

PN.ABI-879

879

74

START-UP WORKSHOP FOR THE IRRIGATION SYSTEMS MANAGEMENT II PROJECT

QUETTA, PAKISTAN

March 12-15, 1990

ISPAN Activity No. 690C

ISPAN Report No. 30



IRRIGATION SUPPORT PROJECT FOR ASIA AND THE NEAR EAST

Sponsored by the U.S. Agency for International Development



**IRRIGATION SUPPORT PROJECT FOR ASIA
AND THE NEAR EAST**

ISpan Technical Support Center
Room 1001
1611 North Kent Street
Arlington, Virginia 22209-2111
U.S.A.
Phone: (703) 243-7911
FAX: (703) 525-9137
TELEX: 276532 ISpan UR

INTEGRATED IRRIGATION MANAGEMENT RESOURCES

Camp Dresser & McKee International Inc. (Prime Contractor)

CARE

Cornell University

Development Alternatives, Inc.

Harza Engineering Company

International Science and Technology Institute, Inc.

Training Resources Group

The University of Arizona

ISPAN Report No. 30

**START-UP WORKSHOP FOR THE IRRIGATION SYSTEMS
MANAGEMENT II PROJECT**

QUETTA, PAKISTAN

MARCH 12-15, 1990

Prepared for the USAID Mission to Pakistan
under ISPAN Activity No. 690C

by

**Kathy Alison
and
Lee Jennings**

July 1990

**Irrigation Support Project for Asia and the Near East
Contract No. ANE-0289-C-00-7044-00, Project No. 3-7631510
is sponsored by the ASIA/Near East Bureau
U.S. Agency for International Development
Washington, D.C. 20523**

CONTENTS

CHAPTER	Page
ACKNOWLEDGMENTS	iii
ACRONYMS	v
EXECUTIVE SUMMARY	vii
1. INTRODUCTION	1
1.1 Background	1
1.2 Terms of Reference	1
1.3 Interviews	2
1.4 Interview Findings and Issues Identified	3
2. THE START-UP WORKSHOP DESIGN	5
2.1 Workshop Background and Overview	5
2.2 Workshop Goals	6
2.3 Workshop Schedule and Working Norms	6
2.4 Session Descriptions	9
3. OUTCOMES AND AGREEMENTS	15
3.1 Specific Agreements and Recommendations	15
3.1.1 Clarification of Roles/Responsibilities of TA Team and Other Consultants	15
3.1.2 Provincial Irrigation Departments: Identification of Needs and Priorities	20
3.1.3 Salvaging/Making Use of Products Developed under ISM I ...	24
3.1.4 Planning for Long-term Viability of "Institutions"	28
3.1.5 ISM II is scheduled to end on 5 June 1993	32
3.2 Project Management Expectations	35
3.3 Work Plan	35
4. PARTICIPANT EVALUATIONS	37
5. RECOMMENDATIONS AND CONCLUSIONS	41

APPENDIXES

A.	Participant List	43
B.	Overview of the ISM II Project	49
C.	Issues Identified During Interviews	51
D.	Management Expectations	59
E.	ISM II Work Plan Discussion Paper	63
F.	Job Description and Work Program of the Provincial Advisors	71
G.	Provincial, FCC, and USAID Work Plan Priorities	81
H.	Participant Evaluation Results	91

ACKNOWLEDGMENTS

We would like to express our appreciation for the opportunity to work with this dedicated group of specialists who are beginning the task of implementing the ISM II Project.

We are especially grateful to Alvin Newman and Jan Emmert, USAID/Islamabad; Mr. Usmani, ISM Federal Coordinator; and Jim Ringenoldus, Harza Chief of Party, for their cooperation and support in organizing and implementing this start-up workshop.

We would also like to thank the Baluchistan Irrigation Department for their excellent support during the workshop. Special thanks go to Mr. K.D. Khajjak and the PID computer staff for their long hours of setting up and then removing the computers we used to generate all of the participants' input. Finally, a very special thanks goes to Mr. Mohammad Amin, Chief Engineer, and Mr. Shirin Khan Loni, Provincial Coordinator, for hosting an excellent barbecue that we all enjoyed.

The success of the ISM II workshop is due in part to the excellent support we received from Adil Malik and Sohail Sheikh, USAID/Islamabad. Their long hours and accurate transcribing allowed us to provide the workshop agreements to the participants by the end of the workshop. Our thanks also go to the support and administrative staff of the Baluchistan Provincial Advisor, Carlos Gandarillas, who provided excellent logistical support to the workshop facilitators and participants.

