PD-AAP-146
ISN: 34310

386-0481/15

UNCLASSIFIED

PROJECT EVALUATION SUMMARY (PES) — PART I

Report Symbol U-44

1. PROJECT TITLE	2. PROJECT NUMBER	3. MISSION/AID/W OFFICE
Maharashtra Irrigation Technology and Management (AID Loan No. 386-T-232)	386-0481	INDIA 102

4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No. beginning with No. 1 each FY) 84-1

☒ REGULAR EVALUATION ☐ SPECIAL EVALUATION

5. KEY PROJECT IMPLEMENTATION DATES			6. ESTIMATED PROJECT FUNDING	7. PERIOD COVERED BY EVALUATION
A. First PRO-AG or Equivalent FY 82	B. Final Obligation Expected FY 82	C. Final Input Delivery FY 87	A. Total $93,000,000 B. U.S. $47,000,000	From (month/yr.) April 1982 To (month/yr.) November 1983 Date of Evaluation Review November 1983

8. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

A. List decisions and/or unresolved issues, cite those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., airgram, SPAR, PIO, which will present detailed request.)	B. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED
1. Attached is the first Implementation Review Report dated November 1983, highlighting the progress made by the project and action required by USAID, GOM and CWC.	BNM	April 1984
2. The funds and staff provided meet the projections envisioned in Project Paper but do not meet the revised construction priorities fixed by GOM/ID. In order to complete the construction as planned, additional staff and funds should be provided by GOM/ID.	GOM	April 1984
3. GOM/ID must accellerate the completion of detailed soil and topographic surveys so that the distribution system is planned and executed as envision in project paper.	GOM	April 1984

Best Available Document

9. INVENTORY OF DOCUMENTS TO BE REVISED FOR ABOVE DECISIONS — None

- ☐ Project Paper
- ☐ Financial Plan
- ☐ Logical Framework
- ☐ Project Agreement
- ☐ Implementation Plan e.g., CPI Network
- ☐ PIO/T
- ☐ PIO/C
- ☐ PIO/P
- ☐ Other (Specify)
- ☐ Other (Specify)

10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT

- A. ☒ Continue Project Without Change
- B. ☐ Change Project Design and/or ☐ Change Implementation Plan
- C. ☐ Discontinue Project

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Names and Titles)

John R. Westley
Program Officer

B.N. Maheshwari — Project Officer

12. Mission/A.I.D./W Office Director Approval

Signature

Typed Name: Owen Cyke
Director

Date

0309E
12/17/83
12/21/83.

MAHARASHTRA IRRIGATION TECHNOLOGY AND MANAGEMENT PROJECT

(386-0481)

Annual Implementation Review

November 1983

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Annual Implementation Review - November 1983

1. Schedule and purpose

The annual implementation review was jointly conducted with the GOM officials during November 1983. Ten subprojects were visited by USAID and the status of remaining three were discussed with the project officials (Attachment A). The physical and financial progress data (Attachment B) was collected from the project officers during the visit and subsequently analysed.

The purpose of the review was to assess the progress made against planned project activities, identify constraints to progress, and suggest remedial actions to the GOM and GOI to assure the completion of planned activities as originally scheduled.

2. Project Commitments

The Maharashtra IT&M Project is a five-year irrigation sector project, designed to improve institutional capability and provide support for the planning, construction, operation and management of 13 new prototype irrigation systems. Short-term training of technicians involved in design, construction and operation of medium irrigation systems in Maharashtra and studies of key problems constraining optimal use of irrigation will also be funded.

A project loan and grant agreement was executed between AID and GOI on August 31, 1982. The loan of $44 million, will fiannce two-thirds of eligible planning,design and construction costs of 13 prototype irrigation systems during the five-year life-of project. The most appropriate U.S. and Indian irrigation technology will be drawn on in the design and operation of these prototypes. The sucessful aspects of the prototype will guide the design of future projects, both physical structures and managerial systems. The grant of $ three million will cover technical assistance, training, field studies and research.

3. End of Project Status

At the completion of this rive-year project, substantial portion of the professional staff of the Irrigation and Agriculture Departments of GOM will have participated in the development and application of new concepts of planning, design, construction and operation of surface irrigation systems. The central element of the new approach will be the end user, the farmer, and his needs and the importance of involving him actively at every stage of the building process, from initial planning through construction to operation and maintenance.

