

PROJECT EVALUATION SUMMARY (PES) - PART I

Report Symbol U 447

1. PROJECT TITLE Rajasthan Medium Irrigation (AID Loan No. 386-T-228)		2. PROJECT NUMBER 386-0467	3. MISSION/AID/W OFFICE India
		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) 82- 3	
		<input checked="" type="checkbox"/> REGULAR EVALUATION <input type="checkbox"/> SPECIAL EVALUATION	

5. KEY PROJECT IMPLEMENTATION DATES			6. ESTIMATED PROJECT FUNDING		7. PERIOD COVERED BY EVALUATION	
A. First PRO-AG or Equivalent FY 80	B. Final Obligation Expected FY 80	C. Final Input Delivery FY 85	A. Total	\$ 58,000,000	From (month/yr.)	6/80
			B. U.S.	\$ 35,500,000	To (month/yr.)	10/81
					Date of Evaluation Review	11/81

B. 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., algram, SPAR, PIO, which will present detailed request.)	B. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED
<p>1. Attached is the Annual Evaluation Report dated November, 1981 highlighting the project progress and actions to be taken by GOR for improving project performance. The following actions are recommended:</p> <ul style="list-style-type: none"> <li>a. GOR needs to take immediate steps for sanctioning the required field staff and their placement on a priority basis.</li> <li>b. Existing budget allocation for MIP completion by PACD are inadequate and need to be substantially increased during the remaining period of project.</li> <li>c. GOR/ID efforts need to be stepped up to insure clearance of on-going subprojects by CWC Appraisal Committee by March, 1982.</li> <li>d. To expedite project design and approval process, GOR should establish a design unit at state level.</li> <li>e. Award of contract for socio-economic baseline studies and progress of water loss measurement studies need to be expedited.</li> </ul>	Edwin D. Stains	December, 1982

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS			10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT	
<input type="checkbox"/> Project Paper	<input type="checkbox"/> Implementation Plan e.g., CPI Network	<input type="checkbox"/> Other (Specify)	A. <input checked="" type="checkbox"/> Continue Project Without Change	
<input type="checkbox"/> Financial Plan	<input type="checkbox"/> PIO/T		B. <input type="checkbox"/> Change Project Design and/or	
<input type="checkbox"/> Logical Framework	<input type="checkbox"/> PIO/C	<input type="checkbox"/> Other (Specify)	<input type="checkbox"/> Change Implementation Plan	
<input type="checkbox"/> Project Agreement	<input type="checkbox"/> PIO/P		C. <input type="checkbox"/> Discontinue Project	

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER BANKING PARTICIPANTS AS APPROPRIATE (Names and Titles)		12. Mission/AID/W Office Director Approval	
Edwin D. Stains - Engineering Advisor D. M. Singhvi - OSD, Rajasthan Irrigation Dept. John Westley - Chief, Program Office		Signature: <i>Priscilla M. Boughton</i> Typed Name: Priscilla M. Boughton Title: Director Date: JAN 1 1982	

RAJASTHAN MEDIUM IRRIGATION PROJECT

(Loan 386-0467)

Annual Evaluation Report

November, 1981

1. Project Summary

The Rajasthan Medium Irrigation Project is a five year irrigation sector support project. The project is designed to provide financial support to 15-20 Medium Irrigation Projects (MIP) (new, on-going and modernisation) for developing irrigation potential of approximately 65,000 hectares. A project loan agreement between AID and the GOI was signed on June 30, 1980 to provide \$35.00 million as loan to finance construction of MIPs and \$0.5 million as grant financing for specialised training and studies. Total cost of the project including the GOR contribution was estimated to be \$58.0 million. The "Project Assistance Completion Date" (PACD) is June 30, 1985.

2. Project Commitments

The project paper specified the following outputs:

## a. Loan

- i. Implementing fifteen to twenty MIPs (half new and on-going and half modernised) covering approximately 65,000 hectares of irrigated land.
- ii. GOR to double expenditures on MIPs during the life of the Project.
- iii. Irrigation intensity increased by 20 percent.