ACRONYMS

ACE	Associated Consulting Engineers (Pvt), Ltd.
ACOP	Alluvial Channels Observations Project
AID/W	U.S. Agency for International Development (Washington)
AMU	Administrative Management Unit (of Provincial Irrigation Departments)
COP	Chief of Party
DAI	Development Alternatives, Inc.
FCC	Federal Coordination Cell
GOP	Government of Pakistan
HDC	Hydraulic Design Criteria
ISM	Irrigation Systems Management Project (USAID)
ISM-II	Irrigation Systems Management Project, Phase-II
ISPAN	Irrigation Support Project for Asia and the Near East
ISRP-I	Irrigation Systems Rehabilitation Project, Phase-I (World Bank)
ISRP-II	Irrigation Systems Rehabilitation Project, Phase-II
MIFC	Management Information Flow Center
M&E	Monitoring and Evaluation
NESPAK	National Engineering Services (Pakistan), Ltd.
NWFP	North West Frontier Province
O/ARD	Office of Agriculture and Rural Development (USAID)
O&M	Operation and Maintenance

PA	Provincial Advisor
PACD	Project Activity Completion Date
PC	Provincial (Project) Coordinator
PC-1	The project authorization document of the Government of Pakistan
PEA	Punjab Engineering Academy, Lahore
PID	Provincial Irrigation Department
PIL	Project Implementation Letter
PSC	Personal Service Contractor
SDO	Sub-Divisional Officer (of Provincial Irrigation Departments)
TA	Technical Assistance (consultants)
TL	Team Leader
TOR	Terms of Reference
USAID	United States Agency for International Development (overseas mission)
WAPDA	Water and Power Development Authority
WRD	Water Resources Division of the Office of Agriculture and Rural Development, USAID/Pakistan
XEN	Executive Engineer

EXECUTIVE SUMMARY

The Irrigation Systems Management Project in Pakistan is facing many implementation challenges as it begins the second phase of the project. The ISM-I Project began winding down in 1988. The follow-on phase of the project, ISM-II, was signed in mid-1989. Implementation began later in the year.

ISM II's primary objective is to rehabilitate the irrigation system of Pakistan and establish appropriate funding levels, funding mechanisms, and operations and maintenance procedures and practices to keep the system in its improved state.

A new technical assistance team, new players at the Pakistan provincial level, and a new USAID project officer made it imperative that those implementing the project get acquainted, share information about the project, and decide how to implement this second phase. The Irrigation Support Project for Asia and the Near East (ISPAN) provided two facilitators, Kathy Alison and Lee Jennings, to conduct a three and one half day start-up workshop at the request of the Government of Pakistan Ministry of Water and Power and the USAID mission in Islamabad.

The workshop was held March 12-15, 1990, at the Serena Hotel in Quetta, Pakistan.

Forty individuals who are closely associated with the implementation of ISM II participated in the workshop. Participants included the ISM II Federal Coordinator; the Provincial Coordinators and technical staff from Baluchistan, NWFP, Punjab, and Sindh; the Harza consulting team; the USAID division chief and project staff from Islamabad and Lahore; and representatives from Associated Consulting Engineers (Pvt). Ltd. (ACE) and National Engineering Services (Pakistan), Ltd. (NESPAK).

The objectives of the workshop were to:

- Exchange current project information that is essential to the implementation of the project.
- Gain agreement on and commitment to project goals and activities.
- Provide an opportunity for the project team to become better acquainted.

- **Agree on the roles and responsibilities of USAID, the Federal Coordination Cell, the Provincial Irrigation Departments, and the Harza technical assistance team.**
- **Agree on procedures for managing the project.**
- **Clarify expectations for working together.**
- **Discuss and develop strategies for dealing with the most important issues that will affect the project.**
- **Review and agree on draft work plans for the first year of the project.**

Prior to the workshop, the facilitators interviewed 31 individuals. Five major topics were identified as important to discuss during the workshop.

1. **Clarification of the roles and responsibilities of the provincial advisors, technical assistance advisors, USAID project staff, and others involved in the project in relation to the Provincial Irrigation Departments.**
2. **Identification of the needs and priorities of the Provincial Irrigation Departments to develop close coordination between the provinces and the technical assistance team. Possible priorities included rehabilitation of canals or drainage systems, operations and maintenance, computerization, equipment workshops, design, and commodity/equipment procurement and construction equipment management.**
3. **The salvage and use of products (O&M manuals, maintenance cost yardsticks, training modules, hydraulic design criteria, etc.) developed under ISM I.**
4. **Planning for long-term viability of "institutions" developed as part of the project, including financial viability, administrative management units, computer cells, design cells, equipment task forces, equipment workshops, management information flow centers, training advisory committees, hydraulic monitoring units, etc.**
5. **Planning for project completion by June 5, 1993.**

Most of the workshop was spent discussing these five issues and reaching agreements on what steps are required to resolve them. Specific agreements and recommendations are listed in Chapter 3 of this report.

Summary of Key Agreements

The workshop group came to major agreements about how the technical assistance team provincial advisors were to coordinate and collaborate with the Pakistani provincial coordinators in the Provincial Irrigation Departments. Specific responsibilities were defined, based on the needs of the provinces.

Procedures were identified to include provincial authorities in the identification of priorities and a number of steps were identified to review and revise products that had been developed under ISM I which will be useful in the provinces. Discussions about the placement of design cells and computer cells led to agreements about the size and scope of these activities, based on province-by-province needs.

