct AID	Contract/Other Agency		Total	Direct AID	Contract/Other Agency	Total
Through 6/30/69	419	252	167		-	-	-	-	-	-	Michigan State University
Estimated FY 70	169	156		U.S. Technicians	-	129	129	-	128	128	
Estimated through 6/30/70	588	408	180	Participants ...	-	40	40	-	129	129	
		Future Year Obligations	Estimated Total Cost	Commodities ...	-	-	-	-	-	-	
				Other Costs ...	-	-	-	-	-	-	
Proposed FY 71	257	215	1,060	Total Obligations	-	169	169	-	257	257	

Country: TURKEY

PROJECT DATA (Continued)

TABLE IIIa

PROJECT TITLE	PROJECT NUMBER
National Education Research and Planning	277-11-680-398

U.S. Technicians: Two full-time contract technicians. Short-term advisors will be provided as required to assist in activities undertaken by the RPO. MSU campus staff will continue to participate in analysis and evaluation of project activities.

Participants: Fifteen participants will begin training in education planning, evaluation and computer science. Four will continue their second year in the U.S.

Contract: To fund the Michigan State University contract for one year.

PROJECT TITLE Higher Education Development	ACTIVITY Education	FUNDS TA	
PROJECT NUMBER 277-11-660-445	PRIOR REFERENCE Page 183, FY 1970 PDB	INITIAL OBLIGATION FY: 1968	SCHEDULED FINAL OBLIGATION FY: 1972

Project Target and Course of Action:

This project represents part of A.I.D.'s support of the improvement of Turkish higher education by assisting the Middle East Technical University (METU) and Hacettepe University (HU) to implement their five-year development plans. These plans envision a doubling (METU) and tripling (HU) of enrollment by 1972. Both administratively and academically they represent a significant departure from the traditional approach of Turkish universities and, as such, hopefully will serve as models for the modernization of Turkish higher education institutions.

METU is governed by an independent board of trustees and has an openminded approach to course structure and content. It is a relatively new institution (founded in 1957) with an international character: the language of instruction is English; close to 10% of the students are non-Turks, and about 15% of the faculty are foreign. Most METU students are in the engineering and science faculties, but there is also a liberal arts faculty and a school of economics and management. The UN, OECD and Ford Foundation are also furnishing visiting professors and graduate training for younger faculty members.

Hacettepe started in 1958 as a teaching hospital and medical school which distinguished itself by developing

a multi-disciplinary approach to curriculum, creating an integrated approach to medical education that has achieved international recognition, and emphasizing community service by running eight rural and urban health centers as part of its training program. It is providing the initial staff and leadership for the new Medical Faculty at Atatürk University at Erzurum (whose medical school has a Development Loan, and whose agricultural school was helped by the Technical Assistance Program). In 1967, it became a full university with faculties of science, humanities and education as well as medicine. While instruction is in Turkish, all students are required to have a working knowledge of English, French or German.

The A.I.D. program for these two institutions combines grant and loan funds. Loans of \$4.5 million each were made in FY 1967 to METU for books and equipment, and to HU for books, equipment, visiting professors, and faculty training in the U.S. (See Loan No. 277-H-080 for METU and Loan No. 277-H-083 for HU.)

This project finances: (1) the foreign exchange cost of training METU staff in the U.S., and American professors teaching at METU, and (2) a contract to provide both HU and METU with the services of Overseas Educational Services to (a) review with the universities their overall development programs and yearly implementation plans,

U.S. DOLLAR COSTS (In Thousands)							PRINCIPAL CONTRACTORS/ K008KX008			
	Obligations	Expenditures	Unliquidated	Cost Components	OBLIGATIONS					
					Estimated FY 1970			Proposed FY 1971		
Through 6/30/69	1,138	233	905		Direct AID	Contract X000XX X000XX		Total	Direct AID	Contract X000XX X000XX
Estimated FY 70	252	542			U.S. Technicians	-	252	252	-	425
Estimated through 6/30/70	1,390	775	615	Participants ...	-	-	-	-	200	200
		Future Year Obligations	Estimated Total Cost	Commodities ...	-	-	-	-	-	-
Proposed FY 71	625	1,235	3,250	Other Costs ...	-	-	-	-	-	-
				Total Obligations		252	252		625	625

Overseas Educational Service

Country: TURKEY

PROJECT DATA (Continued)

TABLE IIIa

PROJECT TITLE	PROJECT NUMBER
Higher Education Development	277-11-660-445

including the proposed utilization of A.I.D. loan and grant-financed books, equipment and personnel; (b) recruit American professors to serve at the two universities; (c) arrange programs in U.S. institutions for Turkish staff. The Turkish Government is financing all construction costs and local operating costs at both universities.

Progress to Date:

Initially this project was delayed by inadequate administration of procurement by the universities and delays in recruiting personnel. Assistance is being provided by OES consultants to improve planning and implementation. A decision has also been taken to have a full-time OES representative stationed in Turkey.

The success of this project depends on continuing to strengthen the administrative capacity at the two universities. Consultants have been provided to both universities for the purpose of reviewing development plans for a number of faculties and for approving purchases of supplies, equipment and books under the A.I.D. loans.

Recruitment of visiting professors and participant placement for the current academic year (1969-1970) was substantially accelerated. OES was able to recruit 15 visiting professors for METU compared to a total of seven professors last year. 32 participants from METU are now studying in the U.S. compared to 18 last year.

However continued progress at METU is uncertain. The University is recruiting a new Rector and a procurement staff. There has been some difficulty in finding a successor to the Rector suitable to both faculty and students.

FY 1971 Program:

OES will continue to recruit American visiting staff members and will continue placing participant fellows in

U.S. universities. On the expectation that the administrative difficulties mentioned above will be resolved, OES plans to recruit 20 visiting professors for METU for the 1970-1971 academic year. Short-term consultants will be sent to assist both universities with long-range plans and to approve equipment, books and supply purchases.

U.S. Technicians:

Twenty visiting professors will be recruited for METU. Three short-term consultants will be sent to work with all faculties of METU.

Participants:

A total of 42 participants will be studying in U.S. universities.

Contract:

The contract with OES will be extended for an additional 12 months and will provide funds for 20 visiting professors from METU, participant training and the costs of OES services for METU and Hacettepe Universities.

Country: TURKEY

PROJECT DATA

TABLE III

PROJECT TITLE Development Statistics	ACTIVITY Public Administration and Public Safety	FUNDS TA
PROJECT NUMBER 277-11-740-364	PRIOR REFERENCE Page 186, FY 1970 PDB	INITIAL OBLIGATION FY: 1962
		SCHEDULED FINAL OBLIGATION FY: 1973

Project Target and Course of Action: This project assists the Turkish Government to develop within the State Institute of Statistics (SIS) a reliable system for collecting, processing, evaluating and publishing economic, demographic, and social data required for economic social development programming and for government and business policy making and administration. U.S. assistance is directed toward improving statistical methods and procedures, establishing data processing capabilities, and upgrading the required professional and technical staff.

Progress to Date: We have been helping the State Institute of Statistics (SIS) since it was established in 1962. In this period SIS has restructured its organization and has increased its staff from 719 to 1009. The Government of Turkey has increased SIS's budget as its operations have grown and has provided a new and fully-equipped headquarters facility. To strengthen staff capabilities, AID helped set up the Statistical Training Center in 1965 which has provided training for SIS and other agencies staff. Over 170 professional employees have been trained at the Center. Over 60 of these have received further academic training in the U.S., and 38 have returned to assume subject area and management positions.

Concurrently with the institution-building effort, assistance has been focused on improving SIS programs and methods of data-gathering. Over the past few years, assistance has been given in agricultural land-use, labor force and demographic surveys. Our help has been related to

gathering data in important areas of family planning, export crops, and cereals production. A major emphasis is on developing sampling methods and introducing data processing. Based on experience gained, SIS will undertake its first major survey based on the sampling technique in the agricultural census scheduled for 1970. Efforts are also being made to improve the methodology used in the 1970 Population Census. To improve processing and availability of data gathered, AID advisors will help SIS install this year the basic unit of a medium-size computer (UNIVAC 9400) which was purchased by SIS funds. AID will help SIS develop its capability to operate and manage the modern computer facility.

FY 1971 Program: AID advisors will help SIS apply modern statistical techniques in carrying out the 1970 Agricultural and Population Censuses. Short-term advisors will help set up the new computer facility for use in these censuses.

U.S. Technicians: Three Bureau of Census full-term advisors: demography and population census specialist; census geographer; and agricultural statistics expert. Short-term specialists in data processing, sampling and quality control.

Participants: Six new participant starts in statistics, demography, national accounts and foreign trade. Eight academic participants will be extended. Four SIS staff members for short-term training in management.

U.S. DOLLAR COSTS (In Thousands)				OBLIGATIONS						PRINCIPAL AGENCIES
	Obligations	Expenditures	Unliquidated							Bureau of Census
Through 6/30/69	1,055	967	88	Estimated FY 1970			Proposed FY 1971			
Estimated FY 70	193	215		Direct AID	Other Agency	Total	Direct AID	Other Agency	Total	
Estimated through 6/30/70	1,248	1,182	66	-	101	101	-	94	94	
		Future Year Obligations	Estimated Total Cost	92	-	92	99	-	99	
				-	-	-	-	-	-	
				-	-	-	-	-	-	
Proposed FY 71	193	189	1,630	92	101	193	99	94	193	
				Total Obligations						

Country: TURKEY

PROJECT DATA

TABLE III

PROJECT TITLE Development Administration Training	ACTIVITY Public Administration and Public Safety	FUNDS TA
PROJECT NUMBER 277-15-995-396	PRIOR REFERENCE Page 187, FY 1970 PDB	SCHEDULED FINAL OBLIGATION FY: 1973
	INITIAL OBLIGATION FY: 1966	

Project Target and Course of Action:

This project finances training primarily in management and economics in areas not directly associated with other specific projects nor available in Turkish universities. Turkey lacks the managers required for development. Many young professional Turks with university technical training who have demonstrated qualities of intelligence and leadership can greatly enhance their contribution to the country's development through one or two years of graduate-level work in management and economics. Increased emphasis, particularly for private sector participants, will be placed upon developing the trained manpower needed to prepare Turkey to operate within the framework of a more open and competitive economy.

In the public sector promising government employees are nominated by their ministries and selected by an inter-ministerial committee chaired by the State Planning Organization with A.I.D. participation.

Priority consideration is given to nominations of employees from government agencies who (a) have a broad influence on economic development but are weak in management, (b) play a major role in the development of the private sector or (c) have responsibilities for activities accorded high priority, e.g., family planning.

In the private sector, participants are selected through nation-wide competitive examinations and interviews conducted by the Turkish Education Foundation (TEF) and A.I.D. The Turkish Education Foundation was established in 1967 by 235 leading businessmen, educators and public servants to provide local scholarships for worthy students. Under this project the TEF finances the screening, selection and international travel costs of students chosen for U.S. training.

Progress to Date:

To date, 57 participants have completed their training and have returned to Turkey. They occupy responsible positions in: health and family planning institutions (8); government economic enterprises (8); government ministries (19); universities (17); State Planning Organization (3); and rural electric cooperatives (2).

The majority of the government ministries' participants have been Ministry of Finance personnel who have returned to positions ranging from Section Chief to Assistant Director General. These returned participants continue to make a significant impact on the capability and attitudes of the Ministry of Finance. As they develop and reach positions of greater responsibility the Ministry should be a stronger force for modernization. An example of this development role has been the support

U.S. DOLLAR COSTS (In Thousands)				PRINCIPAL CONTRACTORS/AGENCIES						
	Obligations	Expenditures	Unliquidated	Cost Components	OBLIGATIONS					
					Estimated FY 1970			Proposed FY 1971		
					Direct AID	Contract/Other Agency	Total	Direct AID	Contract/Other Agency	Total
Through 6/30/69	665	288	377							
Estimated FY 70	575	286								
Estimated through 6/30/70	1,240	574	666	U.S. Technicians	-	-	-	-	-	-
				Participants ...	575	-	575	550	-	550
				Commodities ...	-	-	-	-	-	-
				Other Costs ...	-	-	-	-	-	-
Proposed FY 71	550	277	2,067	Total Obligations	575	-	575	550	-	550

PROJECT TITLE Development Administration Training	PROJECT NUMBER 277-15-995-396
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within the Ministry for the Budget Improvement and Tax Administration projects.

FY 1971 Program:

The project will continue to assist the modernization of both the public and private sector primarily by providing graduate-level training in management and economics in the U.S. for qualified candidates.

Participants:

Forty-five government and private sector participants will be programmed to begin the first of two years graduate-level training in the U.S., and an additional 30 participants will continue their training programs for a year. Also planned are two one-year training programs in family planning and 20 man-months of short-term training in such areas as industrial management.

Country: TURKEY

PROJECT DATA

TABLE III

PROJECT TITLE Tax Administration		ACTIVITY Public Administration and Public Safety		FUNDS TA	
PROJECT NUMBER 277-11-750-433		PRIOR REFERENCE Page 185, FY 1970 PDB		INITIAL OBLIGATION FY: 1967	
				SCHEDULED FINAL OBLIGATION FY: 1971	

Project Target and Course of Action: The project aims to create an effective tax organization using modern procedures in order to maximize revenue yields. To accomplish these aims A.I.D. is assisting the Government of Turkey: (1) to develop and test new procedural methods and processes in areas of income and corporate tax revenue administration and (2) to create a training institution within the Revenue Directorate for continued development of its staff.