## b. Grant

- i. GOR/GOI Irrigation Department Engineers responsible for design, construction, operation and water management in MIPs, GOR/AD and GOI staff specialising in economic and project feasibility analysis provided with incountry training and training in the United States.

- ii. Baseline socio-economic surveys of representative MIPs completed.
- iii. Water management studies below the outlet level (40 hectares) conducted, and
- iv. Local level management organisation studied and evaluated.

### 3. Purpose of Evaluation

Implementation schedule outlined in the Project Paper requires conduct of Annual Review of the project in October 1981 in order to evaluate progress on physical construction, funds disbursed and status of studies and training required/conducted.

Review of the project was conducted in November 1981 in collaboration with concerned GOR Irrigation Department officials (See Attachment A for list of officials) and on the basis of information available in the "Annual implementation Review Report" of the Central Water Commission (CWC) dated November 27, 1981.

### 4. Project Status

- a. Physical: The project has realised the following achievements against the targets outlined in section 2.
  - i. Project Approvals : There has been some delay in the subproject approvals by the CWC Approval Committee since the subprojects have to meet recently established GOI improved design criteria and the additional USAID subproject approval criteria developed in consultation with GOR/ID and CWC for improved project design. In addition there is no separate "Design Unit" at the state level for preparation of project reports. At present the projects are prepared by the project staff who are committed to construction activities and have little time for project preparation. A model subproject report for the Bhim Sagar subproject has been prepared to serve as a guideline for GOR/ID officials in the preparation of further project reports. It is envisioned that the proposed six on-going subprojects will be cleared by the Appraisal Committee ending March, 1982.

- ii. Construction: Currently, it appears that approximately 15 (5 new, 6 on-going and 4 modernisation) subprojects with a combined CCA of about 174,000 hectares will be implemented under the project (Attachment B). Construction activities in many of the above subprojects have commenced. The construction activities are at their initial stages except for two subprojects therefore it is difficult to determine trends during this first review.

However, Annual Implementation Report (November, 1981) of the CWC on MIPs has highlighted staffing as a major constraint to project construction activities. Analysis (attachment B) reveals that only 40 sub-divisions are in place on the 15 projects while the CWC has estimated that 154 sub-divisions are necessary to complete construction on time.

- iii. Training: Four groups of GOR (Irrigation and Agriculture Department) /GOI officials have completed their training in the the United States as summarized below

<u>Participants</u>	<u>Field of Training</u>	<u>Place of Training/ Duration</u>
Three	Economic Analysis of Irrigation Projects	Colorado State Univ. 3 months (Jan - March 81)
Four	Irrigation Problems and Practices	Colorado State Univ 2 months (June - Aug 81)
Three	Irrigation Training/ Study Tour	Cal. State Poly. Univ. 1 month (June - July, 81)
Ten	Irrigation Training/ Observation Study Tour	Cal. Poly State Univ. 1 month (July - Aug. 81)

GOR/GOI response to training of the concerned staff associated with project activities has been very encouraging resulting in successful culmination of the above training program. This would appreciably help in quick transfer of technology resulting in better project design, construction and management.

Another in-country training program on "Diagnostic Analysis of Farm Irrigation System" for GOR-Irrigation and Agriculture Deptt. officials is scheduled during January-February, 1982.