USAID shared information about the status of the project, potential for extension, and projections for future funding. There is virtually no possibility that USAID can extend its assistance beyond the June 1993 Project Activity Completion Date (PACD).

Other major agreements included expectations on how the provinces, the Federal Ministry, contractors, and USAID plan to work together on information sharing, working relationships, written reports, decision making, monitoring performance, and involvement in planning.

Facilitators' Comments

ISM II is facing many challenges over a short timeframe, but the project team (provincial level, Harza, and USAID) brings experience and commitment to the task.

The participants had an opportunity to participate in open discussions about their expectations for the outcomes of the project and gather information about the current project status. By the end of the workshop, there seemed to be a better understanding of and commitment to project goals, and individuals felt more involved in what was going on and more committed to project success.

Many agreements were reached about how to proceed in the implementation of ISM II. To reach the project objectives, it is important that all those who participated in the workshop take responsibility for the commitments they made. USAID, the Harza team, the Federal Coordinator, and the provincial coordinators, plus the others who participated, must all keep the lines of communication open and monitor the progress and adherence to agreements made during the workshop.

The facilitators believe that this project team of experts can make much progress toward achieving the objective of rehabilitation and development of funding mechanisms for the operation and maintenance of the irrigation system.

Chapter 1

INTRODUCTION

1.1 Background

The Irrigation Systems Management (ISM) Project agreement was first signed in June 1983 and had the following primary objectives: to rehabilitate the irrigation system of Pakistan and establish appropriate funding levels, funding mechanisms, and operations and maintenance procedures and practices to keep the system in its improved state.

ISM was designed with four discrete but interrelated components: 1) rehabilitation works; 2) institutional and technical skill improvement; 3) research and policy implementation; and 4) command water management. The technical assistance (TA) contractor for ISM-I departed in 1988, but some essential project activities continued to be supported by a locally hired "bridging team." The amendment for Phase II of the project was signed in mid-1989, and the new TA contractor began fielding its advisors in late 1989.

Although special care was taken to incorporate the substantial findings and recommendations of the ISM I evaluation into the project amendment, implementation problems can still arise during the first year of a development project. No matter how thoroughly a project is planned, it does not become a reality until the project actually starts.

USAID/Islamabad therefore requested that the Irrigation Support Project for Asia and the Near East (ISPAN) provide two facilitators to conduct a project start-up workshop for ISM II. One of the USAID project officers had prior experience with a similar workshop when he was in Sri Lanka and the chief of party of the contract team had also participated in a similar workshop in Egypt. Both were influential in gaining Ministry approval for the workshop.

1.2 Terms of Reference

ISPAN was requested to provide two senior facilitators, skilled in workshop design, implementation, and consultation. Their assignment was to:

- Review roles/responsibilities and background information about the project in a team planning meeting

- Meet with the workshop steering committee (Ministry federal coordinator, technical assistance chief of party, and USAID project officer) to assist in the preparation for the workshop and get direction and input about expectations for the workshop
- Interview workshop participants to identify key issues and constraints to successful project implementation
- Analyze interview data, using results to design the specific elements particular to the project
- Oversee the workshop planning and organization and the timely and proper management of all logistical arrangements.
- Manage and facilitate the workshop, emphasizing team building and problem-solving approaches
- Conduct a debriefing on the results of the workshop and possible next steps with key ministry, contract, and USAID staff
- Prepare a workshop report on issues identified, ensuing discussion, methodologies employed, and agreements and recommendations reached for effective project management and improved project implementation. The final report will be distributed to all workshop participants.

1.3 Interviews

Interviews were conducted with 31 people by the ISPAN facilitators to identify project issues and to prepare participants for the workshop. The interviews included 13 Government of Pakistan (GOP) participants, 12 contractor (Harza/DAI participants), and 6 USAID participants.

Interviewees were asked to describe their role in ISM II, their expectations for the workshop, the overall goal/objectives of the ISM II Project, and the issues they felt should be discussed during the workshop. They were also asked to identify the one thing they would like to accomplish during the workshop, and they were given an opportunity to pose any questions they had about the workshop.

The facilitators analyzed the interview data and used the results to develop five categories of issues. These categories and the proposed workshop agenda and schedule were discussed with the workshop steering committee (F. H. Usmani, Federal Coordinator; Alvin Newman,

Chief, Water Resources Division, O/ARD, USAID; Jan Emmert, Project Officer ISM II, USAID; and Jim Ringenoldus, Chief of Party, Harza TA team) prior to the workshop.

1.4 Interview Findings and Issues Identified

Most participants interviewed were positive about the workshop and were quite frank and open about sharing their concerns with the facilitators. Those who were most enthusiastic were those who had not been involved in ISM I and thus felt a real need to meet the other key players in ISM II and to clarify roles and responsibilities.

The analysis of the interview data enabled the facilitators to group the issues into the following five general categories:

1. Clarification of roles and responsibilities
2. Identification of the needs and priorities of the Provincial Irrigation Departments (PIDs)
3. Salvaging/making use of products developed under ISM I
4. Planning for long-term viability of "Institutions"
5. Implications of the ISM II Project ending on June 5, 1993.