A.I.D. is providing assistance through advisors from the Internal Revenue Service to help the Turkish Government overcome inefficiencies existing in its present tax administration. A recent review of the project indicated that important progress is being made in modernizing administration and increasing efficiency in pilot areas. The procedures adopted as a result of the pilot activities are being applied on a broader basis by the Revenue Directorate. The Government also has proposed a tax administration reform bill which creates a single organization with exclusive responsibility within the Ministry of Finance. The bill is pending in the Parliament.

Progress to Date: Efforts to improve administration of the tax laws have been underway since 1966. New procedures, work systems and programs in the functional areas of tax administration (e.g. returns processing, revenue

accounting, delinquent accounts collection, audit examination of returns) are being developed. These procedures are being tested in four Ankara tax offices. Some of the results of these pilot tests are: (1) the new system of mathematical verification of individual tax returns installed in two districts (representing less than 10 per cent of total tax returns) resulted in the recovery last year of over \$250,000 equivalent. One in 25 returns examined resulted in additional revenue; (2) the new accounting system enables top management for the first time to check financial reports received from local tax offices against individual taxpayer accounts; and (3) the new procedures for delinquent accounts installed in the four district offices yielded a 26 per cent reduction in the growing inventory of delinquent accounts and the recovery of approximately \$500,000 in delinquent taxes.

These and other successful improvements have encouraged the Turkish Government to decide to install these procedures throughout the revenue service. Within eighteen months, over 70 per cent of the revenue transactions are scheduled to be brought under the new systems. To improve staff skills the first of seven planned regional training centers has been opened. In 1969 over 450 employees of the revenue service, including 45 instructors, received training in the new procedures through courses prepared with the assistance of A.I.D. advisors.

U.S. DOLLAR COSTS (In Thousands)							PRINCIPAL AGENCIES				
	Obligations	Expenditures	Unliquidated	Cost Components	OBLIGATIONS						
					Estimated FY 1970			Proposed FY 1971			
Through 6/30/69	363	346	17	U.S. Technicians Participants . . .	Direct AID	Other Agency	Total	Direct AID	Other Agency	Total	Internal Revenue Service
Estimated FY 70	101	95			Commodities . . .		65	65		79	
Estimated through 6/30/70	464	441	23	Other Costs . . .		36	-	36	29	-	
		Future Year Obligations	Estimated Total Cost		-	-	-	-	-	-	
Proposed FY 71	108	-	572	Total Obligations	36	65	101	29	79	108	

Country: TURKEY

PROJECT DATA (Continued)

TABLE IIIa

PROJECT TITLE	PROJECT NUMBER
Tax Administration	277-11-750-433

If the reform bill is passed, or similar action occurs, there would be a dramatic breakthrough in the field of tax administration with the creation of an institutional framework for sustained improvement of tax administration. If the Turkish Government takes affirmative action, A.I.D. will consider extending this project to help carry out the modernization of the Revenue Directorate.

FY 1971 Program: The IRS advisors will continue to provide technical assistance in connection with the planned expansion of the new procedures and work systems in the field offices at the provincial and district levels. Also the IRS team will provide guidance for initiation of four additional regional training centers in early FY 1971.

U.S. Technicians: Two long-term IRS technicians - a senior tax advisor and a specialist in audit and administrative appeals procedures. Also, six man-months of short-term assistance will be provided.

Participants: Two senior officials will attend the special course given by the Harvard Law School's International Tax Program and two others will come to the U.S. for academic training in management and data processing. In addition, two officials will make short-term observation/on-job-training tours of IRS facilities in the U.S.

Country: TURKEY

PROJECT DATA

TABLE III

PROJECT TITLE Budget Administration Improvement	ACTIVITY Public Administration and Public Safety	FUNDS TA	
PROJECT NUMBER 277-11-750-448	PRIOR REFERENCE Page 189, FY 1970 PDB	INITIAL OBLIGATION FY: 1970	SCHEDULED FINAL OBLIGATION FY: 1973

Project Target and Course of Action: To introduce program budgeting and improved budget administration on a government-wide basis. This requires the design of a modern system of budget classification, management, and control which can be made operable in the Turkish environment. It will involve the reorganization of the General Directorate of Budget and Fiscal Control in the Ministry of Finance, and the budget units of major agencies, and the redesign of the budget document and annual draft budget law. A.I.D. is drawing on the expertise of New York State's Budget Division which provides on-the-job training for Turks in Albany and releases members of its staff to serve as short-term consultants.

Progress to Date: A major experimental effort in program budgeting has begun. In 1969 the Prime Minister issued an executive order instructing all government agencies to establish separate program budget units. In December 1969, the Minister of Finance presented the FY 1970 Budget Document to Parliament which included sample program budgets paralleling the traditional budgets for 42 of the 46 major agencies. Last year only five sample budgets were prepared. This year's program budget data cover 83 percent of the General Budget. During a transitional period, dual budgets will continue to be prepared to help educate budget personnel in the new process.

This effort is supported by a major training program to develop staff. The General Director of the Budget, a former A.I.D. participant, has created a Budget Reform group of 62 persons to assist in the organizational, analytical and training aspects. Nine members are also

former participants. Another ten each completed short-term on-the-job training in program budgeting at the New York State Budget Division last year. In-country training sessions have started in Ankara with over 155 budget and fiscal staff employees attending. U.S. advisors have helped prepare instructional materials which are in Turkish and are used in the training program. A library on program budgeting has been set up.

FY 1971 Program: A.I.D. will continue to assist the General Directorate develop its organization and staff to carry out program budgeting, establish procedures for systematically determining priorities among programs, and preparing budget reporting procedures. About 100 additional central budget, ministry and other agency personnel will receive in-country training.

U.S. Technicians: One direct-hire technician. Five short-term consultants from the State of New York for three to five months in budgetary accounting and reporting, organization, and procedures and management.

Participants: Fifteen budget and fiscal officials will receive on-the-job training for three months in the State of New York's Budget Office or similar budget agencies. Four budget officials will start one year academic training programs in budgeting and systems analysis.

Contracts: To fund twenty man-months of short-term consultants from the State of New York.

Commodities: Demonstration materials.

U.S. DOLLAR COSTS (In Thousands)				OBLIGATIONS						PRINCIPAL CONTRACTORS/ Personal Services
	Obligations	Expenditures	Unliquidated	Estimated FY 1970			Proposed FY 1971			
				Direct AID	Contract/	Total	Direct AID	Contract/	Total	
Through 6/30/69	-	-	-							
Estimated FY 70	117	76		24	40	64	25	50	75	
Estimated through 6/30/70	117	76	41	52	-	52	51	-	51	
		Future Year Obligations	Estimated Total Cost	1	-	1	1	-	1	
Proposed FY 71	127	265	509	-	-	-	-	-	-	
				Total Obligations	77	40	117	77	50	127

Country: TURKEY

PROJECT DATA

TABLE III

PROJECT TITLE Technical Support	ACTIVITY Technical Support	FUNDS TA	
PROJECT NUMBER 277-15-999-000	PRIOR REFERENCE Page 191, FY 1970 PDB	INITIAL OBLIGATION FY: 1952	SCHEDULED FINAL OBLIGATION FY: Continuing

Project Target and Course of Action: This project provides general support for the USAID program. Specifically, it supports supervisory, technical and secretarial personnel for developing and implementing both technical assistance and capital projects. Also long-term specialists in development economics, tourism and project analyses. The Turkish Government provides funds for local costs of all projects and USAID operations, including quarters and education allowances, international and local travel, and local personnel salaries.

Commodities: Office machines and parts, office and residential supplies, and technical and scientific books.

Contract: Consultants under personal services contracts.

FY 1971 Program:

U.S. Technicians: Thirty-nine direct-hire Americans will be funded: nine technical division chiefs and their assistants; two family planning advisors; five in economic planning, program analysis and operations; twelve in development loan analysis and engineering; two in implementation of commodity imports; one in general services; two in participant training program; and six secretaries. Four long-term specialists to advise the private sector in such fields as management, capital markets, tourism, and accounting systems will serve under personal services contracts. About fifteen man-months of short-term contract specialists, primarily in economic planning and project evaluation and development, will assist USAID and the Turkish Government on aspects of the technical and capital assistance programs outside the competence of on-board personnel.

U.S. DOLLAR COSTS (In Thousands)				OBLIGATIONS						PRINCIPAL CONTRACTORS Personal Services
	Obligations	Expenditures	Unliquidated	Estimated FY 1970			Proposed FY 1971			
				Direct AID	Contract	Total	Direct AID	Contract	Total	
Through 6/30/69	12,840	12,708	62							
Estimated FY 70	1,068	1,009								
Estimated through 6/30/70	13,908	13,787	121							
		Future Year Obligations	Estimated Total Cost							
Proposed FY 71	1,015	Cont'd	Cont'd	911	157	1,068	891	124	1,015	
				Cost Components						
				U.S. Technicians						
				Participants ...						
				Commodities ...						
				Other Costs ...						
				Total Obligations						

COUNTRY: TURKEY

PROJECT DATA SUMMARY
(Dollar Amounts in Thousands)

TABLE IV
Part 2

Project Title	Project Number	FY of Initial Obligation	FY of Scheduled Final Obligation	Through FY 1969			Estimated FY 1970			Proposed Program FY 1971		Future Year Obligations	Estimated Total Cost
				Obligations	Expenditures	Unliquidated Obligation 6/30/69	Obligations	Expenditures	Unliquidated Obligation 6/30/70	Funds	Amount		
<u>Agriculture</u>													
Integrated Agriculture Services	277-11-190-425	1960	1970	1,388	1,331	57	209	192	74				1,597
Forest Resources Development	277-11-170-252	1955	1967	1,368	1,367	1	-	1	-				1,368
<u>Education</u>													
Technical and Vocational Training	277-11-610-346	1962	1968	1,071	1,033	38	-	38	-				1,071
<u>Public Administration</u>													
Public Management Services	277-11-730-298	1958	1969	2,347	2,286	61	-	61	-				2,347
Administration Training Institutions	277-11-770-331	1959	1967	961	937	24	-	24	-				961
<u>Health & Sanitation</u>													
Nursing Education	277-15-540-289	1955	1966	114	112	2	-	2	-				114
Total													
TC													
SA													
DL (grants)													

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: TURKEY

Borrower: Government of Turkey

Funds: Development Loan

Title and Number of Loan: MTA Aerial Mineral Survey 277-H-052	
Date Authorized: 5/28/64	Date Signed: 11/24/64
Loan Status as of 12/31/69	Loan Terms
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$320	Grace Period 10 yrs
Disbursed 229	Interest Rate
Repayments 0	Grace 3/4%
Interest Collected 5	Thereafter 2%
	Currency of Repayment .. U.S. \$

of anomalies proved the equipment is operating effectively. The AFMAG-electromagnetic system has been delivered but has not yet been installed. Installation has been delayed due to technical problems which are now resolved. Installation is expected in the third quarter of CY 70.

Financial Status: The loan is fully committed. Disbursements are expected to continue until the geophysicist-interpreter completes his services. His work begins when the equipment is installed on the airplane, which should take approximately six months.

Host Country Role and Procurement Source: The Government of Turkey has supplied MTA with an Aerocommander 680-F airplane in which the magnetometer has been installed. In addition, the Government of Turkey is making available the local currency equivalent of \$560,000.

Purpose of Loan: To finance the foreign exchange costs of aerial mineral surveying equipment, related ground follow-up equipment and services to enable the Mineral Research and Exploration Institute (MTA) to employ magnetic and electromagnetic methods in its mineral exploration program.

Equipment and services are being procured in the United States.

This equipment will permit MTA to explore areas of the country quickly and economically in its search for deposits of iron ore, copper, lead, zinc and related materials.

The loan finances the purchase of two magnetometers, an AFMAG-electromagnetic system, ancillary air and ground equipment; installation of the airborne equipment in a fixed-wing aircraft purchased by MTA with its own resources and training of MTA personnel in the use of the equipment.

Physical Status: McPhar Geophysics, Inc., of Buffalo, Barringer Research, Inc., of East Natick, Mass., and Aero Services, Inc., of Philadelphia, are supplying the equipment. The magnetometers have been delivered and installed on the aircraft. MTA has completed several aerial surveys using only the airborne magnetometers; ground follow-up

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: TURKEY

Borrower: Government of Turkey

Funds: Development Loan

Title and Number of Loan:	
Gokcekaya Dam (Ciceroz) 277-H-053	
Date Authorized: 6/15/64	Date Signed: 12/2/64
Loan Status as of 12/31/69	Loan Terms
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$20,400	Grace Period 10 yrs
Disbursed 7,325	Interest Rate Grace 3/4%
Repayments -	Thereafter 2%
Interest Collected 76	Currency of Repayment .. U.S. \$

46% complete.

On October 6, 1969 the diversion tunnel was closed by subsidence of the overlying rock, and the river flow passed through the construction site. Tunnel reconstruction is underway. The estimated delay to the project is one year. Completion date for the project is now scheduled for January, 1973. Orders valued at \$16.2 million have been placed in the U.S. for generators, turbines, powerhouse crane, construction equipment, transformers, gates, other equipment.