Each of the 13 systems will require a minimum of seven years from the beginning of construction to completion, so given a five year life of the project, none will be fully operational by the

Project Assistance Completion Date (PACD) of March 31, 1987. However, the project paper envisioned the following achievements by the PACD:

a. Systems designed to deliver full flows at individual outlets when operating at 50 percent capacity and water delivery channels to be constructed to the farm gates,

b. Complete surface drainage included in plans, to be constructed by the State,

c. Water delivery budgets developed and used,

d. Economic rate of return (ERR) of 12 percent for subprojects (10 percent ERR for tribals and drought prone subproject areas),

e. Detailed soil surveys and land capability of CCA included as part of the planning design criteria,

f. Farmers actively involved in system planning, construction, operation and maintenance,

g. GOM adopts results of improved criteria for watercourses and field channels design, O&M and for decreasing seepage losses,

h. 135 officers of ID and AD trained in groundwater development, drainage engineering, Ag. water management and systems analysis, land development and conjunctive water use,

i. Thirteen special field studies conducted and results utilized in clarifying and meeting subproject criteria by PACD,

j. One hundred percent planning and design of civil works, 60 percent of the construction completed and 10 percent of the on-farm development complete by PACD,

k. All subprojects subjected to formalized quality control procedures,

l. Socio-economic baseline studies completed on approx. four subprojects by the end of the second year of the project, and

m. At least one demonstration chak established and functioning on each of the 13 MIPs, plus pilot chaks established on an existing MIP.

4. Monitoring Responsibility

The project paper provides that CWC and USAID will conduct regular evaluations at annual or more frequent intervals. The CWC is required to report, following visits to divisional offices, and/or field sites for each subproject, on the following schedule: (1) Preparation Report every six months; (2) Implementation Report two times during the construction season; (3) Operation Report annually after completion of implementation. These reports are to comment on scheduled activities, assess performance and flag present and potential problem areas. An annual Project Implementation Report is also required to be submitted by CWC after a review with GOM officials. This will include status of subprojects under planning, implementation and operation and budget and staffing projections for the ensuing year and the remaining life of the project.

This USAID review of the project was conducted during November 1983 in collaboration with the concerned GOM officers (see Attachment A for the list of officers) and on the basis of the "Annual Implementation Review Report - Sept. 1983" of the Central Water Commission (CWC).

5. Current Project Status

a. Physical: The project has realized the following achievements against the targets outlined in Section 3:

(i) Sub-Project Appraisal/Approval: Two subprojects have been appraised by CWC (Sina on August 25 and Urmodi on October 31, 1983, against the target of eight subprojects up to June 1983. The delay in subproject appraisal/approval by the CWC Appraisal Committee (CWC/AC) has been caused by the extra effort required to meet the GOI improved design criteria and the additional USAID subproject approval criteria developed in consultation with GOM/ID and CWC. It took some time for the field officers to fully understand the requirements. The Project Preparation Cell of GOM/ID and the Foregin Assistance Directorate II of CWC/GOI are making an all-out effort to get the remaining 12 subprojects appraised/approved by March-April 1984 (ahead of planned schedule).

(ii) Socio-economic baseline study reports have been received for three subprojects and the fourth is under print.

(iii) A program of carrying out special studies has been laid out by GOM and studies have been initiated. However, due to the delay of the U.S. Resident Water Management Specialist/Project Coordinator, the special studies and training program has been delayed approximately one year.

(iv) Training and Workshops: In the absence of the U.S. Resident Specialist only two workshops on irrigation and drainage (Irrinage) Planning were held by USAID staff and three officers completed their training in the U.S.A. as summarized below:

Training	No. of Participants	Place of Training and duration
Irrinage Planning	20	Shahanur Dam Site, one week
Design & Planning of USAID assisted MIPs	21	WALMI, Aurangabad, 4 weeks
On-Farm Water Management	3	Utah State University, USA

(v) The distribution system on the 13 USAID supported 13 subprojects is to be designed/planned on the basis of the detailed topographic and soil surveys. The current status of the topographic surveys are detailed in Attachment C. Only 8400 ha. have been surveyed as of

November 1983 against a target of 38,000 ha. by March 1984. The detailed planning of distribution system has been completed for only 1,770 ha. (Attachment D) against the target of 15,000 ha. as of March 1984. It does not appear that it will be possible to meet these targets. The pre-irrigation soil surveys for all the 13 MIPs have been completed and part of the data required for detailed soil surveys collected. However, the detailed soil survey reports envisioned in the project paper are yet to be published.