Chapter 2

THE START-UP WORKSHOP DESIGN

2.1 Workshop Background and Overview

The overall purposes of this project start-up workshop were to shorten project start-up time; develop draft action plans for the first 6 to 12 months of the project; and build an effective team of donor agency representatives, ministry officials, and contractors who will be working together over the life of the project.

In some respects, a project "start-up" workshop may seem inappropriate in this situation since the ISM Project agreement was first signed on June 5, 1983, and some activities of the first phase of the project went through the end of 1989. However, the second phase of the project, ISM II, was designed in 1988 with special care to incorporate the substantial findings and recommendations of the ISM I evaluation which was done in January-February 1988. (See ISPAN Report No. 2, Pakistan ISM Project Evaluation: Rehabilitation and Institutional Strengthening Components.) The design of Phase II significantly modified the approach used during Phase I, and a new TA contractor was selected to field the TA team.

Thus, the TA team members for ISM II are mostly new to the project. There are also several new players for the Government of Pakistan (GOP) and USAID because of staff transfers/changes. These significant changes in the project called for a "start-up" activity for ISM II.

The Water Resources Division (WRD) of USAID/Islamabad's Office of Agriculture and Rural Development (O/ARD), with the concurrence of the ISM Federal Coordinator, F. H. Usmani, asked the Irrigation Support Project for Asia and the Near East (ISPAN) to conduct this project start-up workshop. The workshop was held in Quetta, Pakistan, March 12-15, 1990, at the Quetta Serena Hotel. The facilitators were Kathy Alison, Human Resource Development Program Manager for ISPAN, and Lee Jennings, Senior Management Consultant from the Training Resources Group.

Thirty-seven participants attended the ISM II project start-up workshop. In addition, the two program assistants from O/ARD/USAID/Islamabad who made up the workshop coordination and support staff participated in some sessions. The Irrigation Engineer with the World Bank Resident Mission in Islamabad, Mr. Anis N. Youssef, was unable attend due to other engagements. (See Appendix A for the complete list of participants, support staff, and facilitators.)

The workshop design provided opportunities for getting better acquainted, sharing project information, discussing and proposing solutions to project issues, defining management

expectations, and drafting a project work plan for 1990. The ISPAN facilitators guided group assignments and encouraged full participation of all members, facilitated plenary discussions/decision making, and recorded and reviewed agreements reached and recommendations made.

2.2 Workshop Goals

The workshop was designed to accomplish the following goals:

- Exchange current project information essential to the implementation of the project.
- Gain agreement on and commitment to project goals and activities.
- Provide an opportunity for the project team to become better acquainted.
- Agree on the roles and responsibilities of USAID, the FCC, PIDs, and the Harza/DAI/ACE technical assistance team.
- Agree on procedures for managing the project.
- Clarify expectations for working together.
- Discuss and develop strategies for dealing with the most important issues that will affect the project.
- Review and agree on draft work plans for the first year of the project.

2.3 Workshop Schedule and Working Norms

This section contains the daily schedule and list of working norms that were agreed to at the start of the workshop.

Monday, 12 March 1990

18:00 Opening Session

Welcome remarks by:

- F. H. Usmani, Federal Coordinator
- A. Newman, Chief, WRD/ARD/USAID

Get acquainted exercise

Objectives, schedule, and working norms

19:00 Session 2: Sharing Project Information

Panel:

- F. H. Usmani, Federal Coordinator
- A. Newman, Chief, WRD/ARD/USAID
- Jan Emmert, Project Officer ISM-II, ARD/USAID
- Masaud A. Arbab, PC, Sindh
- Mohammad Ashraf, PC, Punjab
- Saleemullah Khan, PC, NWFP
- Jim Ringenoldus, COP, Harza TA team

Develop questions for panel members

20:30 Reception/dinner

Tuesday, 13 March 1990

08:30 Session 2: Continued

Questions and answers for panel members

10:30 Break

10:45 Session 3: Overview of Project Issues

11:15 Session 4: Discussion of Project Issues

Work in 5 small groups

13:00 Lunch

14:30 Session 4: Continued

Small groups continue discussions

16:00 Break

16:15 Session 4: Continued

Two small groups report out

18:30 Adjourn
20:00 Barbecue dinner

Wednesday, 14 March 1990

08:30 Session 4: Continued
Three small groups report out
Summary of agreements on project issues
13:00 Lunch
14:30 Session 5: Management Expectations
16:00 Break
16:15 Session 5: Continued
18:30 Adjourn

Thursday, 15 March 1990

08:30 Session 6: Work Plan
Overview of draft technical assistance ISM II work plan
Clarification of what remains to be done and how to do it
10:30 Break
10:45 Session 6: Continued
Identification of PID priorities/expected outcomes by PACD
Agreement on PID and FCC activities for first year of work plan
Drafting first year PID and FCC work plans
13:00 Lunch

- 14:30 **Session 6: Continued**
 Reports on draft work plans
- 16:00 **Break**
- 16:15 **Agreement on next steps to complete overall work plan**
- 17:00 **Session 7: Evaluation and Closure**
- 17:30 **End of workshop**

WORKING NORMS

- **Participate actively**
- **Listen carefully**
- **Speak one at a time**
- **Respect each others opinion**
- **No smoking in the meeting rooms**
- **Take personal breaks as needed**
- **Dress informally**
- **Be on time**
- **Be brief/precise**
- **Have a good time**

2.4 Session Descriptions

This section contains a brief description of each session. The results of the issues discussed and the agreements and decisions reached appear in Chapter 3.