Financial Status: The loan is 75% committed and 36% disbursed.

Host Country Role and Procurement Source: Previously estimated local currency requirements to complete the project of TL 375,300,000 (\$41.7 million equivalent) will likely be exceeded by the extra local currency costs of tunnel reconstruction and the resultant delay in project completion. The Borrower has certified that necessary funds will be made available to D.S.I. under a disbursement schedule acceptable to A.I.D.

All of the equipment, materials and services to be financed by the loan will be procured in the United States.

Purpose of Loan: To finance foreign exchange costs of constructing and placing in initial operation the Gokcekaya Dam together with a 300 MW hydroelectric power plant on the Sakarya River and a 380 KV plant substation and switchboard. Originally the transmission facilities were to be approximately 97 miles of 154 KV transmission lines. After further feasibility study, taking into account the imminent undertaking of the Keban Dam hydroelectric project, it was decided to raise the transmission line voltage to 380 KV and to tie directly to Istanbul and Ankara. (See A.I.D. Loan 277-H-060 for the transmission line loan.)

Physical Status: Ebasco Services of New York has entered into an engineering supervision and consulting services contract with the Turkish State Hydraulic Works (DSI). An award was made in October, 1966 to Italstrade-Torno of Milan, Italy for the construction contract at considerably less than the only responsive bid received from a U.S. company. The construction contract requires \$9.3 million in foreign exchange in currencies which are being provided by the European Investment Bank. A.I.D. is providing \$4.8 million for U.S. construction equipment. As of December 31, 1969 construction was about

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: TURKEY

Borrower: Government of Turkey

Funds: Development Loan

Title and Number of Loan: Turkish State Railway, CTC 277-H-054	
Date Authorized: 6/25/64	Date Signed: 11/24/64
Loan Status as of 12/31/69	Loan Terms
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$4,400	Grace Period 10 yrs
Disbursed 3,356	Interest Rate 3/4% Thereafter 2%
Repayments -	Currency of Repayment .. U.S. \$
Interest Collected 50	

equipment originally considered necessary for the completion has been delivered with the exception of spare parts and maintenance equipment. Progress has been delayed because of design changes which were necessary in order to adapt equipment of U.S. and European manufacture into the existing railway signalling system. The decision to electrify and double track the section between Haydarpasa and Arifiye has delayed installation of the CTC system for that section until track laying is completed. The decision by TCDD to replace steel ties with concrete ties in a short section of the track will resolve one of the difficult design problems. TCDD estimates that about 70 percent of the system can be operational by the third quarter of 1970.

Financial Status: The loan is 100% committed and 77 percent disbursed. All A.I.D. financed goods and services are expected to be delivered by June 30, 1970. Approximately \$900,000 is being deobligated from the loan.

Host Country Role and Procurement Source: The Government of Turkey has provided the local currency equivalent of over \$4 million and \$1.7 million equivalent of exchange is planned for the procurement of equipment in Europe.

All equipment, materials and services financed by the loan are being procured in the United States.

Two Step Terms: The funds made available by the loan were relent to the TCDD, with repayment within 20 years at 3½ percent interest per year, and 5 years grace.

Purpose of Loan: To partially finance the foreign exchange costs of procurement and installation of a Central Traffic Control and Communications system on the railroad line between Istanbul (Haydarpasa) and Ankara, and a communications system on the line between Ankara and Zonguldak.

Installation of these facilities will result in improved train performances, increased track capacity and greater safety on train operations on Turkey's most heavily travelled rail lines.

To further increase efficiency, the Turkish State Railways (TCDD), the government-owned entity which manages and operates railway facilities in Turkey, has procured diesel locomotives (foreign exchange costs financed by Loan 277-H-033), and is installing heavy gauge rails on the line between Ankara and Haydarpasa.

Physical Status: Westinghouse Air Brake Company (WABCO) under a contract with TCDD, is providing the equipment, engineering, technical supervision of installation and training of TCDD personnel in the United States. All

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: TURKEY

Borrower: Government of Turkey

Funds: Development Loan

Title and Number of Loan:	
Gokcekaya Transmission Lines 277-H-060	
Date Authorized: 5/28/65	Date Signed: 8/27/65
Loan Status as of 12/31/69	Loan Terms 1/
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$5,960	Grace Period 10 yrs
Disbursed 1,466	Interest Rate 1% Grace
Repayments -	Thereafter 2½%
Interest Collected 15	Currency of Repayment U.S. \$

performing tower fabrication and erection has experienced difficulty in meeting tower specifications, but after being required to take out and reset defective work, performance has improved. As of December 1969, about 5 percent of the line construction is complete versus a revised target of about 8 percent. About 88 percent of the capital equipment under this loan is on order (main power transformers to be shipped early in 1970) and virtually all the construction equipment has been shipped. The present completion schedule of the Istanbul-Gokcekaya-Ankara line is March 1972 and for the Istanbul and Ankara substations, it is December 1972.

Financial Status: The loan is 100% committed and 25% disbursed.

Purpose of Loan: To finance the foreign exchange costs of the construction of electrical power transmission lines from the Gokcekaya Dam and Hydroelectric plant to the Northwest Anatolia Grid System and the construction of related substations and facilities including substations at Ankara and Istanbul. This will be in coordination with the Gokcekaya Dam Project (A.I.D. Loan 277-H-053), and the Keban Transmission Project (277-H-063).

Host Country Role and Procurement Source: The local currency cost which is to be met entirely by the Borrower is TL 139,700,000 (approximately U.S. \$16,000,000 equivalent.)

All of the equipment, materials and services to be financed from the loan will be procured from the United States.

Physical Status: In September, 1965 Elektrik Isleri Etut Idaresi (EIE), the Turkish Government Agency responsible for basic planning of electric energy generation and transmission facilities, entered into a contract with Commonwealth Associates Incorporated of Jackson, Michigan for the design and supervision of construction of the 380 kv backbone transmission system described briefly above. Upon completion of certain studies relating to the 380 kv system design parameters, the responsibility for construction of the transmission system and the CAI contract both were assigned to Etibank. As of December 1969, the design work was about 82 percent complete. Line construction schedules have been extended in time due partly to delays in initial operation schedules for Keban and Gokcekaya powerplants. The Turkish contractor

1/ Two-Step Terms: The funds of this loan were relent by the Government of Turkey to Etibank-Turkish Government agency which will construct and own the transmission lines at an interest rate of 3½% per annum, and repayment period of 25 years with a 5 year graceperiod.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: TURKEY

Borrower: Government of Turkey

Funds: Development Loan

Title and Number of Loan:	
Economic & Engineering Studies - 277-H-062	
Date Authorized: 6/26/65	Date Signed: 9/20/65
Loan Status as of 12/31/69	Loan Terms
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$3,600	Grace Period 10 yrs
Disbursed 2,238	Grace 1%
Repayments -	Interest Rate
Interest Collected 27	Thereafter 2½%
	Currency of Repayment .. U.S.\$

being furnished under Loan 277-H-081; and (7) the National Parks Service is furnishing planning assistance to the Turkish National Parks Service toward enhancing Turkey's ability to attract foreign tourists.

Financial Status: The loan is 70% committed and 62% disbursed on individual projects. The remaining funds are being reserved for new projects including those currently being developed in the Ministries of Public Works and Power and Natural Resources.

Host Country Role and Procurement Source: The Borrower will finance all local costs of each specific study financed under the loan.

Purpose of Loan: To finance the foreign exchange costs of undertaking priority economic and engineering studies to assist Turkey in its economic development.

All services financed from the loan will be procured in the United States.

Physical Status: To date seven studies have been approved for financing under this loan: (1) Fertilizer specialists from TVA helped the Turkish State Planning Organization survey Turkey's fertilizer needs and production possibilities; (2) the joint venture of Camp (Boston, Mass.), Harris (New York, N.Y.), and Messara (a private Turkish firm) is completing a final report on a master plan for the proposed water supply and sewage project for the city of Ankara; (3) the firm of Stone & Webster has completed a study of Turkey's needs for future expansion of its electric power system and a plan for implementing this expansion; (4) the International Engineering Company, San Francisco, California studied water development of the Konya-Cuma region; (5) Leeds-Hill-Bechtel Corp. of San Francisco has prepared a Master Plan for the Buyuk-Menderes River; and is completing the final feasibility report on the initial unit of the Buyuk-Menderes Master Plan; (6) the U.S. Geological Survey initiated assistance to the Mineral Research and Exploration Institute (MTA) in mineral exploration and training and further assistance is

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: TURKEY

Borrower: Government of Turkey

Funds: Development Loan

Title and Number of Loan:	
Keban Dam 277-H-063	
Date Authorized: 6/29/65	Date Signed: 8/31/66
Loan Status as of 12/31/69	Loan Terms
(In Thousands of Dollars and Equivalent)	Duration 40 yrs.
Authorized \$40,000	Grace Period 10 yrs.
Disbursed \$15,604	Interest Rate
Repayments -	Grace 1%
Interest Collected 278	Thereafter 2½%
	Currency of Repayment . . U.S. \$

Financial Status: Up to \$155 million equivalent for financing this project has been pledged by foreign lending institutions as follows:

A.I.D.	\$40 million
European Investment Bank (EIB)	40 million equivalent
Germany	20 million equivalent
France	15 million equivalent
Italy	15 million equivalent
World Bank Group	25 million equivalent
	<u>\$155 million equivalent</u>

Purpose of Loan: To finance a portion of the direct and indirect foreign exchange costs of the construction of the Keban Dam and 620 MW hydroelectric power plant on the Euphrates (Firat) River and approximately 1,275 miles of high voltage transmission lines.

Loan agreements have been signed with all of the lenders, including the World Bank. The A.I.D. loan is 62% committed and 39% disbursed. A.I.D. funds have been committed for the design engineering services of EBASCO and Commonwealth Associates, construction equipment and to assist with the indirect foreign exchange costs of this major investment project. The balance of A.I.D. funds will be required for additional construction equipment, consulting services and additional indirect foreign exchange costs.

Physical Status: Detail design work on the dam and powerhouse has been completed by EBASCO Services, Inc. of New York. The civil works contract was awarded to Compagnie de Constructions Internationales, a joint venture of French and Italian firms. Diversion of the Euphrates River through two tunnels successfully took place in November 1967. Project construction was about 38% complete on November 30, 1969. Adverse foundation problems required extensive rectification work. The design slopes of the rockfill structure were flattened to accommodate available quarry material; this increased the volume of fill necessary. Commonwealth Associates, Jackson, Michigan, is performing the detail design and construction supervision of the transmission lines. Completion of the entire project, originally scheduled for January 1971, is now estimated for mid 1973. The delay is principally due to foundation problems and resultant changes in design.

Host Country Role and Procurement Source: The latest estimates available indicate a total cost of approximately \$432 million equivalent for the project. Of the \$432 million the Borrower is providing approximately \$277 million equivalent. No requirement for A.I.D. financing beyond the present \$40 million is anticipated.

In general, all bilateral lenders limit the use of their loans to purchases of goods and services in their country, while the two international banking institutions made their loans available for purchases in their member countries. The A.I.D. loan will finance only U.S. goods and services.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: TURKEY

Borrower: Government of Turkey

Funds: Development Loan

Title and Number of Loan:	
Family Planning Program and Rural Health Service, 277-H-068	
Date Authorized: 6/7/66	Date Signed: 10/4/66
Loan Status as of 12/31/69	Loan Terms
(In Thousands of Dollars and Equivalent)	
Authorized \$2,100	Duration 40 yrs
Disbursed 54	Grace Period 10 yrs
Repayments -	Grace 1%
Interest Collected -	Interest Rate
	Thereafter 2½%
	Currency of Repayment . . U.S. \$

Financial Status: \$350,000 has been committed to cover the TAMS contract. Budgeted items include \$251,000 for vehicle shop equipment and \$300,000 for audio-visual equipment and services. The balance of \$1,199,000 is available for the purchase of vehicles.

Host Country Role and Procurement Source: The Borrower will finance all associated local costs which are estimated to be the equivalent of approximately \$3.6 million.

All goods and services financed by this loan will be procured in the United States.

Purpose of Loan: To finance the foreign exchange costs of providing jeep-type vehicles (to be assembled in Turkey), repair and maintenance equipment for such vehicles, educational equipment, and technical advice related to the vehicles and equipment for Turkey's Rural Health Centers in connection with the country's family planning program.

Physical Status: In November 1968, A.I.D. issued a letter of commitment to finance the contract between the Ministry of Health and Social Welfare and Tippetts-Abbett-McCarthy-Scrutton (TAMS) New York to assist in establishing a Transport Directorate and facilities required for the repair and maintenance of the vehicles. The TAMS team leader arrived in Turkey in February 1969 and other personnel followed in March, September and December. TAMS has prepared bidding documents for the first 650 vehicles and a report recommending implementation of a comprehensive maintenance program. Part of this program is underway.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: TURKEY

Borrower: Government of Turkey

Funds: Development Loan

Title and Number of Loan: Ambarli Power Station Expansion - 277-H-069	
Date Authorized: 6/24/66 Date Signed: 9/17/66	
<small>Loan Status as of 12/31/69</small>	<small>Loan Terms</small>
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$12,300	Grace Period 10 yrs
Disbursed 9,588	Grace 1%
Repayments -	Interest Rate Thereafter 2½%
Interest Collected 64	Currency of Repayment .. U.S.\$

Financial Status: All project funds have been committed and the loan is 77% disbursed.