- iv. Baseline Surveys: Eight subprojects (Jaswant Sagar, Jaisamand, Gosunda, Chhapparwada, Kothari, Bilas, Gudha and Panchana) have been selected for baseline surveys. Contract for the conduct of studies for the six projects is due to be awarded shortly to the National Council of Applied Economic Research (NCAER). It is envisioned that the studies would be completed in about six months after the award of contract and reports become available. An additional contractor from Rajasthan is being selected to carry out the two remaining studies. AID will review and approve the scope of work and questionnaire for each consultant.
- v. Water Management Studies: Three representative subprojects (Gudha, Jaisamand and Chhapparwada) have been selected for the conduct of water loss measurement studies and outlets identified. Studies are scheduled to be conducted beginning this winter (Dec. 1981) on Rabi crops and continue through the cropping season ending March-April, 1982.
- b. Financial: Attachment C provides a summary of the financial status of the 15 subprojects identified for loan assistance. Expenditure incurred on the subprojects ending March, 1981 has been rather low due to initial problems such as land acquisition, time delays in fixing of contractors, inadequate staff and the budget provisions made by GOR during the Sixth Plan period ending March, 1985 are low. In order to expedite construction and complete the projects in schedule-time as outlined in the project paper (5 years for the on-going projects from the date of agreement signing, 5 years for new projects and 8 years for modernisation projects from the date of initiation of construction), the budget provisions and staffing need to be increased. The estimated staff requirements have been shown in attachment B and budget requirements shown in brackets in attachment C.
- c. Disbursement: Expenditures made after the signing of the loan agreement are eligible for reimbursement after the approval of the subprojects by CWC. From July 1980 through March 1981 the subprojects have incurred an expenditure of Rs 76 million (attachment C-Column 5). Assuming that about 75 percent of eligible expenditure has been incurred on Civil works, an amount of \$4.2 million of AID loan funds will be disbursed for the period ending March, 1981 as soon as the projects have been approved by CWC. It was estimated (log frame) that \$4.0 million would be disbursed by the end of September 1981.

Disbursement on Grants has been satisfactory. As against planned disbursement of \$100,000 outlined in the project paper for the period ending September, 81 an expenditure of \$265,000 has been incurred for which approximately \$98,000 has been disbursed. With the proposed Workshop on "Diagnostic Analysis of Farm Irrigation Systems" scheduled in January-February, 1982, award of contracts for the socio-economic baseline studies, and the water management studies the entire grant of \$500,000 will be disbursed by the end of FY 82.

5. Recommendations

- i. There is a significant shortfall in the staff placement. GOR needs to take immediate steps for sanctioning the required sub-divisions and staffing them on a priority basis.
- ii. Existing budget allocations of the GOR for the sub-projects which need to be completed by project closing date (June, 1985) are inadequate. These need to be substantially increased during the remaining period of the project in order to achieve the targetted project construction completion.
- iii. The water loss measurement studies and award of contract for the socio-economic baseline studies needs to be expedited.
- iv. GOR/ID efforts need improvement to insure CWC Appraisal Committee's approval of the on-going projects by March, 1982.
- v. To further expedite project design and approval process it is recommended that GOR establish a Design Unit at the State level.

List of Key GOR Irrigation Department Officials Contacted

- |    |                   |                             |
|----|-------------------|-----------------------------|
| 1. | Mr. C.S. Hukmani  | Chief Engineer (irrigation) |
| 2. | Mr. D.M. Singhvi  | OSD (Irrigation)            |
| 3. | Mr. O.P. Mathur   | Superintending Engineer     |
| 4. | Mr. R.C. Sharma   | Executive Engineer          |
| 5. | Mr. V.K. Bairathi | Executive Engineer          |

RAJASTHAN MEDIUM IRRIGATION PROJECT

Sub-projects identified for assistance - Staff Position  
(November, 1981) 1/

No.	Subprojects	District	CCA (ha)	Staff (SD) <u>2/</u>	
				in position	Recomm. by CWC
<u>NEW</u>					
1.	Bassi	Chittor	4,452	2	7
2.	Chappi	Jhalawar	9,449	1	12
3.	Bilas	Kota	3,369	1	6
4.	Sawan-Bhadon	Kota	6,962	1	10
5.	Gosunda	Chittor	10,000	4	12
			<u>34,232</u>	<u>9</u>	<u>47</u>
<u>ON-GOING</u>					
6.	Kothari	Bhilwara	5,123	1	8
7.	Bhimsagar	Jhalawar	9,986	4	12
8.	Panchana	S. Madhopur	9,985	4	12
9.	Harishchandra Sagar	Jhalawar	17,762	1	14
10.	Som-Kamla-Amba	Dungarpur	13,870	8	16
11.	Som-Kagdar	Udaipur	6,507	4	10
	Sub-Total		<u>63,233</u>	<u>22</u>	<u>72</u>
<u>MODERNIZATION</u>					
12.	Meja & Meja Feeder	Bhilwara	20,722	6	11
13.	Morel	S. Madhopur	22,400	1	9
14.	Gudha	Bundi	10,730	1	6
15.	Jaisamand	Udaipur	22,680	1	9
	Sub-total		<u>76,532</u>	<u>9</u>	<u>35</u>
	TOTAL		<u>1,73,997</u>	<u>40</u>	<u>154</u>