(vi) Staff: The staff deployed on the construction of the 13 MIPs selected for USAID assistance is detailed in Attachment E. Generally, one subdivision is required for construction of Rs.20-25 million and considering the outlays provided or proposed by GOM for FY 83-84 and 84-85, the number of subdivisions required works out to 49 and 80 respectively, against which only 43 subdivisions are in position out of which 37 posts of JEs are vacant as of November 1983. This requirement is exclusive of requirements for topographic surveys and planning.

b. Financial: Details in Attachment F present the status of total estimated cost of the 13 subprojects, flow of funds required by the Irrigation Department during six year construction period as per estimated work progress (Attachment G) and the expenditure incurred. As the reimbursement is to be made on the expenditures incurred after April 1, 1982 and the ID works on MIPs are to be completed within a six-year period, the funds provided during 1983-84 and the proposed funds for 1984-85 are

not adequate. Even if it is considered that the layouts proposed by GOM will be spent in full, there remains a shortfall of nearly Rs.243 million by March 1985. This needs serious consideration because the budget provided or proposed is less than required (as per GOM priorities for subprojects) and there is not the staff capacity to spend the budgeted amount.

c. Accrued Expenditures: The GOM/ID has incurred an expenditure of Rs.79.50 million since April 1, 1982 on the 13 MIPs selected for AID assistance, of which nearly Rs.47 million (67% of eligible cost) will be reimbursible after CWC/AC appraisal and approval.

Thus far only two subprojects SINA and URMODI have been appraised by CWC/AC on which the accrued and reimbursable expenditures since April 1, 1982 are about Rs 30.19 million and Rs 18 million respectively.

d. Disbursement: No disbursement against the loan has been made as none of the subproject approves have been formally received by CWC/AC.

An amount of $71,549.96 has been disbursed as of October 31, 1983 from the grant funds of $3 million including a $60,480.00 advanced to GOM for meeting the expenses on in-country training and special studies.

6. Recommendations

a. Only 2 sub-projects have been appraised by CWC/AC thus far against the target of 8 sub-projects. GOM must give high priority for getting the sub-projects appraised and approved from CWC/AC in order to utilize the available credit.

b. As per the constructional priorities fixed by GOM/ID for the 13 sub-projects selected for AID assistance and considering the planned completion phase, Attachment F & G, Rs.189.31 million and Rs.359.40 million should have been provided during 1983-84 and 1984-85 but the outlays provided or proposed by GOM/ID are only Rs.122.80 million and Rs.197.80 million respectively. The backlog by 84-85 will be approximately Rs.242.89 million. GOM/ID must therefore reconsider the financial outlays and provide required funds.1/

c. The staff requirement, as per GOM/ID projected financial outlays, for the year 1983-84 is 49 sub-divisions (one per Rs.2.5 million) but as of November 83 only 42 sub-divisions are in position (Refer Attachment E) and 37 JEs are yet to join or

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1/ Rs.122.08 million provided by GOM/ID for 1983-84 exceeds the projected expenditure of Rs 84.80 million envisioned in the project paper. The higher requirement is due to the revised completion priorities assigned by GOM/ID resulting in heavy expenditure during the initial years of the overall project to complete individual sub-projects within seven years.

be posted. The GOM/ID must ensure to fill these vacant positions and sanction additional 38 sub-divisions to keep pace with the construction as per GOM/ID projected outlays.2/

d. Topographical surveys on 8,400 ha has been completed as of November 1983 against a target of over 37,000 ha. to be covered by March 1984 and 60,000 ha. by March 1985 (out of over 75,000 ha. command area of 13 MIPs posed for AID assistance). To complete the surveys on schedule GOM must deploy additional staff for command area survey and mapping. We estimate 10,000 Survey Party days will be needed to complete the survey and mapping in remaining 51,600 ha. by March 1985.

e. Distribution system up to the farm gate has been planned on 1770 ha. as of November 1983 against the target of 15,000 ha. by March 1984 (Attachment D). As the distribution system is required to be conscructed upto farm gate it is essential that its planning & design is accelerated and the topographical survey and planning be rapidly completed in a phased manner by deploying more staff. We estimate 4300 JEs days will be required to complete the planning and designing of 43,230 ha. by March 1985.