Host Country Role and Procurement Source: Etibank, the implementing Borrower Agency, has budgeted the equivalent of \$11.4 million for financing the local costs of this project.

All goods and services financed by this loan will be procured in the United States.

Purpose of Loan: To finance the foreign exchange costs of increasing the output of electricity from the Ambarli Thermal power station from 220,000 KW to 330,000 KW by adding a Third 110,000 KW unit.

Physical Status: Etibank is the implementing agency for this project, the consulting engineer is Stearns-Roger of Denver and the general contractor is MWK International of Seattle. Etibank is constructing civil parts of the cooling water system, equipment foundations, buildings and other permanent improvements. MWK is supplying powerhouse structural steel, miscellaneous equipment and services for the installation of the boiler plant, turbine-generators, condenser and all auxiliary powerplant equipment. Practically all the equipment has been delivered, the boiler has been completed and layed up, turbine-generator installation is well along, mechanical and electrical equipment is in place and station service is mostly completed. MWK assures completion by the scheduled date of July 1970 and possibly sooner.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: TURKEY

Borrower: Government of Turkey

Funds: Development Loan

Title and Number of Loan:	
Turkish Coal Industry - 277-H-070	
Date Authorized: 6/24/66	Date Signed: 4/4/67
Loan Status as of 12/31/69	Loan Terms
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$28,100	Grace Period 10 yrs
Disbursed 8,043	Interest Rate Grace 1%
Repayments -	Thereafter 2½%
Interest Collected 63	Currency of Repayment .. U.S.\$

a result, substantial savings in dollar costs of engineering designing and materials are expected to result. Such savings will offset overruns in the costs of other items already purchased. Project completion date is scheduled for 1973.

Financial Status: Loan funds are approximately 50% committed, and 28% disbursed.

Host Country Contribution: Turkish costs of the project are the equivalent of \$75.25 million and have been budgeted by the Borrower.

Procurement Sources: All of the equipment, materials and services to be financed by this loan will be procured in the United States.

Purpose of Loan: To finance the foreign exchange costs of engineering services and equipment for the expansion of lignite production at two mines in Western Turkey by 3.5 million tons per year and bituminous coal production from the Zonguldak region on the Black Sea by 2.4 million tons per year under the supervision of Turkish Coal Enterprises of the Government of Turkey (TKI).

Physical Status: Paul Weir Company of Chicago is providing consulting engineering services under its May 1967 contract with TKI. Equipment procurement has been completed for the two lignite mines at Tuncbilek and Seyitomer. Roberts & Schaefer Company of Chicago completed the Tuncbilek Fine Coal Washery expansion and performance tests were satisfactorily completed in August 1969.

Zonguldak Basin Expansion Program: A contract for the expansion of and additions to the Zonguldak and Catalagzi coal washeries has been signed also between Roberts & Schaefer Company and TKI. An invitation to bid has been published for the Asma Hoisting Installation. TKI, continuing expansion of its capability, has established an effective engineering/design section and is fabricating items such as head frames and shaft installation materials in its own shops using A.I.D.-financed machine tools. As

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: TURKEY

Borrower: Government of Turkey

Funds: Development Loan

Title and Number of Loan: Highway Equipment 277-H-071	
Date Authorized: 6/24/66	Date Signed: 10/4/66
Loan Status as of 12/31/69	Loan Terms
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$15,000	Grace Period 10 yrs
Disbursed 13,900	Interest Rate . Grace . . 1% Thereafter 2½%
Repayments -	Currency of Repayment . . U.S. \$
Interest Collected 96	

Fifteen participants completed their training during the first eight months of 1969 and fourteen more will complete training during the first half of 1970. An additional 25 top management men from Highways Department will participate in management studies and observations during 1970 at various counterpart organizations in the U.S.

Financial Status: The loan is 100 percent committed and 93 percent disbursed. All equipment is expected to be delivered by June 30, 1970.

Host Country Contribution: An estimated \$4 million (equivalent) was spent by the Turkish Highway Department for this project.

Procurement Source: All of the equipment, materials and services to be financed by this loan will be procured from the United States.

Purpose of Loan: To finance foreign exchange costs of purchasing trucks and other equipment to maintain existing roads in Turkey by the Turkish Highway Department. Loan funds will also be utilized to continue the contract with a U.S. consulting firm for Technical Assistance in implementing this project.

Physical Status: Consulting engineering services by Frederic R. Harris Company were completed. A.I.D. approved five groups of equipment for tendering of bids as follows: Group I - automotive equipment; Group II - tractors, motor graders, wheel dozers, loaders; Group III - compressors, rollers, arc welders, generators; Group IV - vibrators, highway striping equipment, parts and engines, generator sets diesel; and Group V - extractors, hydraulic excavators, pile hammers and leads, oil heater. All major equipment items have been procured. All deliveries including spare parts are expected to be completed by June 1970. Participant trainees being funded out of the loan will continue their training in the U.S. until December 1970; they will observe highway construction and maintenance systems and participate in classroom studies related to their specialities.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: TURKEY

Borrower: Government of Turkey

Funds: Development Loan

Title and Number of Loan: Black Sea Copper - 277-H-076	
Date Authorized: 5/17/67	Date Signed: 5/31/68
Loan Status as of 12/31/69	Loan Terms 1/
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$30,500	Grace Period 10 yrs
Disbursed 3,539	Grace 1%
Repayments -	Interest Rate
Interest Collected 11	Thereafter 2½%
	Currency of Repayment U.S.\$

Financial Status: All conditions precedent to disbursements have been met. Letters of Commitment aggregating \$21,075,910 have been issued as of March 1, 1970. Disbursements as of that date aggregate \$11,527,037. IFB's for equipment and services totalling \$25 million have been reviewed and approved. The major portion of the procurement under this loan is expected to be completed by the first quarter of FY 71.

Host Country Role and Procurement Source: The Turkish private sector, represented by leading Turkish banks, has invested over \$17,000,000 for 51% ownership of the Company. The GOT directly and through its official agency for mining and power (Etibank), has contributed a total of \$64 million equivalent in cash and mining properties. It holds a 49% equity interest in the company. That portion of the project utilizing Finnish expertise and licenses is being funded by the GOT. All of the A.I.D.-financed procurement will be from United States source and origin.

Purpose of Loan: To finance the U.S. dollar costs of engineering services and equipment for increasing production of copper ore from the Etibank mines at Murgul and Kure, constructing new ore concentrating plants at Murgul and Kure and a 40,000 ton per year smelter at Samsun, with all ancillary facilities. Export of blister copper should result in substantial foreign exchange earnings.

Physical Status: The new company, Karadeniz Bakir Isletmeleri, formed in May 1968 has developed a staff and has begun to function effectively. Arthur G. McKee Company of San Francisco and their sub-contractor, the Lummus Company of Bloomfield, N. J., are proceeding with design and procurement work. A Finnish Company, Outokumpu, holder of rights to the flash smelting process, are proceeding with their design work on schedule. Stripping of over-burden for the Cakmakkaya mine at Murgul is being carried out by a Turkish contractor and under other local contracts, ground preparation and erection of buildings is going ahead at Samsun and the other sites. Target date for completion of all physical facilities is now September 1971.

1/ **Two-Step Terms:** This is a two-step loan with the company repaying the loan in lira to the Government of Turkey in 15 years at 8% interest.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: TURKEY

Borrower: Government of Turkey

Funds: Development Loan

Title and Number of Loan:	
Ataturk University Medical School - 277-H-077	
Date Authorized: 6/22/67	Date Signed: 10/23/67
<small>Loan Status as of 12/31/69</small>	<small>Loan Terms</small>
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$2,000	Grace Period 10 yrs
Disbursed 1,104	Grace 1%
Repayments -	Interest Rate Thereafter 2½%
Interest Collected 1	Currency of Repayment .. U.S.\$

academic training or short observational visits to U.S. medical institutions.

Financial Status: Loan funds are 100% committed and 55% disbursed.

Host Country Role and Procurement Source: The Government of Turkey is providing approximately \$9,300,000 in local currency for import duties and building renovation and construction. Hacettepe University is providing technical assistance, including the initial teaching staff and subsequent specialized training.

All loan-financed equipment and services will be procured in the United States.

Purpose of Loan: To finance the foreign exchange costs of procurement of medical equipment and supplies for the Ataturk University Medical School at Erzurum and costs of advanced training for medical school staff.

The loan will outfit the medical school and its affiliated teaching hospital with basic medical equipment. This is the major medical facility in eastern Turkey which has a population of 5,500,000. Turkish medical faculty from Hacettepe University (Loan 277-H-083) established the medical school in 1966 and follow a modern approach to teaching. The medical school is expanding the 380-bed Erzurum hospital to a 550-bed teaching hospital. It is also constructing its own classrooms on the Ataturk University campus.

Physical Status: The plans, equipment lists and bidding procedures were approved by Dr. James Tollman and Mr. Richard Bennett of the University of Nebraska. The medical school has purchased all equipment and supplies under the approved list. All the equipment and supplies are expected to be delivered by early CY 70. To date six (6) long-term participants and five (5) short-term participants have been processed for either advance

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: TURKEY

Borrower: Government of Turkey

Funds: Development Loan

Title and Number of Loan: Eregli Steel 277-H-078	
Date Authorized: 6/29/67	Date Signed: 5/15/68
Loan Status as of 12/31/69	Loan Terms 1/
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$14,200	Grace Period 10 yrs
Disbursed 2,168	Interest Rate Grace 1%
Repayments -	Thereafter 2 1/2%
Interest Collected 13	Currency of Repayment .. U.S. \$

Financial Status: Letters of Commitment aggregating \$10.1 million have been opened to cover the costs of engineering and management and supervisory assistance, equipment and supplies. As of March 1, 1970 firm purchase orders and contracts have been placed totalling \$ 7.1 million.

Host Country Role and Procurement Source: The Government of Turkey has loaned more than \$70 million equivalent to date to the project financed by Loan 277-A-020. It will finance the local currency costs of this expansion project by an additional loan equivalent to about \$3 million. The company is providing labor for construction and site preparation. Procurement from A.I.D. dollar loan funds is restricted to United States source and origin.

Purpose of Loan: To finance the U.S. dollar costs of an expansion of the flat product manufacturing facilities of the Eregli Steel Mill and for approximately 160 man-years of management and supervisory personnel.

The proposed expansion financed by this loan will increase the mill's flat product capability by approximately 30 to 40 thousand tons per year. Elements being financed include the expansion and relining of the existing blast furnace, miscellaneous spare parts, material handling equipment, and additions to the tinning line.

Physical Status: Site preparation has proceeded well. The contract for required second oxygen plant has been placed with Air Liquide using French credits. Design engineering and procurement is being carried on by the Koppers Company of Pittsburgh, Penna., under a contract signed on May 17, 1968.

1/ Two-Step Terms: This is a two-step loan with the company repaying the loan in lira to the Government of Turkey in 20 years at 6%.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: TURKEY

Borrower: Government of Turkey

Funds: Development Loan

Title and Number of Loan:	
Middle East Technical University (METU) 277-H-080	
Date Authorized: 6/29/67	Date Signed: 10/23/67
Loan Status as of 12/31/69	Loan Terms
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$4,500	Grace Period 10 yrs
Disbursed -	Grace 1%
Repayments -	Interest Rate Thereafter 2½%
Interest Collected -	Currency of Repayment .. U.S. \$

Purpose of Loan: To finance the foreign exchange costs of books and teaching equipment required for METU's expansion program to double student enrollment to nearly 10,000 by 1972. This is part of an overall program of aid to higher education under which METU has received and will receive grants to finance visiting professors, staff fellowships and consulting services.

METU was established in 1956 and has expanded rapidly. It is a progressive university which teaches in English and offers a high quality of education in engineering, architecture, sciences and arts, and administrative sciences. The University receives most of its financial support from the Turkish Government. The other principal foreign contributors include United Nations Agencies, the Ford Foundation, and CENTO.

Physical Status: In July 1968 AID employed under grant financing the Overseas Educational Services (OES) of New York to provide consulting services, staff recruitment, participant placement and assistance in book and equipment procurement. OES technicians have conferred with METU several times and aided them in the development of the detailed plans. Consultants have visited METU

and reviewed plans for book and equipment purchasing. Owing to the University's unfamiliarity with AID procurement procedures and requirements, assistance has been provided regarding purchasing procedures and in preparing purchasing documents.

METU is currently experiencing difficulties concerning its administration and leadership. The University is recruiting a new Rector and a staff for Foreign procurement activities. There has been some difficulty in finding a successor for the Rector suitable to both faculty and students. Pending resolution of these problems, inevitable delays will occur in further implementation of this loan.

Financial Status: Letters of Commitment totalling \$170,000 for library books and periodicals have been established to finance the first year procurement of these commodities. Full disbursement of this amount is expected during CY 70.

Host Country Role and Procurement Source: The Government of Turkey will contribute an estimated \$2,300,000 in local currency for the loan-financed books and equipment project. It will also contribute to costs of grant-financed visiting professors and staff fellowships from a university operating budget in excess of \$3,500,000 equivalent per year and pay for additional construction.

