

IA

- | | | |
|--|-------------------------------|------------|
| B. Main System Management Specialists for LBII/WAPCOS Team Recruitment Initiated | D.R. Arora
LBII/WAPCOS/NRM | 6/89 |
| 3. Recommendation. Integrate subject matter into a systematic curriculum which corresponds to the actual work functions of the ID. | | |
| <u>Action</u> | | |
| A. Annual State Implementation Plans (ASIPS) are under development which address the curriculum planning process in more depth | D.R. Arora
LBII/WAPCOS/NRM | 6/89 |
| B. Training Needs Assessment Program in Process | D.R. Arora
LBII/WAPCOS/NRM | 6/89 |
| C. Training Skills Improvement Activities | D.R. Arora
LBII/WAPCOS/NRM | Continuing |
| 4. Recommendation. Recruit a Teaching Methodologist to support STI instructors and improve training techniques and methods. | | |
| <u>Action</u> | | |
| A. Two Training Methodologists recruited to regularly review training techniques at STI's | D.R. Arora
LBII/WAPCOS/NRM | 6/89 |
| B. Training skills improvement plan presented at Directors Meeting in May 1989 | D.R. Arora
LBII/WAPCOS/NRM | 5/4/89 |
| 5. Recommendation. Evaluations program should be institutionalized at each STI. | | |
| <u>Action</u> | | |
| A. Rigorous pre/post evaluation guidelines and methodologies completed pilot tested in 3 STI's | D.R. Arora
LBII/WAPCOS/NRM | 12/89 |
| 6. Recommendation. Promote more meaningful interactions between STI's and Universities. | | |
| <u>Action</u> | | |
| A. ASIP's will address complementary and collaborative activities between STI's and Universities | D.R. Arora
LBII/WAPCOS/NRM | 6/89 |
| B. University and STI linkage plans to be developed | D.R. Arora
LBII/WAPCOS/NRM | 12/89 |
| C. Universities and STI's will participate jointly in Micro Computer Based Technical Information System | D.R. Arora
LBII/WAPCOS/NRM | 6/89 |

7. Recommendation. Review guidelines and processing arrangements for selecting trainees.

Action

- | | | |
|---|-------------------------------|-------|
| A. Training Needs Assessments Activities will improve trainee selection | D.R. Arora
LBII/WAPCOS/NRM | 6/89 |
| B. Manpower Assessments methodology improvement plans will improve trainee selection | D.R. Arora
LBII/WAPCOS/NRM | 12/89 |
| C. Specific recommendations for improvement of trainee selection will be developed in the Organizational and Procedural Change activity. (Draft plan for Rajasthan) | D.R. Arora
LBII/WAPCOS/NRM | 6/89 |

8. Recommendation. Develop a strong Training of Trainers Program

Action

- A. Training of Trainers is being transferred at:

Anna University, Madras
Water Technology Center

D.R. Arora
LBII/WAPCOS/NRM Continuing

- | | | |
|--|-------------------------------|-------|
| B. Final Component of TOT Program (social/organizational analysis) will be installed this year | D.R. Arora
LBII/WAPCOS/NRM | 12/89 |
| C. Expansion and improvement of TOT program under consideration | D.R. Arora
LBII/WAPCOS/NRM | 12/89 |

ABSTRACT

H. Evaluation Abstract (Do not exceed the space provided)

- 2 -

The Water Resource Management and Training (WRM&T) Project is a bilateral development activity supported by USAID to improve water management technologies, professional and technical skills aimed at improving the capabilities of irrigation and water resource specialists to create a greater potential for more effective policy and technical dialogue. The purpose of this evaluation was to provide guidance to the Government of India and USAID on the progress, direction and effectiveness of the irrigation management training activities. Louis Berger International Incorporated (LBII) and Water and Power Consultancy Services (India) Ltd. (WAPCOS) are the prime contractors for the irrigation management component of the Project. This team provides technical assistance to the State Training Institute (STIs) and selected Universities. A Joint Project Management Committee (JPMC) consisting of representatives from the Irrigation Research Management and Improvement Cell (IRMIC) of the Central Water Commission (CWC), USAID, LBII and WAPCOS oversees the project. At the state level, project activities of the STIs and the Universities are guided by a State Technical Council, chaired by the State's Secretary of Irrigation or a senior administrator associated with irrigation management policy in that state.

Major findings and conclusions follow:

- STIs are increasing the awareness of on-farm irrigation needs without addressing the main system. The spirit and motivation levels of STI staffs are high and development of relevant course materials and their effective presentation is improving. However, course programs at STIs are still too broad, generic and academic, and therefore fail to meet the needs of Irrigation Departments;
- Greater emphasis must be given to participatory and hands on methods of teaching;
- Systematic collaboration needs to be established between STIs and Universities;
- The selection process for trainees is not resulting in the choice of those professionals in greatest need of improved knowledge and skills;
- The Training-of-Trainers Program should be transferred to India to promote cost effectiveness and future sustainability.