Session 1: Workshop Opening

The participants were welcomed by Alvin Newman, Chief, WRD/ARD/USAID, and F. H. Usmani, Federal Coordinator. After each person in the room had presented him/herself by giving name, position, where based, and role in ISM II, the facilitators reviewed the workshop objectives, schedule, and proposed working norms.

Session 2: Sharing Project Information

In order to share overall information and individual perspectives on the ISM II Project, the facilitators asked the key project actors to be part of a panel to discuss their views on overall project purpose, priorities, and constraints. (See Appendix B for an overview of the ISM II Project prepared by Jan Emmert.) The panel members were:

- F. H. Usmani, Federal Coordinator
- A. P. Newman, Chief, WRD/ARD/USAID
- Jan Emmert, Project Officer ISM II, ARD/USAID
- M. A. Arbab, Project Coordinator, PID/Sindh
- C. M. Ashraf, Project Coordinator, PID/Punjab
- S. Khan, Project Coordinator, PID/NWFP
- Jim Ringenoldus, Chief of Party, Harza TA Team

Because of an opportunity to attend a concert and a buffet dinner sponsored by the British Council, this session ended at 19:30 on Monday, 12 March, and was completed Tuesday morning. Nearly two hours on Tuesday morning were devoted to a question and answer session. Panel members responded to questions formulated by participants who had developed questions in five table groups.

Session 3: Overview of Project Issues

The facilitators presented the results of their analysis of pre-workshop interviews. The five issue categories were reviewed in detail for accuracy, completeness, and acceptance by the total group. (See Appendix C for complete list of issues identified during interviews.)

Session 4: Discussion of Project Issues

To prepare for this session, the facilitators received very helpful input from Alvin Newman, Jan Emmert, and Muzammil Qureshi that enabled them to propose an appropriate balance of seven or eight participants for each of the five issue groups.

The actual composition of the groups was as follows:

Group 1:

- | | |
|--------------------------|-----------------------|
| 1. Saleemullah Khan | 5. Carlos Gandarillas |
| 2. Alvin Newman | 6. Mohammad Ehsan |
| 3. Kifayatullah Chaudhry | 7. Khudadad Khajjak |
| 4. Jim Ringenoldus | 8. A. R. Siddiqi |

Group 2:

- | | |
|-----------------------|------------------|
| 1. Chaudhry M. Ashraf | 5. Javed Awan |
| 2. M. H. Qureshi | 6. Shuja Junejo |
| 3. Ayub Jan | 7. Mohammad Amin |
| 4. Gene White | |

Group 3:

- | | |
|----------------------|-----------------|
| 1. F. H. Usmani | 5. R. Malik |
| 2. Naseer Rana | 6. Adil Hasni |
| 3. M. Naseem (USAID) | 7. M. A. Zaidi |
| 4. R. Stoneman | 8. Asif Mahmood |

Group 4:

- | | |
|---------------------|--------------------|
| 1. Shirin Khan Loni | 5. Tom Liston |
| 2. M. I. Chishti | 6. Major A. Hameed |
| 3. A. B. Baloch | 7. M. Mithrani |
| 4. Gene Thompson | |

Group 5:

- | | |
|--------------------------|------------------|
| 1. M. A. Arbab | 5. David Miller |
| 2. Jan Emmert | 6. Mehboob Karim |
| 3. R. Boswell | 7. Zainuddin |
| 4. Mohammad Naseem (QTA) | 8. A. H. Zaidi |

The groups worked from late Tuesday morning into mid-afternoon. The first two groups made their reports in plenary session on Tuesday and the remaining three groups gave their reports on Wednesday morning. Following each group report, the facilitators managed the plenary discussions that led to the results/agreements on the project issues (see Chapter 3).

Session 5: Management Expectations

For this session three new groups were formed so that all of the project personnel working with the GOP, Harza, or USAID were in their respective groups. The facilitators provided each group with a management expectations matrix which the group was asked to complete. The matrix included the expectations that each group had of the other two groups in terms of:

- sharing information
- ideal working relationships
- written reports
- decision making
- monitoring performance
- involvement in planning, and
- any other areas

The groups completed their matrices in 1.5 hours. By the end of Wednesday's session, each group presented its matrix and reached agreement with the other groups about how the project should be managed. (See Appendix D for the complete list of agreements regarding these management expectations.)