2/ Forty two subdivisions provided meets the staffing requirements envisioned in project paperr (34 subdivisions @ 1 per Rs.2.5 million) but not sufficient for the revised increased budget provisions.

f. Planning & design of the irrigation and drainage system to cater to individual farms is comparatively new for the staff deployed on the 13 MIPs. Only two training workshops have been held thus far and about 40 officers trained. GOM should plan 5 more training workshops for field officers so that at least 140 officers/officials are trained by March 1985.

g. GOM should avail the opportunity of training the officers deployed on USAID assisted sub-projects in U.S. as provided under the grant funding of the project. Particulars of various courses available in U.S. has already been provided to GOM/ID vide USAID letter of December 16, 1982 and October 4, 1983. Nominations other than three form WALMI, have yet to be received.

h. The special studies and training program envision in project paper has been considerably delayed due to non arrival/posting of Resident coordinator/water management specialist. The USAID must ensure the early arrival of the specialist to speed up the special studies and training effort.

i. The CWC is required to monitor this project and submit the periodical reports on preparation, implementation, operation and project implementation after six months, two times during construction season, annualy after construction completion and annually respectively. The overdue reports on implementation and periodical report on preparation should be expedited.

Attachment A

List of GOM Officials Contacted for the Review

November 1983

1. Mr. M.Y. Oke, CE. Pune Region
2. Mr. K.N. Shukla, CE North Maharashtra Region, Nasik
3. Mr. V.S. Bhide, CE, Amravati
4. Mr. E.D. Shende, SE, Kolhapur Irrigation Circle, Kolhapur
5. Mr. S.D. Ketkar, SE, Akola Irrigation Circle, Akola
6. Mr. K.V. Kulkarni, SE, Irrigation Project Circle, Nasik
7. Mr. G.G. Vartak, SE, PPC, Pune
8. Mr. D.S. Palkar, EE, Minor Irrigation Division, Satara
9. Mr. D.B. Shaikh, EE, Minor Irrigation Division, Miraj
10. Mr. B.S. Meshram, EE, Tultuli Project Division, Garchiroli
11. Mr. M.E. Dalvi, EE, Mun Irrigation Project Division, Khamgaon
12. Mr. S.V. Mahankal, EE, Shanoor Project Division, Achalpur
13. Mr. B.D. Kashtikar, EE, Special Project Division, Dhule
14. Mr. B.D. Agashe, EE, PPC, Pune

Attachment B

MAHARASHTRA IRRIGATION & TECHNOLOGY PROJECT/SUB-PROJECT STATUS AS ON NOVEMBER 1983

Sub-PROJECTS	CWC/AC Appraisal Planned	CCA ha	ESTIMATED COST Rs.mill.	Rs./ha CCA	EXPENDITURE RS. MILLION Upto 3/82	4/82-3/83	4/83-10/83	Since 4/82	OUT LAYS RS.M 83-84	84-85	STAFF IN POSITION Div.	Sub-Div.	JEs	Command Area Survey Done ha	Works in Progress	Potential Problem
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
Hetwane	1/84	6753	298.00	44,128	2.75	2.00	2.85	4.85	10.00	25.00	1	4	20	190		Command Area survey & Planning
Urmodi	Done 10/83	8000	280.48	35,060	0.03	0.81	0.33	1.14	10.00	20.00	-	2	10	600	Const. of buildings for head work & canal.COT	Lack of staff
Sankh	1/84	2834	81.70	28,828	0.70	0.85	0.57	1.42	8.80	10.00	-	2	8	535	Approach Road Bldgs	Saline water & saline soils
Bori	4/84	8700	121.50	13,965	0.32	0.56	0.11	0.67	0.20	0.80	-	1	5	Nil	Bldgs. for canal & head works canal and command area survey	Land aquisition command area survey planning. Staff & Funds
Khairi	12/83	1821	39.70	21,801	2.05	4.10	1.08	5.18	8.30	10.00	1	4	19	250		Command Area Survey & Plng.
Sina	Done 8/83	8500	208.00	24,471	26.29	16.95	12.19	29.14	29.00	30.00	1	5	40	990	Headworks, canals, Topographic survey	Command Area Survey & Dis. system planning
Nagya-Sakya	12/83	2011	40.90	20,338	Nil	1.23	3.62	4.85	1.00	10.00	1/3	2	10	421	Buildings and COT	Forest area in Sub-mergence - clearance from GOI
Sonwad	3/84	3890	51.70	13,290	0.05	0.33	0.91	1.24	5.00	8.00	1/3	3	11	370	Canal & Headworks Buildings	Land Acquisition