COSTS

1. Evaluation Costs

1. Evaluation Team		Contract Number OR TDY Person Days	Contract Cost OR TDY Cost (U.S. \$)	Source of Funds
Name	Affiliation			
Dr. S. Keller	Irrigation Consultant	45 days	ANE-0289-6-D0 7044-60	Project Monitoring Evaluation
Dr. L. Compton	Training Consultant			
Dr. M. Walter	University of Wisconsin Water Management Research Advisor, Cornell			
Mr. M.L. Mathur	University, NRM Office Secretary Irrigation, Rajasthan (Rtd.)	45 days	ISPAN Activity No. 625 A	
Dr. W.B. Rahudkar	Dean, Akola Agricultural University (Rtd.)	45 days		

2. Mission/Office Professional Staff

Person-Days (Estimate) 45 days

3. Borrower/Grantee Professional

Staff Person-Days (Estimate) 90 days

X

A.I.D. EVALUATION SUMMARY - PART II

SUMMARY

J. Summary of Evaluation Findings, Conclusions and Recommendations (Try not to exceed the three (3) pages provided)

Address the following items:

- | | |
|--|--|
| <ul style="list-style-type: none"> • Purpose of evaluation and methodology used • Purpose of activity(ies) evaluated • Findings and conclusions (relate to questions) | <ul style="list-style-type: none"> • Principal recommendations • Lessons learned |
|--|--|

Mission or Office:

USAID

Date This Summary Prepared:

April 1989

Title And Date Of Full Evaluation Report:

Evaluation of the Irrigation Management Training Component of Water Resource Management and Training Project.

1. Purpose of Activities Evaluated

The WRM&T Project is a technical resource to the Government of India's central and state irrigation and water resource organizations. It is particularly focused on the Irrigation Research Management and Improvement Cell (IRMIC) at the Central Government level and STIs and selected Universities in ten states. It provides assistance for state irrigation implementation activities, and support for centrally organized irrigation and water resource management and training initiatives. The major project components are: irrigation management training; water resource management systems analysis and training; irrigation action research; information network development and dissemination, and organizational and procedural change.

2. Purpose of Evaluation and Methodology Used

The purpose of this evaluation was to assist the Ministry of Water Resources, Central Water Commission, and USAID to review the progress, problems, and issues of the irrigation management training activities of the WRM&T Project. The evaluation was intended to identify mid-course modifications to improve the relevance, impact, and implementation of the project. It is limited in scope and designed to assess in a constructive manner what has been learned, what needs to be done to fulfill project objectives and to help set future directions, especially for the training assistance activities.

The evaluation team's approach involved identifying and assessing the training strategies and program activities, methods used in assessing training needs, the accuracy and appropriateness of training materials, and the capacity of faculty members to use them.

Within the limited time frame available, the evaluation team used an opportunity analysis rather than a diagnostic approach for analyzing the WRM&T Project. Emphasis was placed on identifying and assessing the context within which the project is functioning in order to determine how to improve its performance. In addition to its observations and findings, recommendations were developed for action planning to identify follow-up activities to the evaluation.

A variety of methods were employed to obtain and verify information pertinent to the evaluation objectives. Individual or group interviews with Indian authorities, educators, field staff, USAID, and contractor staff were conducted. The interviews ranged from a semi-structured list of questions used in the training-of-trainers interview to a spontaneous, interactive mode of eliciting reports on personal perspectives and perceptions of performance.

The content of a wide range of documents pertinent to the WRM&T project was also assessed. Further opportunities were created to observe STI and University program facilities, to assess field-based action research activities, and to conduct group interviews with farmers, STI training participants, and University students. The numerous briefings held by the evaluation team for Indian and U.S. officials and contractor staff provided important feed-back and increased insight that was incorporated in the findings and recommendations.

3. Findings and Conclusions:

Progress was made in developing and implementing training activities by the institutions visited. The STI's are making a considerable impact on increasing the awareness of on-farm irrigation needs. Furthermore, the spirit and motivation at the institutions are high and development of relevant and quality course materials and their effective presentation is improving. However, present course materials at the STIs still appear to be too broad, generic, academic and not well integrated into a systematic curriculum. Programs are also not planned specifically to meet the needs of the officers of the Irrigation and Agriculture Departments or the Command Area Development Authorities.

The focus of present training programs at all the project supported institutions appears to be mainly on the tertiary or on-farm level of irrigation systems. However, there are major structural and management concerns and opportunities for improvement through training at other levels, especially at the level of the main system.