1/ Information based on CWC Annual Implementation Report - November, 1981.

2/ SD - Subdivision ( a working unit at the field level)

## RAJASTHAN MEDIUM IRRIGATION PROJECT

## Subproject costs, expenditure and budget provisions

(Million Rupees)

Name of subprojects	Estt. cost	Expdr. incurred upto 3/81	Expdr. eligible for partial reimbursement 7/80-3/81	Balance Requirement as on 4/81	Budget Provisions				Balance budget requirement beyond April 85
					81-82	82-83	83-84	84-85	
<u>New</u>									
1. Bassi	76	2	1	74	5 (5)	10 (15)	10 (20)	13 (25)	(9)
2. Chappi	161	1	1	160	3 (3)	10 (15)	20 (25)	30 (35)	(82)
3. Bilas	57	1	1	56	4 (4)	6 (10)	7 (15)	9 (15)	(12)
4. Sawan Bhadon	119	-	-	119	1 (5)	5 (10)	15 (20)	20 (30)	(64)
5. Gosunda	170	2	1	168	5 (10)	26 (30)	39 (45)	43 (50)	(33)
Sub-total	583	6	4	577	18 (27)	57 (80)	91 (125)	115 (155)	(200)
<u>On-Going</u>									
6. Kothari	87	11	7	76	7 (15)	10 (20)	5 (25)	2 (16)	(-)
7. Bhimsagar	142	36	7	106	15 (20)	15 (30)	8 (35)	- (21)	(-)
8. Panchana	155	44	28	111	15 (25)	12 (40)	- (35)	- (11)	(-)
9. Harish Chandra Sagar	107	16	4	91	7 (10)	6 (25)	- (30)	- (26)	(-)
10. Som-Kamla-Amba	180	51	7	129	20 (20)	30 (40)	35 (45)	44 (24)	(-)
11. Som-Kagdar	103	54	10	49	18 (18)	17 (25)	12 (6)	- -	(-)
Sub-total	774	212	63	562	82 (108)	90 (180)	60 (176)	46 (98)	(-)

CONTD.

(Million Rupees)

Name of Subproject	Estt. cost <sup>1/</sup>	Expdr. incurred upto 3/81	Expdr. eligible for partial reimbursement 7/80-3/81	Balance Requirement as on 4/81	Budget Provisions <sup>2/</sup>				Balance budget requirement beyond April 85
					81-82	82-83	83-84	84-85	
<u>Modernisation</u>									
2. Meja & Meja Feeder	226	4	2	222	22 (22)	21 (30)	1 (30)	1 (40)	(100)
3. Morel	90	6	2	84	2 (5)	2 (10)	2 (15)	2 (15)	(39)
4. Gudha	43	7	3	36	2 (2)	5 (5)	5 (10)	4 (10)	(9)
5. Jaisamand	91	5	2	86	2 (5)	2 (10)	2 (10)	2 (15)	(46)
Sub-total	450	22	9	428	28 (34)	30 (55)	10 (65)	9 (80)	(194)
Total	1807	240	76	1567	128 (169)	177 (315)	161 (366)	170 (333)	(394)

- 1/ Project costs based on CWC Annual Implementation Review Report-Nov, 81  
 -) Suggested budget provisions for completing subprojects on time. based on CWC cost estimates.  
 2/ Budget provisions made by GOR shown without brackets.