Attachment 6 (Contd.)

Sub-PROJECTS	CWC/AC Appraisal Planned	CCA ha	ESTIMATED COST Rs.mill.	ESTIMATED COST Rs./ha CCA	EXPENDITURE RS. MILLION Upto 3/82	EXPENDITURE RS. MILLION 4/82-3/83	EXPENDITURE RS. MILLION 4/83-10/83	EXPENDITURE RS. MILLION Since 4/82	OUT LAYS RS.M 83-84	OUT LAYS RS.M 84-85	STAFF IN POSITION Div.	STAFF IN POSITION Sub-Div.	STAFF IN POSITION JEs	Command Area Survey Done ha	Works in Progress	Potential Problem
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
Dehali	3/84	5242	73.90	14,098	0.05	0.48	1.35	1.83	7.60	15.00	1/3	3	8	150	Bldgs. for Canal & Headworks	Land Acquisition
Karvappa	2/84	4280	72.50	16,943	2.75	3.43	7.81	11.24	9.30	15.00	-	3+1 (M)	17	1900	Bldgs. for Canal & Headworks Approach Road, COT	Land Acquisition
Shahnur	12/83	7466	219.72	29,429	4.10	4.00	7.67	11.67	14.40	25.00	1	6 + 1(M)	20	1700	Bldgs. for Canal, Head Works & Mech.Unit, Appr. Road	None
Mun	1/84	7804	102.86	13,180	Nil	1.54	3.56	5.10	15.00	20.00	1	6 + 1(M)	20	1200	Approach Rd., canal H. Works Atrs. for Mech. Unit	Com and Area survey and Planning of Distry system
Shivna	3/84	7895	194.40	24,623	Nil	0.50	0.47	0.97	1.00	10.00	-	1	5	100	Temp.sheds & Bldgs.	Lack of staff & Budget command area survey plng.
Total		75196	1785.36	23,743	39.09	36.78	42.72	79.50	122.80	197.80	6	42+(3M)	193	8406		

Attachment C

MAHARASHTRA IRRIGATION & TECHNOLOGY PROJECT / STATUS OF COMMAND AREA SURVEY (NOV. 1983)

SUB PROJECTS	CCA ha.	TARGET % 20 82-83	30 83-84	30 84-85	20 85-86	ACHIEVEMENT UPTO 11/83	BALANCE TO BE COMPLETED BY 3/84	FIELD OFFICERS PROMISED TO COMPLETE BY 3/84	REMARKS
Hetwane	6753	1350	2025	2025	1353	190	3185	300	Survey & planning lagging behind considerably.
Urmodi	8000	1600	2400	2400	1600	600	3400	1800	Acute shortage of staff.
Sankh	2834	570	850	850	564	535	885	1235	Likely to meet target.
Bori	8700	1740	2610	2610	1740	Nil	4350	1000	Lagging behind considerably.
Khairi	1821	360	550	550	361	250	660	1600	O.K.
Sina	8500	1700	2550	2550	1700	990	3260	8215	Doesn't seem to be poss.to complete the target
Nagya-Sakya	2011	400	600	600	411	421	579	2000	O.K.
Sonwad	3890	780	1170	1170	770	370	1580	1300	Should be able to cover more.
Dehali	5242	1050	1570	1570	1052	150	2470	1200	Behind schedule.
Karvappa	4280	860	1280	1280	860	1900	240	5000	Acute shortage of staff.
Shahnur	7466	1500	2240	2240	1486	1700	2040	5000	O.K.
Mun	7804	1560	2340	2340	1564	1200	2700	5000	O.K.
Shivna	7895	1580	2370	2370	1575	100	3850	800	Shortage of staff.
TOTAL:	75196	15050	22580	22580	14986	8406	29224	34450	