All loan financed equipment and services will be procured in the United States.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: TURKEY

Borrower: Government of Turkey

Funds: Development Loan

Title and Number of Loan:	
Mineral Research Training Institute - 277-H-081	
Date Authorized: 6/23/67	Date Signed: 10/23/67
Loan Status as of 12/31/69	Loan Terms
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$2,600	Grace Period 10 yrs
Disbursed 1,131	Grace 1%
Repayments -	Interest Rate
Interest Collected 2	Thereafter 2½%
	Currency of Repayment . . U.S.\$

Physical Status: In the 1969 summer season USGS and MTA personnel investigated a number of areas considered geologically attractive for minerals but to date have not located any new economic mineral reserves. During the winter months, office geologic work continues, including the development of a program for the coming summer season. Particular emphasis will be given to the search for economic deposits of iron ore. Presently, almost all the equipment to be procured under this loan has been ordered and a major portion has arrived.

Financial Status: Letters of Commitment have been issued to cover equipment and accessories in the amount of \$1,345,000 and for the services of USGS advisors. It is expected that the remaining loan funds will be committed by June 1970. The loan is 44% disbursed.

Host Country Role and Procurement Source: The Turkish Government will contribute an estimated \$3,880,000 equivalent in local currency to carry out this project.

All loan-financed services and equipment will be procured from the United States.

Purpose of Loan: To finance foreign exchange costs of technical assistance program to improve the quality of work performed by the Turkish Mineral Exploration Institute (MTA) and costs of equipment to carry out this program. This loan will advance the technical and administrative operations of MTA by providing for the services of a team of United States Geological Survey (USGS) geologists who will guide MTA staff in the exploration of three promising mineralized areas in Turkey. Equipment to facilitate this exploration plus other equipment to be used in training the MTA staff will also be provided under the loan.

Turkey has a potentially large, but relatively unexplored, supply of minerals. The U.S. Geological Survey will work with MTA personnel to find economically exploitable reserves of iron ore, copper, and base metals in three regions, of which two are in the west and northwest and one in east-central Turkey. The USGS will also give on-the-job training in photo-geology, geologic mapping, laboratory analysis and metallurgy, diamond drilling and photo-printing.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: TURKEY

Borrower: Government of Turkey

Funds: Development Loan

Title and Number of Loan: Hacettepe University 277-H-083	
Date Authorized: 6/29/67	Date Signed: 10/23/67
Loan Status as of 12/31/69	Loan Terms
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$4,500	Grace Period 10 yrs
Disbursed 103	Grace 1%
Repayments -	Interest Rate
Interest Collected -	Thereafter 2 $\frac{1}{2}$ %
	Currency of Repayment .. U.S. \$

Physical Status: A contract with Overseas Educational Services of New York (OES) was signed in June 1968 to provide consulting services. There are at present 19 fellows studying in the U.S. and 3 more fellows are scheduled to arrive in the summer. 10 U.S. visiting professors are now at Hacettepe. OES has sent equipment specialists to consult on requirements and procurement of substantial quantities of equipment is now underway.

Financial Status: Letters of Commitment amounting to \$270,290 have been issued to finance fellowships for study in the U.S. and visiting U.S. professors. Letters of Commitment for \$2.2 million have been issued for procurement of equipment and supplies. The major portion of the \$2.2 million will be disbursed during FY 71.

Purpose of Loan: To finance foreign exchange costs of equipment, books, visiting professors, and staff fellowships in the five-year expansion program to triple university enrollment to 4,000 and to improve the quality of education. A.I.D. is also financing, under a technical assistance grant, the foreign exchange costs of consultants who will assist the Hacettepe University in completing the project.

Host Country Role and Procurement Source: The Turkish Government will contribute an estimated \$3,000,000 in local currency to carry out this project.

All equipment, books, visiting professors, and staff fellowships will be procured in the United States.

Hacettepe University started as a 150-bed children's hospital in 1958. It has developed into a university with 1,300 students in faculties of medicine, health sciences, natural and social sciences; a school of graduate studies, an institute of population studies; and a 1,000-bed teaching hospital. The University is progressive and uses modern techniques of instruction. Unlike older Turkish medical schools, Hacettepe's medical students learn an interdisciplinary approach to medicine, and while in the University's clinics, are required to spend a fifth school year as interns.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: TURKEY

Borrower: Government of Turkey

Funds: Development Loan

Title and Number of Loan: Turkiye Sinai Kalkinma Bankasi (TSKB) 277-H-084	
Date Authorized: 7/19/67	Date Signed: 5/18/68
Loan Status as of 12/31/69	Loan Terms 1/
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$7,500	Grace Period 10 yrs
Disbursed 533	Grace 1%
Repayments -	Interest Rate
Interest Collected 1	Thereafter 2½%
	Currency of Repayment .. US \$

Financial Status: As of December 31, 1969, TSKB had authorized loans requiring about \$1.5 million from the present AID loan. Letters of Commitment totalling \$2 million had been issued and over \$500,000 had been disbursed as of that date.

Procurement Source: All procurement has been and will be of United States source and origin.

Purpose of Loan: To finance medium and long term sub-loans to private enterprises for the foreign exchange costs of equipment, materials, supplies, and services.

Background: The TSKB is a privately-owned institution established in 1950. The Bank was established with the guidance of the IBRD, and the International Finance Corporation, an affiliate of the IBRD, owns 10% of its stock of TL 110 million (equivalent of \$12 million). Loans extended to-date to TSKB by the IBRD group total \$75 million. Since 1950, TSKB has extended over 800 loans to such industries as refrigeration, machine tools, plastic pipe, sewing machines, tire manufacture and light bulbs. The Bank has been and continues to be the principal source of financing for private industry in Turkey. Including the present loan, AID has lent \$22.5 million to TSKB. In addition TL 368 million (equivalent to US \$ 40 million) of counterpart and PL 480 funds were loaned to TSKB by the Government of Turkey on concessionary terms, thus increasing its borrowing power by the equivalent of \$160 million.

1/ Two-Step Terms: This is a two-step loan with the Bank repaying the loan in lira to the Government of Turkey in 15 years at 6½% interest.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: TURKEY

Borrower: Government of Turkey

Funds: Development Loan

Title and Number of Loan: Program Loan - Commodity Imports 277-H-085	
Date Authorized: 2/27/68	Date Signed: 5/18/68
Loan Status as of 12/31/69	Loan Terms
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$40,000	Grace Period 10 yrs
Disbursed 38,536	Interest Rate .Grace... 2% Thereafter 2½%
Repayments -	Currency of Repayment ..U.S. \$
Interest Collected 435	

Financial Status: The loan is fully committed by Letters of Commitment, Administrative Excess Property Reservation, and procurement requests to the General Services Administration; it is 96% disbursed. It is expected that all deliveries will be completed by the terminal delivery date March 31, 1970.

Procurement Source: All eligible commodities and commodity related services are being procured in the United States.

Purpose of Loan: To assist in financing part of Turkey's imports of capital goods, spare parts, and raw materials in support of its development program.

Turkey's First Five-Year Plan, which ended in 1967, is regarded as a significant success. Gross National Product (GNP) grew on the average of 6.6 percent a year and exports rose at nearly the same pace. The Second Five-Year Plan, which began in 1968, is an ambitious endeavor to increase the GNP growth rate to 7 percent a year.

Physical Status: All funds have been fully committed to both private and public sector importers. As of the end of October 1969, Letters of Credit totalling \$34.0 million, exclusive of U.S. Government-owned Excess Property for which \$915,000 was reserved, had been issued.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: TURKEY

Borrower: Government of Turkey

Funds: Development Loan

Title and Number of Loan:	
Agricultural Development and Control 277-H-086	
Date Authorized: 6/25/68	Date Signed: 9/6/68
<small>Loan Status as of 12/31/69</small>	<small>Loan Terms</small>
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$3,000	Grace Period 10 yrs
Disbursed -	Interest Rate
Repayments -	Grace 2%
Interest Collected -	Thereafter 2½%
	Currency of Repayment U.S. \$

Physical Status: \$1,302,651 has been committed in the form of instructions (including transfer of funds) to the General Services Administration to purchase equipment estimated to cost this amount. \$350,000 worth of this equipment has been shipped to Turkey, and additional orders totalling \$951,000 are now being placed by the GSA to meet the initial requirements of both Ministries. Release of the remaining funds will be in two parts, at intervals which will permit evaluation of the program implementation.

Host Country Contribution: The Ministries of Agriculture and Interior are providing personnel and locally available equipment.

Procurement Source: All goods and services financed by this loan will be procured in the United States.

Purpose of Loan: To finance foreign exchange costs of goods and services required to improve the ability of the Government of Turkey to control the cultivation and distribution of natural narcotics crops, to eliminate illicit cultivation of such crops, and to encourage, through research and other appropriate means, the substitution of more suitable agricultural commodities by growers.

Background: Opium poppy cultivation has been a tradition with Turkish farmers for centuries, not only for the production of opium but also for poppy seed and oil. Since 1967 legal cultivation has been reduced from 21 provinces to 9. A further reduction is planned this fall. The Ministry of Interior plans to acquire \$1,500,000 in patrol vehicles, communication and investigation equipment, and training for the eradication of illicit poppy cultivation and suppression of illicit traffic in narcotics. The Ministry of Agriculture, which provides assistance to farmers in crop substitution, plans to purchase approximately \$1,500,000 of laboratory and cultivation equipment, seeds and vehicles.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: TURKEY

Borrower: Government of Turkey

Funds: Development Loan

Title and Number of Loan: Industrial Investment and Credit Bank (IICB) 277-H-087	
Date Authorized: 6/24/68	Date Signed: 9/17/69
Loan Status as of 12/31/69	Loan Terms 1/
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$5,000	Grace Period 10 yrs
Disbursed -	Grace 2%
Repayments -	Interest Rate
Interest Collected -	Thereafter 2 ¹ / ₂ %
	Currency of Repayment .. US \$

Current Status: Conditions Precedent to disbursement, required by the Loan Agreement, have been met. We expect that the first Letter of Commitment will be opened shortly.

Financial Status: It is expected that funds will be committed in the near future.

Procurement Source: All procurement will be of United States source and origin.

Purpose of Loan: To finance medium and long term sub-loans to private enterprises for the foreign exchange costs of equipment, materials, supplies and services.

Background: The IICB was established in 1963 by six commercial banks for the purpose of extending term loans in Turkish lira to private sector industry. In the five years of its existence, the Bank has limited its activities to extension of working capital loans. The Bank now wishes to expand its lending to include development loans in local currency and in foreign exchange. This loan is intended to assist in the establishment of the IICB as a second private development bank in Turkey which will eventually be able to compete with the Industrial Development Bank (TSKB).

1/ Two-Step Terms: This is a two-step loan with the IICB repaying the loan in lira to GOT in 15 years at ~~6~~¹/₂ interest.

STATUS OF DEVELOPMENT LOANS

TABLE V

Country: TURKEY

Borrower: Government of Turkey

Funds: Development Loan

Title and Number of Loan:	
Eregli Steel Mill Sintering Plant - 277-H-088	
Date Authorized: 6/26/68	Date Signed: 11/27/68
Loan Status as of 12/31/69	Loan Terms 1/
(In Thousands of Dollars and Equivalent)	Duration 40 yrs
Authorized \$12,500	Grace Period 10 yrs
Disbursed -	Grace 2%
Repayments -	Interest Rate
Interest Collected -	Thereafter 2½%
	Currency of Repayment U.S.\$

Host Country Contribution: The Government of Turkey (GOT) has lent 50 million Turkish Lira (\$5.5 million equivalent) to the project and all construction, labor and site preparation costs will be covered by Eregli's own resources.

Procurement Sources: All goods and services financed by this loan will be procured in the United States.

Purpose of Loan: The funds will be reloaned to Eregli Demir ve Celik Fabrikalari Turk Anonim Sirketi, a Turkish corporation to assist in financing the foreign exchange costs of engineering services, machinery, equipment, freight and insurance for the installation of an iron ore sintering plant and related facilities with an annual capacity of 1,150,000 tons of sinter.

Physical Status: A contract was signed on December 9, 1968 with the Koppers Company of Pittsburgh, Pennsylvania, to undertake the design engineering of this project. Bids for supply of equipment and services were opened on December 8, 1969. A contract was awarded to the Dravo Company of Pittsburgh on February 24, 1970.

Financial Status: The conditions precedent to disbursement of funds were met on January 23, 1969. Funds were committed for the Koppers contract on July 24, 1969. A Letter of Commitment in the amount of \$9.3 million to finance the Dravo Company is expected to be issued during March 1970. The balance of the loan will be held open to finance engineering services, ocean freight, insurance and contingencies.

1/ Two-Step Terms: This is a two-step loan with the company repaying the loan to the GOT in 15 years, including three years grace period at 6%.