The STI faculty are generally enthusiastic, hard working and qualified. Faculty are recruited on the basis of subject matter considerations, without adequate attention to their teaching ability. Instructors rely too much on lectures as their primary mode of teaching and seldom take advantage of participatory and hands-on methods which are superior for practical in-service training.

Although several project-funded efforts have been initiated, none of the STIs visited used evaluations to assess the procedures, and associated impacts of their training activities. Regular evaluations would provide the necessary feedback in improving the relevance, quality of training, and discipline in the program. Present exchanges between the STI's and Universities are primarily personal and ad hoc. Potential exists for more effective collaboration in strengthening professional development, course content and action research.

The selection process for trainees has often resulted in the choice of candidates who were not in the greatest need of training nor in a position to make optimal use of improved knowledge and skill levels.

Observations and discussions both in India and the United States have lead the team to conclude that it would be more cost-effective to strengthen a training-of-trainers capability within India itself, than to continue with the U.S. program.

4. Recommendations:

These recommendations are based on a review of training plans and programs at the various institutions visited, and the assistance provided to those institutions by LBII/WAPCOS.

1. It is recommended that the STIs initiate a process in collaboration with the Irrigation Department to carry out strategic training planning. This effort is essential in focussing STI training on the specific work activities and knowledge/skill needs necessary for improving the capability of irrigation system designers and operators.
2. A more balanced training approach was recommended with a focus on the whole system, i.e. activities above the outlets serving the tertiary systems. This would give greater emphasis to the "main system" which would be more appropriate for ID engineers, and be less academic.
3. The curriculum needs significant modification to more closely reflect the actual work functions of the ID officers. Integration of subject matter through practical application to field activities and action research should be emphasized.
4. A "teaching methodologist" should be recruited to assist each STI instructor in improving and evaluating teaching techniques especially participatory and hands-on methods of non-academic training.
5. Relevant and rigorous evaluation procedures need be developed and institutionalized at each STI to improve the quality of training.
6. Systematic interaction and collaboration between STIs and Universities need to be promoted to strengthen the effectiveness of course content and action research.
7. Each state needs to systematically review its guidelines and process for selecting trainees to insure that the most appropriate candidates are chosen.
8. The team recommends that an appropriate Indian institution and personnel be identified and arrangements made for foreign consultants to work with them to develop a high quality training-of-trainers program.

ATTACHMENTS

K. Attachments (List attachments submitted with this Evaluation Summary. Always attach copy of full evaluation report, even if one was submitted earlier. Attach studies, surveys, etc. from "on-going" evaluation, if relevant to the evaluation report.)

1. Evaluation of the Irrigation Management Training Component of Water Resource Management and Training Project.
2. Minutes of the Mission Review Committee Meeting - Water Resource Management and Training Project - Midterm Evaluation, April 18, 1989.

COMMENTS

L. Comments By Mission, AID/W Office and Borrower/Grantee On Full Report

Minutes of the Mission Review Committee Meeting
Water Resource Management and Training Project
Midterm Evaluation

April 18, 1989

A brief Mission Review Committee (MRC) was held to discuss results of the evaluation of irrigation training activities of the Water and Resource Management and Training Project. The office of Natural Resource Management (NRM) and Ministry of Water Resources have fully endorsed the eight evaluation recommendations and received the states' support for their implementation. Initiative has been taken to set up state level working groups to establish processes for follow-up actions.

The main thrust of the eight specific recommendations is to improve the relevance and quality of training programs. Dennis Wendel made a detailed presentation on the actions taken and current status of the recommendations along with a time bound workplan for the rest of the year (1989). The status of recommendations will be shortly made available (o/a May 5, 1989) on the computerized PROMIS system and will therefore be excluded from this presentation.

No significant issues were raised and the MRC approved the evaluation report along with the eight recommendations including NRM's plan for execution of the implementation activities.

Participants in the MRC :

R. Bakley, D	Gary Eidet, CO
D. Pfeiffer, DD	Mike Snyder, RCO
T. Mahoney, DPP	Steve Freundlich, PRJ
John Grant, DPP/E	Glenn Anders, NRM
Jenny Ruducha, DPP/E	Dennis Wendel, NRM
Gokul Prasad, NRM	D.R. Arora, NRM

Clearance :

G. Anders, NRM	<u>GA (draft)</u>	Date <u>5/3/89</u>
T. Mahoney, DPP	<u>TM</u>	Date <u>6/2/89</u>
S. Freundlich, PRJ	<u>SF</u>	Date <u>6/5/89</u>
G. Eidet	<u>GE</u>	Date <u>6/6/89</u>
D. Pfeiffer, DD	<u>DP</u>	Date <u>6/2/89</u>
R. Bakley, D	<u>RB</u>	Date <u>6/2/89</u>