Attachment D

MAHARASHTRA IRRIGATION & TECHNOLOGY PROJECT / STATUS OF DISTRIBUTION
SYSTEM (BEYOND 40 h.a.) PLANNING
November 1983

SUB-PROJECTS	CCA ha	TARGET % 20 83-84	40 84-85	40 85-86	ACHIEVEMENT UPTO 11/83	BALANCE FOR COMPLETION BY 3/84	3/85	STAFF REQUIRED JEn days @ 10ha/JEn/day
Hetwane	6753	1300	2600	2853	100	1200	3800	380
Urmodi	8000	1600	3200	3200	170	1430	4630	463
Sankh	2834	600	1200	1034	150	450	1650	165
Bori	8700	1700	3400	3400	Nil	1700	5100	510
Khairi	1821	400	800	621	Nil	400	1200	120
Sina	8500	1700	3400	3400	500	1200	4600	460
Nagya-Sakya	2011	400	800	811	Nil	400	1200	120
Sonwad	3890	800	1600	1490	Nil	800	2400	240
Dehali	5242	1000	2000	2242	Nil	1000	3000	300
Karvappa	4280	900	1800	1580	100	800	2600	260
Shahnur	7466	1500	3000	2966	400	1100	4100	410
Mun	7804	1500	3000	3304	350	1150	4150	415
Shivna	7895	1600	3200	3095	Nil	1600	4800	480
TOTAL:	75196	15000	30000	30196	1770	13230	43230	4323

Attachment E

MAHARASHTRA IRRIGATION & TECHNOLOGY PROJECT/STATUS OF STAFF FOR CONSTRUCTION (NOV. 1983)

SUB-PROJECTS	1983-84			1984-85			No. of JEs 1983-84			REMARKS
	OUTLAY Rs.m	NO. OF SD @ 1/Rs.2.5m	IN POSITION Nov.'83	OUTLAY	NO. OF SD @ 1/Rs.2.5m	ADDITIONAL OVER 83-84	AS PER SD IN POSI-TION	ACTUALLY IN POSITION	YET TO POSTED	
Hetwane	10.00	4	4	25.00	10	6	20	20	NONE	
Urmodi	10.00	4	2	20.00	8	6	10	10	NONE	
Sankh	8.80	4	2	10.00	4	2	10	8	2	
Bori	0.20	-	1	0.80	1	-	5	5	NIL	
Khairi	8.30	3	4	10.00	4	-	20	19	1	
Sina	29.00	12	5	30.00	12	7	25	40	-	More JEs diverted from other projects recently for Command Area Survey.
Nagya-Sakya	1.00	0.5	2	10.00	4	2	10	10	NIL	
Sonwad	5.00	2	3	8.00	3	-	15	11	4	
Dehali	7.60	3	3	15.00	6	3	15	8	7	
Karvappa	9.30	4	3	15.00	6	3	15	17	-	
Shahnur	14.40	6	6	25.00	10	4	30	20	10	
Mun	15.00	6	6	20.00	8	2	30	20	10	
Shivna	1.00	0.5	1	10.00	4	3	5	5	NIL	
TOTAL:	122.80	49	42	197.80	80	38	210	193	37	

Attachment F

MAHARASHTRA IRRIGATION & TECHNOLOGY PROJECT/REQUIREMENT OF FUNDS AND ACTUALLY PROVIDED
YEARLY FUNDS ESTIMATED @ 10, 23, 28, 25, 13 & 1 PERCENT OF COST (EXCLUDING PART II WORKS) OVER 6 YEAR PERIOD