STATUS OF DEVELOPMENT LOANS SUMMARY

As of 12/31/69

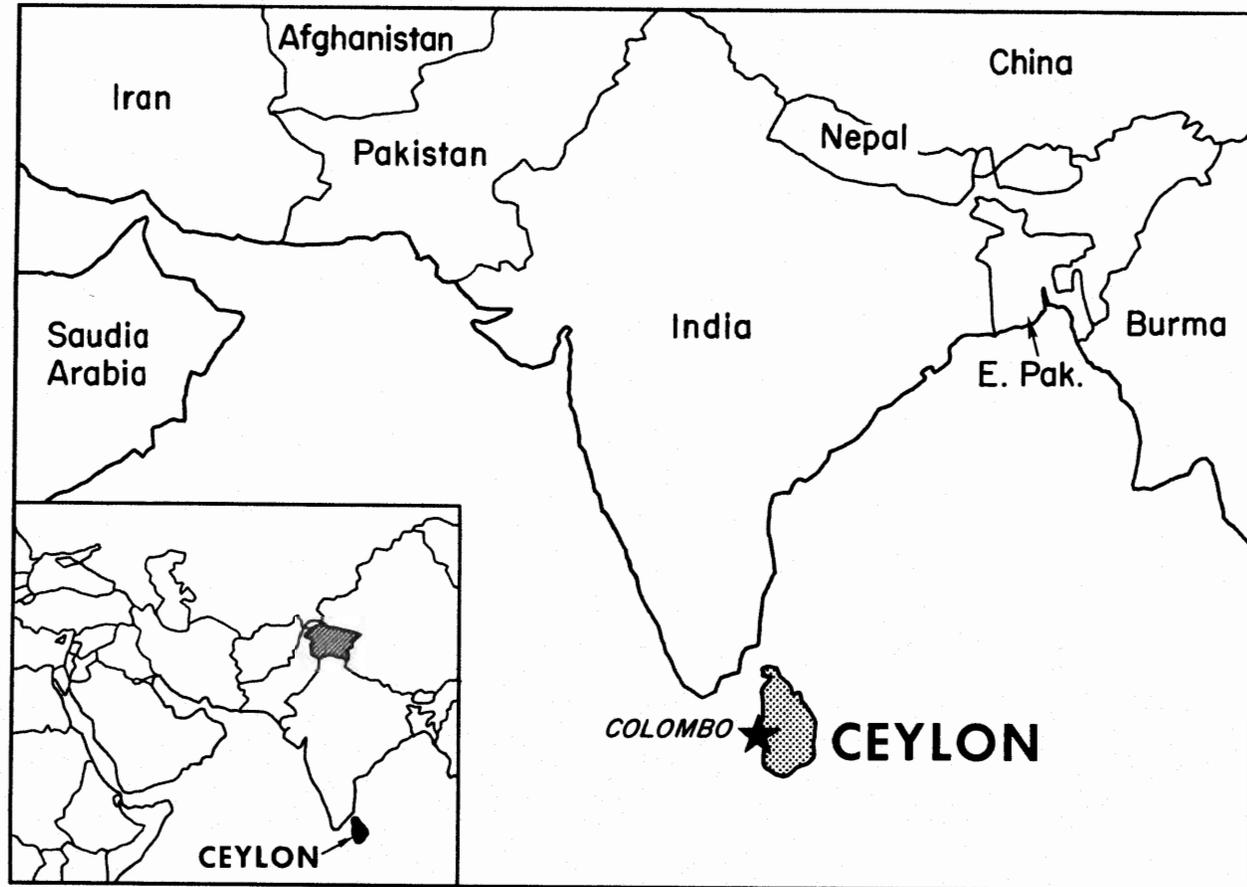
COUNTRY: TURKEY

(In Thousands of Dollars and Equivalent)

TABLE VI

Loan No.	Title	Date		Grace Period (years)	Life of Loan (years)	Interest Rate (%)		Amount Authorized	Amount Disbursed	Currency of Re-payment	Principal Repayments	Interest Collected
		Auth- orized	Loan Agree- ment			Grace Period	Amorti- zation					
277-H-059	32 Load Centers - Power Transmission	4/30/65	8/6/65	10	40	1	2 1/2	2,590	2,432 ^{a/}	U.S.\$	-	32
	^{a/} Project completed.	Undisbursed balance being deobligated.										
	Total	XXXX	XXXX	XXX	XXX	XXXX	XXXX	2,590	2,432	XXXX	-	32

Ceylon



BASIC DATA

Population (<i>millions – mid-1969</i>)	12.2
Annual Growth Rate (<i>percent</i>).....	2.3
Area (<i>1000 square miles</i>).....	25
Population Density Per Square Mile.....	483
Agricultural Land as % of Total Area	29
Percent of Labor Force in Agriculture.....	49

Per Capita GNP (<i>dollars</i>).....	156*
Life Expectancy (<i>years</i>).....	62
People Per Doctor	4,180
Literacy Rate (<i>percent</i>)	70-80
Students as % of 5-19 Age Group	65
<i>(Primary and Secondary)</i>	

* - 1969 in 1968 prices.

CEYLON

PROGRAM SUMMARY (In millions of dollars)				
	FY 1968 Actual	FY 1969 Actual	FY 1970 Estimated	FY 1971 Proposed
Development Loans	-	5.0	5.0	7.0

U.S. AID OBJECTIVES

The A.I.D. loans support Ceylon's development efforts, particularly to increase food production. These loans and P.L. 480 food imports provide the U.S. share of a combined aid donor effort initiated by the IBRD in 1965.

PROBLEMS AND PROGRESS

In 1965, Ceylon's economic future looked bleak. World prices for its exports had been declining for some years, while demand for imports, particularly of food, continued to rise. Development had been sacrificed as capital goods and raw material imports were squeezed out. Investment was low and GNP and population grew at about the same rate.

In the last two years the investment level has been raised -- to over 16% of GNP last year -- while the GNP growth rate has been nearly 7% in each of the last two years, well over twice the rate of population increase. The market for Ceylon's exports, however, continued to worsen.

Almost 90% of Ceylon's exports are made up of three traditional commodities (tea, rubber and coconuts) for which world market prices were declining. Ceylon could not develop new exports to counterbalance anticipated trade losses in the short run. Ceylon's best hope for short run relief for its balance of payments problems lay in import substitution, which means growing more of its food at home.

In 1967, the Government of Ceylon launched a highly successful campaign to grow more food which has substantially increased agricultural production and farmer incomes. Overall agricultural production has risen an average of 6% in the past three years and rice production has had a 13% yearly rise.

This successful agricultural program required the introduction of economic policies that very often were highly politically sensitive. While farmers were given incentives to increase domestic food production, subsidies to food consumption were reduced. The subsidized rice ration was halved and other rations reduced considerably. Imports of many food commodities were curtailed sharply. These actions created the needed incentive for the agricultural production drive.

Industrial production was spurred by a set of far-reaching policies which included formal devaluation in 1967, a preferential import-export rate in 1968, and a revised import policy which restricted consumption imports in favor of those needed for production. As a result of these policies, private investment has been expanding at about 15% a year, and industrial production has risen better than 12% a year.

A number of critical problems still exist and some have been created in part by the above successes. Growing inflationary pressures in the economy must be controlled by increasing the rate of domestic savings and by reducing government expenditures on non-developmental programs. Agricultural production efforts need continued support, and programs of crop diversification, particularly to reduce food imports, must be accelerated. Incentives for non-agricultural exports need to be strengthened, and economical import-substitution industries must be encouraged through increased incentives and by freeing additional foreign exchange for imports of raw materials and capital goods. Aid donor support for the policies to overcome these problems and to continue the good growth of the recent past is warranted.

FY 1971 PROGRAM

The United States has contributed \$67 million of the \$310 million committed by the IBRD-led group of aid donors since 1965. The U.S. contribution included \$20 million in Development Loans; the balance was P.L. 480 Title I assistance to be repaid in convertible currency.

To help support Ceylon's development efforts, particularly in expanding agricultural production, A.I.D. has programmed a \$5 million development loan in FY 1970 to help meet a portion of Ceylon's fertilizer import requirements.

To continue support for the Ceylonese development program, a loan of \$7 million is required in FY 1971 to finance essential raw materials and capital goods, including fertilizer. The loan will supplement FY 1971 P.L. 480 Title I sales of wheat flour projected at about \$15 million.

STATUS OF DEVELOPMENT LOANS SUMMARY

As of 12/31/69

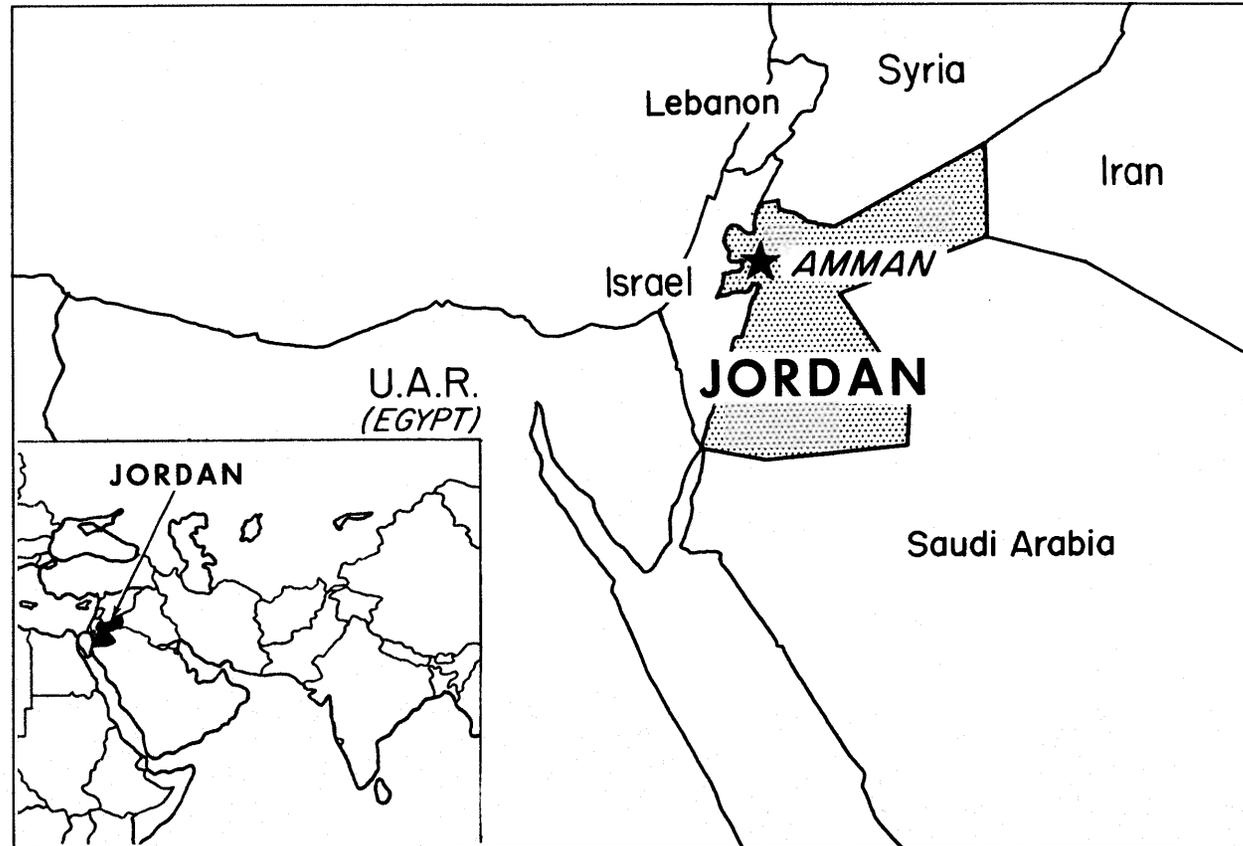
COUNTRY: CEYLON

(In Thousands of Dollars and Equivalent)

TABLE VI

Loan No.	Title	Date		Grace Period (years)	Life of Loan (years)	Interest Rate (%)		Amount Authorized	Amount Disbursed	Currency of Re-payment	Principal Repayments	Interest Collected
		Auth-orized	Loan Agree-ment			Grace Period	Amorti-zation					
383-H-012	Program Loan	2-24-67	4-8-67	5	25	3½	3½	7,500	7,054	U.S.\$	-	360
383-H-014	Program Loan	5-23-69	8-8-69	10	40	2	3	5,000	-	U.S.\$	-	-
Total		XXXX	XXXX	XXX	XXX	XXXX	XXXX	12,500	7,054	XXXX	-	360

Jordan



BASIC DATA

Population (<i>millions – mid-1969</i>)	2.2
Annual Growth Rate (<i>percent</i>)	3.0
Area (<i>1000 square miles</i>)	38
Population Density Per Square Mile	58
Agricultural Land as % of Total Area	14
Percent of Labor Force in Agriculture	35

Per Capita GNP (<i>dollars</i>)	286*
Life Expectancy (<i>years</i>)	52
People Per Doctor	3,910
Literacy Rate (<i>percent</i>)	35-40
Students as % of 5-19 Age Group	54
<i>(Primary and Secondary)</i>	

* - 1967 in 1967 prices.

JORDAN

PROGRAM SUMMARY (In millions of dollars)				
	FY 1968 Actual	FY 1969 Actual	FY 1970 Estimated	FY 1971 Proposed
Technical Assistance . . .	2.0	1.5	1.6	1.9
Supporting Assistance . . .	10.2	-	-	-
Total A.I.D. Assistance	12.2	1.5	1.6	1.9

U.S. AID OBJECTIVES

The maintenance of moderation and stability within Jordan is basic to the U.S. effort to achieve a constructive resolution of the problems which stem from the continuing Arab-Israeli confrontation. Although Jordan's West Bank, representing nearly half the economy, has been occupied by Israel, the Government of Jordan has been able to continue to improve the standard of living of its people. This has been done despite the influx of refugees who, along with the displaced persons, now comprise nearly half the population of the East Bank.