Session 6: Work Plan

For this session, new groups were formed to reflect the major working teams of the project. These included the four Provincial Irrigation Departments (PIDs); the Federal Coordination Cell (FCC), including both Harza and USAID personnel responsible for technical assistance to all the PIDs; and USAID project management personnel. Each group was given copies of 1) the draft working paper prepared by David Miller of Harza (Appendix E), 2) job description and work program of the Provincial Advisors prepared by Jim Ringenoldus, the Harza Chief of Party (Appendix F) and 3) copies of the draft work plans for computerization, equipment repair and maintenance, and monitoring and evaluation.

The task given to each group was to review the draft work plans; clarify what remains to be done and how to do it; identify priorities and, if possible, expected outcomes by the PACD in June 1993; and then star/check the priorities for 1990. These tasks were done by late morning on the last day, Thursday, 15 March, and they were then presented, discussed, and agreed upon in plenary session. (See Appendix G, Provincial, FCC and USAID Work Plan Priorities.)

The final activity of the session was agreement on the following next steps:

<u>Step</u>	<u>Deadline</u>
1. Fax any additional ideas on work plans through liaison office to Jim Ringenoldus	20 March 1990
2. Next draft of overall plan to PAs	27 March 1990
3. PID comments back to Jim Ringenoldus/FCC (after informing/involving Secretaries)	11 April 1990
4. Final overall work plan drafted by David Miller, Harza	2 May 1990

Session 7: Evaluation and Closure

The facilitators invited anyone who wished to do so to share their impressions of the workshop. The comments reflected a high level of satisfaction with the overall organization, facilitation, and results of the workshop. The facilitators then thanked everyone for their cooperation and passed out the workshop evaluation forms which were completed by the group and returned. (See workshop evaluation results in Appendix H.) The workshop ended at 14:30 on Thursday, 15 March.

Chapter 3

OUTCOMES AND AGREEMENTS

3.1 Specific Agreements and Recommendations

This section contains the agreements and recommendations made about the issues discussed at the workshop. Five groups discussed the major issues facing the project.

3.1.1 Clarification of Roles/Responsibilities of TA Team and Other Consultants

There is a need to clarify the roles of the following individuals in the ISM II Project:

Provincial Advisors (PAs)

Team Leader—Chief of Party and Advisor to the Federal Coordination Cell (FCC)

Technical Advisors (TA's) for:

- Equipment and Workshops
- Design
- O&M
- Computerization
- Monitoring and Evaluation

Others (USAID personal services contractors, etc.)

The ISM II Project, funded by USAID, has many players who will be working together on its implementation. The technical assistance team will be in Pakistan for a short period of time. (The project completion date is June 1993, and much of the project technical assistance will be ending by early 1992.)

The emphasis in the Project Paper is clearly on close collaboration with the Provincial Irrigation Departments (PIDs) so that the PA/TA teams can effectively advise and assist the Provincial Irrigation Departments in implementing project components assigned to Harza, including:

- O&M capability and planning
- equipment maintenance, management, and utilization
- training plans and coordination
- monitoring and evaluation.

1. *How can the PA/TA team effectively support and work with the Provincial Coordinators?*

Agreements The PA will be responsible for coordinating and supporting all provincial project activities based on day-to-day contact with the Provincial Coordinator (PC) and Secretary.

The PA will identify all constraints to implementation of project objectives and offer assistance wherever useful.

The PA is a troubleshooter.

He provides inputs to develop annual O&M work plans, including rationalized funding.

He advises on improved construction/O&M procedures based on newly provided equipment.

He advises on improved design procedures and data collection.

He advises on provincial needs regarding training, career development, and documentation.

He supports/promotes the sanctioning of required positions and adequate incentives to arrange engineers to work in design and data collection.

He develops and tracks implementation of long- and short-term plans based on identified needs.

2. *What kinds of outputs and deliverables are expected from the PAs and TAs?*

Agreements Outputs vary by provinces. In larger provinces, PA/TAs' role is heavy on advice; in smaller provinces, PA/TAs should consider actual preparation of work (i.e., assist in preparing rehabilitation schemes).

A quarterly assessment report will be prepared which lists the constraints which the PA sees to the attainment of project objectives and which contains suggestions for how to remove the constraints and what has been done.

In addition, the PA prepares a monthly issues memo to the PC stating what needs to be done, based on his observations. This monthly report will

include recommendations on how to solve problems. The report is based on conversations and cooperation of PC (cc: USAID and NESPAK).

Monthly and quarterly reports will be sent to the Chief of Party.

3. *How will PA/TA performance be monitored/evaluated? What criteria should be used? Who will monitor/evaluate their performances?*

Agreements The Chief of Party, possibly with USAID, will meet the PC every quarter to get feedback on PA performance.

4. *How can the PA/TA team members properly balance the potentially conflicting roles of effectively advising the PIDs with the desire to actually do the work?*

Agreements PAs will be primarily advisory in Sindh and Punjab and more hands-on in NWFP and Baluchistan.

PA can actually conduct training courses, design, and possibly play a major role in development of O&M plan.