SUB-PROJECTS	TAKE-OFF YEAR	ESTT.COST 11/83 Rs.(m)	EXPDT. UPTO 3/82 Rs.(m)	BAL. AS ON 4/82	YEARLY FLOW OF FUNDS NEEDED FOR TIMELY COMPLETION										ACTUAL EXPDT/OUTLAYS			84-85 B/LOG
					82-83	83-84	84-85	85-86	86-87	PACD	87-88	88-89	89-90	TOTAL	82-83	83-84	84-85	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Hetwane	82-83	298.00	2.75	295.25	29.52	67.91	82.67	73.81	38.38	292.29	2.96	-	-	295.25	2.00	10.00	25.00	-143.10
Urmodi	83-84	280.48	0.03	280.45	-	28.04	64.50	78.53	70.11	241.18	36.47	2.80	-	280.45	0.81	10.00	20.00	-61.73
Sankh	84-85	81.70	0.70	81.00	-	-	8.10	18.63	22.68	49.41	20.25	10.53	0.81	81.00	0.85	8.80	10.00	+11.55
Bori	84-85	121.50	0.32	121.18	-	-	12.12	27.87	33.93	73.92	30.29	15.75	1.22	121.18	0.56	0.20	0.80	-10.56
Khairi	82-83	39.70	2.05	37.65	3.76	8.66	10.54	9.41	4.89	37.26	0.39	-	-	37.65	4.10	8.30	10.00	-0.56
Sina	82-83	208.00	26.29	181.71	18.17	41.80	50.88	45.43	23.62	179.90	1.81	-	-	181.71	16.95	29.00	30.00	-34.90
Nagya-Sakya	83-84	40.90	Nil	40.90	-	4.09	9.41	11.45	10.22	35.17	5.32	0.41	-	40.90	1.23	1.00	10.00	-1.27
Sonwad	84-85	51.70	0.05	51.65	-	-	5.16	11.88	14.46	31.50	12.91	6.71	0.53	51.65	0.33	5.00	8.00	+8.17
Dehali	84-85	73.90	0.05	73.85	-	-	7.38	16.98	20.68	45.04	18.46	9.60	0.75	73.85	0.48	7.60	15.00	+15.70
Karvappa	83-84	72.50	2.75	69.75	-	6.97	16.04	19.53	17.44	59.98	9.07	0.70	-	69.75	3.43	9.30	15.00	+4.72
Shahnur	83-84	219.72	4.10	215.62	-	21.56	49.60	60.37	53.90	185.43	28.03	2.16	-	215.62	4.00	14.40	25.00	-27.76
Mun	83-84	102.86	Nil	102.86	-	10.28	23.66	28.80	25.71	88.45	13.37	1.04	-	102.86	1.54	15.00	20.00	+2.6
Shivna	84-85	194.40	Nil	194.40	-	-	19.44	44.71	54.43	118.58	48.60	25.27	1.95	194.40	0.50	1.00	10.00	-7.94
TOTAL:		1785.36	39.09	1746.27	51.45	189.31	359.50	447.40	390.45	1438.11	227.93	74.97	5.26	1746.27	36.77	122.80	197.80	-242.89

Attachment G

MITM PROJECT - FUNDS REQUIREMENT

YEAR/PARTICULARS	1	2	3	4	5	6	7	TOTAL
WORK PROGRESS (Financial %)								
IRRI WORKS	10	25	30	25	10	-	-	100
PART I	-	-	10	30	40	20	-	100
PART II	-	-	-	10	30	40	20	100

ASSUMING COST OF WORKS AS RS.20,363/ha DETAILED AS

IRRIGATION WORKS	Rs.17,570/ha	86%)
PART I	Rs.1,725/ha	9%)
PART II	Rs.1,068/ha	5%)
Total:	Rs.20,363/ha	100

and considering Irrigation Works and PART I works as ID works, funding requirements for ID as per above flow of funds works out as under expressed as percentage of project cost:

Including PART II	9	22	27	24	12	1	-	95
Excluding PART II	10	23	28	25	13	1	-	100

Flow of funds needed for PART II works:

	-	-	-	0.5	1.5	2.0	1.0	5

Overall phasing of project funds during sub-project life:

Including PART II	9	22	27	24.5	13.5	3	1	100
Excluding PART II	9	22	27	24	12	1	-	95