The A.I.D. program seeks to encourage Jordanian economic development initiatives, emphasizing increased agricultural productivity, the encouragement of private and governmental capital investment, and the strengthening of developmental-oriented managerial and administrative talent.

PROBLEMS AND PROGRESS

Jordan's economy has been seriously distorted by the occupation of the West Bank and the consequent disruption of the tourist industry and agriculture production, but the economy is beginning to adjust and expand again. The Government receives payments of

over \$100 million a year from Saudi Arabia, Kuwait and Libya under the Khartoum Agreement of 1967. These payments help make up for the loss of West Bank tourism and other foreign exchange earnings, and have covered Jordan's budget deficit. East Bank economic development has revived significantly. Housing construction has resumed, and limited plant expansion in light industry is occurring. Active public works projects in urban and rural development are continuing to stimulate economic activity and provide employment.

U.S. - supported activities include agricultural production programs, the training of managers, and feasibility studies to probe the prospects for expanded activity in agriculture and water resource development and private sector industry.

FY 1971 PROGRAM

A \$1.9 million Technical Assistance program will emphasize increased agricultural production and strengthened development administration capabilities. Under P.L. 480, support will be provided to voluntary agency activities in the areas of rural public works, economic and community development, and relief. Depending on the crop situation and the supply of food from other sources, a P.L. 480 Sales program may also be needed. Jordan remains eligible for development lending.

With the loss of West Bank agricultural land and sporadic armed conflict in the Jordan Valley, the focus in agricultural development activities has shifted to increasing production in the highlands, concentrating on wheat needed for domestic consumption and vegetable crops for export and domestic markets. Assistance to the Ministry of Agriculture to carry out agricultural economic analysis and planning will also be provided.

Training in management and administration will be continued in order to provide qualified staff for economic developmental programs and activities. Feasibility studies will also continue to be undertaken to stimulate private and government capital investment.

COUNTRY: JORDAN

PROJECT DATA SUMMARY
(Dollar Amounts in Thousands)

TABLE IV
Part I

Project Title	Project Number	FY of Initial Obligation	FY of Scheduled Final Obligation	Through FY 1969			Estimated FY 1970			Proposed Program FY 1971		Future Year Obligation	Estimated Total Cost
				Obligations	Expenditures	Unliquidated Obligations 6/30/69	Obligations	Expenditures	Unliquidated Obligations 6/30/70	Funds	Amounts		
Wheat Research & Production	278-11-130-139	1968	1972	333	131	202	158	233	127	TA	152	126	769
Agricultural Economics & Planning	278-11-140-134	1970	1975	-	-	-	79	30	49	TA	81	253	413
Vegetable Research and Production	278-11-130-140	1970	1974	-	-	-	170	30	140	TA	161	318	649
Public Safety	278-11-710-120	1964	1972	2,114 ^{b/}	1,979	135	114	215	34	TA	74	100	2,402
Development Administration Training	278-16-790-146	1970	a/	-	-	-	280	130	150	TA	260	a/	a/
Feasibility Studies	278-12-995-127	1966	a/	3,103 ^{b/}	735	2,368	-	1,723	645	TA	370	a/	a/
Technical Support	278-11-990-000	1952	a/	9,010	8,971	39	790	777	52	TA	788	a/	a/
Total											1,886		
TC											1,886		
SA													
DL (grants)													

a/ Continuing
b/ Includes SA funds

NUMBER OF U.S. TECHNICIANS (Program Overseas)

TYPE OF TECHNICIAN	On Duty At Close of Year		
	Actual FY 1969	Estimate FY 1970	Proposed FY 1971
A.I.D. employed	16	14	13
Participating agency	2	15 ^{a/}	-
Contractor technicians	2	10	11
Total	20	39^{a/}	24

a/ Includes 14 short term consultants

NUMBER OF PARTICIPANTS

TYPE OF PARTICIPANT	Programmed During Year		
	Actual FY 1969	Estimate FY 1970	Proposed FY 1971
Non-contract	72	52	49
Contract	6	2	16
Total	78	54	65

COUNTRY: JORDAN

PROJECT DATA SUMMARY
(Dollar Amounts in Thousands)

TABLE IV
Part 2

Project Title	Project Number	FY of Initial Obligation	FY of Scheduled Final Obligation	Through FY 1969			Estimated FY 1970			Proposed Program FY 1971		Future Year Obligations	Estimated Total Cost
				Obligations	Expenditures	Unliquidated Obligation 6/30/69	Obligations	Expenditures	Unliquidated Obligation 6/30/70	Funds	Amount		
Malaria Eradication	278-11-511-080	1958	1970	1,899	1,892	7	30	37	-				1,929
Public Administration	278-11-790-083	1958	1969	2,522	2,281	241	-	201	40				2,522
Tourism Development	278-11-240-102	1960	1969	2,123	2,055	68	-	68	-				2,123
Engineering Services to NRA	278-12-250-104	1960	1969	5,397	5,248	149	-	149	-				5,397
East Ghor Rural Development	278-16-810-113	1963	1969	1,397	1,363	34	-	34	-				1,397
Total													
TC													
SA													
DL (grants)													

STATUS OF DEVELOPMENT LOANS SUMMARY

As of 12/31/69

COUNTRY: JORDAN

(In Thousands of Dollars and Equivalent)

TABLE VI

Loan No.	Title	Date		Grace Period (years)	Life of Loan (years)	Interest Rate (%)		Amount Authorized	Amount Disbursed	Currency of Re-payment	Principal Repayments	Interest Collected
		Authorized	Loan Agreement			Grace Period	Amortization					
278-H-003	Damiya Junction/North Shouna Road	6-29-65	9-30-65	10	40	1	2½	1,640	1,394	US \$	-	16
278-H-005	Bethlehem-Jerusalem Road Construction & Engineering Service	6-24-66	6-29-66	10	40	1	2½	1,250	1,141	US \$	-	16
278-H-006	Telecom Improvement System	5-25-66	7-14-66	10	40	1	2½	6,300	124	US \$	-	2
Total		XXXX	XXXX	XXX	XXX	XXXX	XXXX	9,190	2,659	XXXX	-	34

Nepal



BASIC DATA

Population (<i>millions – mid-1969</i>)	10.9	Per Capita GNP (<i>dollars</i>).....	75*
Annual Growth Rate (<i>percent</i>).....	1.9	Life Expectancy (<i>years</i>).....	25-40
Area (<i>1000 square miles</i>).....	54	People Per Doctor	41,110
Population Density Per Square Mile.....	200	Literacy Rate (<i>percent</i>)	5-10
Agricultural Land as % of Total Area	30	Students as % of 5-19 Age Group	13
Percent of Labor Force in Agriculture.....	94	(<i>Primary and Secondary</i>)	

* - 1968 in 1968 prices.

NEPAL

PROGRAM SUMMARY (In millions of dollars)				
	FY 1968 *Actual	FY 1969 Actual	FY 1970 Estimated	FY 1971 Proposed
Development Loans	-	-	0.3*	0.5*
Technical Assistance . . .	2.3	2.7	1.9	2.1
Supporting Assistance . . .	0.05*	0.2*	-	-
Total A.I.D. Assistance	2.4	2.9	2.2	2.6

* Includes \$45,000 in FY 1968, \$222,000 in FY 1969, \$341,000 in FY 1970, and \$492,000 in FY 1971 for population programs under Title X of the Foreign Assistance Act.

U.S. AID OBJECTIVES

A.I.D. assists national programs with three major goals: building infrastructure for agricultural production; upgrading and expanding the education system; and creating a public program for family planning. Other A.I.D. activities focus on malaria eradication and modernization of government administration.

PROBLEMS AND PROGRESS

Increased food grain production is Nepal's priority development objective. Progress has been uneven, however. Over 85% of Nepal's food grain production is in rice and corn, yet increases in these crops have been marginal. However, wheat, Nepal's third crop, has shown good results with annual production rising from only a few thousand tons a decade ago to an estimated 225,000 tons last year.

U.S. efforts have been most successful in development of infrastructure for a national agriculture program. A.I.D. has assisted the development of research stations, extension services, and supply, storage and distribution facilities. Over 260 Nepalese technicians, financed with U.S.-owned Indian rupees, are being trained in India. These participants will provide skilled manpower for Ministry of Agriculture central and field offices.

A.I.D. assistance in education has focused on primary and secondary education, teacher training, vocational education and educational materials. Enrollment in primary schools has steadily increased in recent years. Graduates from the secondary schools in 1969 increased 29% over the 1968 total. New text material, locally prepared, will be available this year for most of the primary grades.

The government recognizes the serious consequences of unchecked population growth and is developing a national family planning program. However, the dissemination of information and contraceptives over rugged and difficult terrain has slowed program expansion.

Malaria control has been achieved in several areas of Nepal. Locales once largely uninhabitable are now productive agriculture centers. Total eradication is a remote possibility in some parts of the country. Therefore, emphasis has shifted from eradication to containment in those areas.

Nepal continues to seek new sources of revenues for development and regular programs. However, although domestic revenues have increased by 60% in four years, a large part of the national budget depends on foreign assistance.

FY 1971 PROGRAM

The proposed \$2.6 million technical assistance program will concentrate on agriculture, education, family planning and malaria control. Also, approximately \$8 million equivalent in excess U.S.-owned Indian rupees will fund local costs of development projects and pay for training technicians in India.

In agriculture, based on infrastructure built by technicians trained under past programs, A.I.D. in the next two years will concentrate on upgrading research and extension centers, developing water resources and improving organization and management. This will enable the government to focus on introduction of new seed varieties and fertilizers, crop diversification, and adoption of better agricultural practices.

A.I.D. will assist the upgrading and expansion of education by providing a Southern Illinois University education team. The focus will be on vocational training. A.I.D. also will assist in improving curricula and textbooks and administrative practices. The Government of Nepal is interested in developing an agriculture college, and A.I.D. will assist by making a feasibility study.

In family planning A.I.D. will finance participant training, largely in India and Pakistan through programs funded with U.S.-owned local currencies. U.S. advisors will assist the government to establish a strong central organization capable of providing effective training and supplying information and evaluation services to a growing cadre of field technicians. Contraceptives will be purchased in India with U.S.-owned rupees.

NEPAL

The malaria program is a continuation of FY 1970 activities and includes spraying, surveillance and consolidation of cleared areas. For the second consecutive year, the Government of Nepal is expected to provide foreign exchange for DDT purchases.

U.S. public administration advisors will provide training in management and accounting procedures and the operation of a national data processing center. Other technical assistance will be for local-level development projects and the Western Hills Road, funded largely with U.S.-owned local currency.

COUNTRY: NEPAL

PROJECT DATA SUMMARY
(Dollar Amounts in Thousands)

TABLE IV
Part 1

Project Title	Project Number	FY of Initial Obligation	FY of Scheduled Final Obligation	Through FY 1969			Estimated FY 1970			Proposed Program FY 1971		Future Year Obligation	Estimated Total Cost
				Obligations	Expenditures	Unliquidated Obligations 6/30/69	Obligations	Expenditures	Unliquidated Obligations 6/30/70	Funds	Amounts		
<u>AGRICULTURE & NATURAL RESOURCES</u>													
Food Grain Production	367-11-110-054	1958	1971	2,227	2,029	198	297	360	135	TA	368		2,892
Groundwater Survey	367-11-120-207	1969	1973	291	12	279	126	385	20	TA	113	119	649
<u>HEALTH AND SANITATION</u>													
Malaria Eradication	367-11-510-014	1954	1973	6,338	6,011	327	134	450	11	TA	107	363	6,942
Family Planning	367-11-580-096	1968	CONT	517	150	367	341	275	433	DL	492	CONTINUING	
<u>EDUCATION</u>													
Teacher and Technical Education	367-11-610-060	1954	1972	4,943	4,325	618	403	640	381	TA	536	392	6,274
<u>PUBLIC ADMINISTRATION AND PUBLIC SAFETY</u>													
Management Improvement and Training	367-11-720-074	1962	1972	849	704	145	75	80	140	TA	69	63	1,056
Statistics Development	367-11-780-078	1960	1971	200	194	6	28	20	14	TA	48		276
<u>COMMUNITY DEVELOPMENT, SOCIAL WELFARE AND HOUSING</u>													
Panchayat Development	367-11-810-090	1963	1972	886	797	89	80	150	19	TA	108	112	1,186
<u>TECHNICAL SUPPORT</u>													
				9,343	8,999	344	747	800	291	TA	750	CONTINUING	
Total											2,591		
TC											2,099		
SA											-		
DL (grants)											492		

NUMBER OF U.S. TECHNICIANS (Program Overseas)

TYPE OF TECHNICIAN	On Duty At Close of Year		
	Actual FY 1969	Estimate FY 1970	Proposed FY 1971
A.I.D. employed	26	28	28
Participating agency	6	6	6
Contractor technicians	12	13	16
Total	44	47	50

NUMBER OF PARTICIPANTS

TYPE OF PARTICIPANT	Programmed During Year		
	Actual FY 1969	Estimate FY 1970	Proposed FY 1971
Non-contract	117	87	82
Contract	16	19	18
Total	133	106	100

PROJECT DATA SUMMARY
(Dollar Amounts in Thousands)