Highest priority should be given to O&M plan.

In Punjab, especially, PA plays a minor role in design—perhaps an O&M assistant to PA might be better than the originally planned-for design assistant.

5. *Can the team help synchronize systems and procedures between PID's, FCC and USAID? How?*

Agreement The TA team plays the role of an expediter, moving requests from PID through FCC to USAID.

6. *What is the flow of communications between the PA/TA team members and USAID? Direct or through the Team Leader/Chief of Party?*

Agreement Information from PA/TAs to USAID should be through the Chief of Party on contractual matters—PA/TAs should use good judgement on other issues. Anything related to contractual matters should go through the Chief of Party.

7. *What is the role of the USAID personal services contractors in relation to PAs and TAs and the USAID project staff?*

Agreements The USAID computer experts are also advisors to the PIDs. They will be evaluated at quarterly meetings between Naseer Rana and the respective provincial coordinators.

The Harza/DAI/ACE technical assistance team and the USAID PSCs (both computer experts and others) will make efforts to coordinate with each other. When travelling to provinces, USAID PSCs will inform the respective PA in advance and liaise closely with him.

8. *What is the role of the team leader in relation to the FCC, to the team and to USAID, and to the World Bank Irrigation Systems Rehabilitation Program (ISRP)?*

Agreements Chief of Party-USAID: Contractual responsibility

Chief of Party-FCC: Daily communication, written monthly updates and distillation of four monthly updates with submittals

Chief of Party-IDA: Informal communication

9. *What is the role of NESPAK in relationship to the USAID engineers?*

Agreements NESPAK/USAID perform joint inspections prior to issuance of PILs, plus make independent visits during construction.

Prior to reimbursement, joint visits are done.

Inspection reports are shared informally.

Ideally, NESPAK will continue to assume more responsibility during construction and USAID engineers less.

USAID engineers would appreciate informal information from NESPAK on civil works, especially in Punjab.

10. *How can the skills and experience of the TA team members be utilized beyond the scope of their specific assignments (i.e., PA may have a strong training background)?*

Agreements The Chief of Party will try to capitalize on individual PA skills and interests through knowledge of the PAs' background and expertise.

In those instances where project needs go beyond the skills of PAs, the Chief of Party will utilize Harza/DAI organizational strengths and request short-term consultancies.

The Chief of Party will prepare a memo to PCs outlining strengths and interests of TA team to be shared with PIDs.

PAs may want to organize individual mini-start-up workshops to familiarize provincial people with the organization of project. This should not interfere with PAs' principal tasks.

11. *How will local hire consultants be integrated into the project? What are their roles/responsibilities?*

Agreements a. ACE is an integral part of the TA team and should be used as a source of professional staff and a source of technical expertise.

b. Other consultancies will be bid separately or be implemented (if small enough) under the Harza/ACE contract, on an as-needed basis.

12. *What should/could be done to help create effective provincial teams?*

Agreement It is the responsibility of PAs to generate interest and enthusiasm in the PIDs in order to develop a cohesive team of consultants and GOP counterparts (i.e., regular get-togethers with PIDs and TA staff).

3.1.2 Provincial Irrigation Departments: Identification of Needs and Priorities

1. *How can the priority needs of the Provincial Irrigation Departments (PIDs) be identified and built into the implementation of ISM II in Baluchistan, NWFP, Punjab, and Sindh?*

Possible priorities include:

- rehabilitation of canals or drainage systems
- O&M
- computerization
- training
- equipment workshops
- design
- commodity and equipment procurement
- other

Agreements Each department will ask the field chief engineers to consult with their lower formations about the priority needs of the department.

The PCs will coordinate with their Chiefs of Engineering and will complete this exercise by 1 June 1990, which is agreed upon by all the four provinces

2. *Can funds be reprogrammed by the project, if desired, to meet current specific needs and wishes of the PIDs (i.e., a serious need to improve drainage systems in one of the provinces)?*

Agreement Yes. It is proposed that, based on the needs of the provinces, the funds be allowed to be reprogrammed, i.e., re-allocation of funds from one item to another, restricted, of course, to the concerned components.

However, apart from the provision of moving 15 percent of the funds between the line items, no re-allocation is allowed to move funds from one category into another, for example, moving funds from training element to commodities, etc.

3. *How much flexibility is there for treating each PID as a unique case or situation?*

Can one or two PIDs go forward with increased computerization if the provinces/GOP are willing and able to provide positions and funds, while other provinces reallocate funds originally programmed for expanded computerization or other activities for other, more pressing priorities?

Agreement **Maximum flexibility should be allowed to the PIDs as to their needs. The provinces should be independent in conducting their own programs.**

4. *What are the implications of the lessons from **ISM I** that too much was attempted with too little coordination and consultation with the PID's? What can be done to keep this from happening in ISM II?*

Agreement **The PIDs feel that ISM I lacked proper coordination between the PIDs, USAID, and the consultants. There should be better coordination now as provincial advisors from the TA consultant team are already assigned to each PID.**

There should be periodic meetings of all the groups to review the problems and progress of the project.