TABLE IV
Part 2

COUNTRY: NEPAL

Project Title	Project Number	FY of Initial Obligation	FY of Scheduled Final Obligation	Through FY 1969			Estimated FY 1970			Proposed Program FY 1971		Future Year Obligations	Estimated Total Cost
				Obligations	Expenditures	Unliquidated Obligation 6/30/69	Obligations	Expenditures	Unliquidated Obligation 6/30/70	Funds	Amount		
Forest Inventory	367-11-170-081	1958	1970	957	928	29	12	36	5				969
✓ Agricultural Credit and Coops.	367-11-140-056	1960	1970	506	479	27	3	19	11				509
Nepal Industrial Development Corp.	367-15-910-083	1956	1970	1,580	1,556	24	4	18	10				1,584
Total													
TC													
SA													
DL (grants)													

STATUS OF DEVELOPMENT LOANS SUMMARY

As of 12/31/69

COUNTRY: NEPAL

(In Thousands of Dollars and Equivalent)

TABLE VI

Loan No.	Title	Date		Grace Period (years)	Life of Loan (years)	Interest Rate (%)		Amount Authorized	Amount Disbursed	Currency of Repayment	Principal Repayments	Interest Collected
		Authorized	Loan Agreement			Grace Period	Amortization					
367-H-003	Nepal Industrial Development Corp. Two-step	9-23-63	12-8-63	3	15	5	5	600	150	U.S. \$	-	4
				10	40	3/4	3/4					
Total		XXXX	XXXX	XXX	XXX	XXXX	XXXX	600	150	XXXX	-	4

CENTO AND REGIONAL PROGRAMS

PROGRAM SUMMARY (In millions of dollars)				
	FY 1968 Actual	FY 1969 Actual	FY 1970 Estimated	FY 1971 Proposed
Development Loans	-	-	0.7*	0.9*
Technical Assistance . . .	3.6	2.8	3.2	3.3
Supporting Assistance . . .	0.7*	1.0*	-	-
Total A.I.D. Assistance	4.3	3.8	3.9	4.2

* Includes grants of \$665,000 in FY 1968, \$976,000 in FY 1969, \$695,000 in FY 1970, and \$925,000 in FY 1971 for population programs under Title X of the Foreign Assistance Act.

U.S. AID OBJECTIVES

The objective of the regional Technical Assistance program is to encourage nations of the region to cooperate by discussing matters of mutual interest, solving problems through joint action and making it possible for students from the various countries to live and study together.

A.I.D. also provides regional advisors who conduct surveys, studies and research and pilot programs to test the effectiveness of projects for the region. Many activities are channeled through the Central Treaty Organization (CENTO) and the American University of Beirut (AUB).

Advanced Training: In recent years, A.I.D. has funded a scholarship program for 400-500 students which has helped to fill the need for trained manpower and has encouraged the use of AUB as a regional institution of higher education. The scholarship program enables many future leaders of the region to meet and work with each other. Courses of study offered at AUB are of higher quality than those available in most other universities in the region. The United States has encouraged AUB, with good results, to offer courses in fields of study that are critical for development such as agriculture, education, engineering and public administration.

Over the past few years, one-fifth of A.I.D.-financed training for students from the region was for study at AUB. In the 1970 school year, the Near East-South Asia regional program is financing 478 students from Jordan, Pakistan, Afghanistan, Turkey, Iran, Lebanon, Cyprus, Nepal, and South Yemen. Over half the students are being trained as public school teachers and agricultural

scientists. The remainder are studying engineering, public health and business and public administration. The estimated obligation for AUB regional training in FY 1970 is \$2.3 million, as is the requested amount for FY 1971.

Regional Activities: A.I.D. conducts pilot programs and special studies within the NESAs region applicable to development efforts in countries in the region. A regional study of programmed instruction, a new educational learning technique developed in the United States, is presently under way. This technique promises to extend the effectiveness of existing educational programs by providing students with texts designed for self-study and testing. It will also improve classroom teaching through the use of logical, programmed instructional guides, and by opening up new possibilities for education of adults and school drop-outs outside the formal classroom. Another study is evaluating the water resources potential of the Near East area and the means for further water resources development. A regional conference on irrigation practices will bring together experts from the United States and NESAs countries to discuss one of the principal roadblocks to increased agriculture production. A.I.D. also provides short-term consultants for special studies preceding loan or technical assistance negotiation.

In FY 1971, A.I.D. proposes a regional conference, involving U.S. and local experts, on unemployment, which is becoming a critical problem as migration increases from rural to urban areas. Also proposed are selected studies on minerals and water and the application of new technologies to development. A.I.D. would also consider providing assistance on regional health problems if the need arises.

Regional Family Planning Activities: Under regional family planning, A.I.D. finances studies and projects which are relevant to the population problems of the entire region. An estimated \$595,000 will be obligated in FY 1970 and \$825,000 is requested for FY 1971.

A number of surveys and studies on population problems in the region are now under way, and more are planned for FY 1971. The Research Triangle Institute (North Carolina) will assist A.I.D. in the gathering and analysis of information on population problems in NESAs countries. Access to relevant and current data will enable A.I.D. to respond more effectively to the problems of planning and implementing population programs throughout the region. Another prospective study is an examination of the means to strengthen research institutions and capabilities for family planning in South Asia.

CENTO AND REGIONAL PROGRAMS

A.I.D. also finances some of the activities of voluntary organizations in support of family planning within the region. The Population Council will receive grants to extend its efforts in the training of population workers, improvement of family planning information programs, and establishment of post-partum programs. The Pathfinder Fund will continue its work with local private groups involved in family planning activities. Johns Hopkins University, under contract with A.I.D., will continue to perform basic field research in India to determine the cost effectiveness of various types of family planning delivery systems. A.I.D. will also finance the services of the Colombo Plan Population Advisor, Ceylon.

CENTO Programs. A.I.D. proposes to contribute \$600,000 in FY 1971 for technical assistance to CENTO, which encourages greater regional economic cooperation among Turkey, Iran, and Pakistan.

The CENTO Multilateral Technical Cooperation Fund finances the exchange of experts among the regional countries; provides scholarships at leading regional institutions for students from the regional countries; and supports other regional technical cooperation activities through special training programs such as geological mapping, civil aviation, and family planning.

Another part of the CENTO program, the Multilateral Science Fund, supports inter-regional study panels and institutes on such subjects as food production and distribution; food and nutrition; materials testing; and repair and maintenance of electronic equipment.

Regional conferences will be held on various aspects of regional development, including agriculture, education, equity investment, and minerals research.

Various aspects of family planning will be emphasized. In 1970 a series of workshops on Teaching of Public Health Practices will stress family planning; in FY 1971 a similar series of workshops will be held on the clinical aspects of family planning. \$100,000 is budgeted for FY 1970 and FY 1971.

PROJECT DATA SUMMARY
(Dollar Amounts in Thousands)

TABLE IV
Part 1

COUNTRY: CENTO

Project Title	Project Number	FY of Initial Obligation	FY of Scheduled Final Obligation	Through FY 1969			Estimated FY 1970			Proposed Program FY 1971		Future Year Obligation	Estimated Total Cost
				Obligations	Expenditures	Unliquidated Obligations 6/30/69	Obligations	Expenditures	Unliquidated Obligations 6/30/70	Funds	Amounts		
<u>Health and Sanitation</u>													
Family Planning	290-11-540-243	1970	Undet.				100	50	50	DL	100	Undetermined	
<u>General and Miscellaneous</u>													
Support of Specific Technical Assistance Requests	290-11-995-200	1958	Cont.	1,782	1,618	164	362	319	207	TA	347	Continuing	
CENTO Multilateral Technical Cooperation Fund	290-11-995-114	1959	Cont.	834	834	-	75	75	-	TA	105	Continuing	
CENTO Multilateral Science Fund	290-11-995-207	1967	Cont.	23	23	-	20	20	-	TA	20	Continuing	
Technical Support	290-11-999-113	1957	Cont.	1,496	1,491	5	49	38	16	TA	34	Continuing	
Total.....											606		
TA.....											506		
SA.....											-		
DL (grants).....											100		

NUMBER OF U.S. TECHNICIANS (Program Overseas)

TYPE OF TECHNICIAN	On Duty At Close of Year		
	Actual FY 1969	Estimate FY 1970	Proposed FY 1971
A.I.D. employed	3	2	2
Participating agency.....	-	-	-
Contractor technicians.....	-	-	-
Total	3	2	2

NUMBER OF PARTICIPANTS

TYPE OF PARTICIPANT	Programmed During Year		
	Actual FY 1969	Estimate FY 1970	Proposed FY 1971
Non-contract			
Contract			
Total			

PROJECT DATA SUMMARY
(Dollar Amounts in Thousands)

TABLE IV
Part 2

COUNTRY: CEN TO

Project Title	Project Number	FY of Initial Obligation	FY of Scheduled Final Obligation	Through FY 1969			Estimated FY 1970			Proposed Program FY 1971		Future Year Obligations	Estimated Total Cost
				Obligations	Expenditures	Unliquidated Obligation 6/30/69	Obligations	Expenditures	Unliquidated Obligation 6/30/70	Funds	Amount		
<u>Transportation</u> CEN TO Regional Civil Airways System	290-12-370-120	1961	1965	6,733	6,633	100	-	100	-				6,733
Total													
TC													
SA													
DL (grants)													

STATUS OF DEVELOPMENT LOANS SUMMARY
As of 12/31/69

COUNTRY: CENTO

(In Thousands of Dollars and Equivalent)

TABLE VI

Loan No.	Title	Date		Grace Period (years)	Life of Loan (years)	Interest Rate (%)		Amount Authorized	Amount Disbursed	Currency of Re-payment	Principal Repay-ments	Interest Collected
		Auth-orized	Loan Agree-ment			Grace Period	Amorti-zation					
290-K-001	CENTO Railroad - Iran	3-10-64	5-31-64	5	35	3½	3½	7,840	4,284	US \$	-	61
290-K-002	CENTO Railroad - Turkey	3-10-64	6-18-64	10	40	3/4	2	10,500	8,376	US \$	-	138
Total		XXXX	XXXX	XXX	XXX	XXXX	XXXX	18,340	12,660	XXXX	--	199

TABLE IV
Part 1

PROJECT DATA SUMMARY
(Dollar Amounts in Thousands)

COUNTRY: NESA REGIONAL

Project Title	Project Number	FY of Initial Obligation	FY of Scheduled Final Obligation	Through FY 1969			Estimated FY 1970			Proposed Program FY 1971		Future Year Obligation	Estimated Total Cost
				Obligations	Expenditures	Unliquidated Obligations 6/30/69	Obligations	Expenditures	Unliquidated Obligations 6/30/70	Funds	Amounts		
<u>Health and Sanitation</u>													
Regional Family Planning	298-15-590-019	1968	Cont.	1,653	170	1,483	595	1,500	578	DL	825	Undetermined	
<u>General and Miscellaneous</u>													
AUB Regional Training	298-13-995-015	1951	Cont.	35,015	33,715	1,300	2,350	2,700	950	TA	2,350	Continuing	
Regional Activities	298-15-995-017	1956	Cont.	1,662	1,451	211	354	395	170	TA	404	Continuing	
Total.....											3,579		
TC.....											2,754		
SA.....											-		
DL (grants).....											825		

NUMBER OF U.S. TECHNICIANS (Program Overseas)

TYPE OF TECHNICIAN	On Duty At Close of Year		
	Actual FY 1969	Estimate FY 1970	Proposed FY 1971
A.I.D. employed	2	2	2
Participating agency.....	-	-	-
Contractor technicians.....	-	-	-
Total	2	2	2

NUMBER OF PARTICIPANTS

TYPE OF PARTICIPANT	Programmed During Year		
	Actual FY 1969	Estimate FY 1970	Proposed FY 1971
Non-contract	-	-	-
Contract	432	478	478
Total	432	478	478

Other NESA
Countries

STATUS OF DEVELOPMENT LOANS SUMMARY
As of 12/31/69

COUNTRY: GREECE

(In Thousands of Dollars and Equivalent)

TABLE VI

Loan No.	Title	Date		Grace Period (years)	Life of Loan (years)	Interest Rate (%)		Amount Authorized	Amount Disbursed	Currency of Repayment	Principal Repayments	Interest Collected
		Authorized	Loan Agreement			Grace Period	Amortization					
240-H-029	Kastraki Dam and Hydroelectric Project	6-29-63	8-26-63	5	25	3½	3½	3,212	2,984	US \$	156	329
	Total	XXXX	XXXX	XXX	XXX	XXXX	XXXX	3,212	2,984	XXXX	156	329

STATUS OF DEVELOPMENT LOANS SUMMARY
As of 12/31/69

COUNTRY: IRAN

(In Thousands of Dollars and Equivalent)

TABLE VI

Loan No.	Title	Date		Grace Period (years)	Life of Loan (years)	Interest Rate (%)		Amount Authorized	Amount Disbursed	Currency of Re-payment	Principal Repayments	Interest Collected
		Auth- orized	Loan Agree- ment			Grace Period	Amorti- zation					
265-H-025	Management and Assistance for Development of Electric Power Industry	6-10-66	1-16-67	5	25	3½	3½	6,213	1,873	US \$	-	65
	Total	XXXX	XXXX	XXX	XXX	XXXX	XXXX	6,213	1,873	XXXX	--	65