The following schedule of meetings is agreed to:

- a. **Quarterly meetings of PIDs, donors, consultants, and advisors, to be chaired by the Secretaries of Irrigation.**
- b. **Quarterly meetings of the PC/PIDs, donors, and consultants prior to the above meeting (probably with the interval of one day or so).**
- c. **Quarterly meetings of the Federal Review Board at Islamabad.**

5. *Is there a way, under ISM II, to improve communications for the canal/drainage systems? If yes, how?*

Agreement **The previous consultants to the ISM I prepared a report on this issue. There are several possibilities to be considered, including a) the provision of fax facilities, and b) the provision of extensively spread wireless system for the regulations. In Phase I, there was a general type of report which suggested ways and means of improving this situation. However, in Phase-II, this general report should be customized to the province-specific needs.**

The existing information system should be reviewed by a short-term consultant. The TA team should identify the best course of action and develop Terms of Reference for the consultant to proceed with.

6. *Is there a need for hydraulic data studies of canals before going ahead with rehabilitation designs? If yes, how will they be done and who will be responsible for doing them?*

Agreements Yes, there is a need for such studies. PIDs will soon have the hydraulic monitoring systems, and the design cells are established to do this analysis. There is a provision in the project that PIDs can be provided their own equipment for hydraulic monitoring, and this will enable them to do the investigations by themselves internally.

Assistance from ACOP will, however, be provided for at least one year.

7. *How can ISM II assure that equipment supplied by the project will be appropriate to the needs of the individual PIDs?*

Agreements Procurements should be taken up after the needs are identified by the PIDs with the justification supported by the TAs.

PAs will send the letters of recommendations for equipment procurement after analyzing the PIDs specific needs. This is the procedure being used to implement the new computer procurement plan.

Other equipment, such as for M&E and O&M, will also be procured following the same procedure. The PA will write a letter supporting the equipment purchase.

8. *How can PID training needs be identified, prioritized, and coordinated?*

Agreements These will be identified by the TA team training consultants in consultation with the PIDs. They will fix the priorities.

- *Who will do in-service, on-the-job training?*

Agreements The TA team/USAID will arrange this in-service on-the-job training through institutions and organizations like the Punjab Engineering Academy, universities and colleges of engineering and technology.

Local experts and eminent retired and serving engineers (both local and expatriate) can also be contracted to do the job.

- *How will trainees be selected?*

Agreements The PIDs will select their trainees. The TA team will help PIDs select nominees for training.

- *Who coordinates/organizes overseas training?*

Agreements The TA team will work closely with the training expert of USAID, to be appointed as a project-funded Personal Service Contractor (PSC), and will coordinate the activity for the PIDs.

There has also been a concern that some American universities refuse to consider GOP nominees for off-shore training because of the students' disinterest in the programs, their uncooperative attitude, and lower academic background. PIDs have agreed to scrutinize the above aspects while proposing participants for the overseas training. USAID has been requested to inform the PIDs about particular and pertinent complaints so that proper caution and care is exercised in future selections.

- *How will training of personnel be planned and coordinated so that planned project activities can be completed on time?*

Agreement The AMUs in the PIDs will plan and implement training programs and will also get assistance from the TA team.

- *How will decisions be made about the amount of in-country training and overseas training that will be necessary under this project?*

Agreement Decisions are laid down in the Project Paper and the PC-Is. However, PIDs and donors can modify/alter the program with mutual consultation.

- *How could a rotating system of training PID personnel be established so that all key staff receive basic training in areas related to their responsibilities (i.e., basic computer skills, design and construction supervision skills, cost estimates, etc)?*

Agreement AMUs in consultation with the TA team will frame the program.

- *Can private sector construction engineers be trained as part of ISM II to improve their design and construction skills?*

Agreement Engineers of firms involved in the project activities may be trained under this program, e.g., NESPAK and WAPDA.

However, training will be restricted to only the public sector firms directly associated with the project, not the private sector institutions which are dealt with separately by USAID by private sector training programs (beyond the scope of the ISM II).

3.2.3 Salvaging/Making Use of Products Developed under ISM I

ISM I developed a number of products. Most of these products have not been institutionalized.

1. *What should be done with the O&M manuals that were developed as part of ISM I: Canal Management, Water Measurement, Canal Embankments, and Structures?*

Agreement The existing manuals are general and very useful but none of the provinces has a manual which relates to their specific canal systems. Therefore, the existing manuals should be revised to meet the conditions in each province. These manuals would then be acceptable to the provinces. The O&M advisor is currently working on this revision.

- *How important is it to revise and eventually adopt these manuals?*

Agreements It is important that provinces that are interested (NWFP and Sindh) should revise and adopt the updated manuals.

The manuals should be developed with the PIDs' assistance and agreement and Harza Technical Assistance.

This activity is not a priority for Punjab and Baluchistan.

- *If the O&M manuals are not appropriate, what needs to be done to improve O&M?*

They are appropriate. Discussed above.

- *Are PID working groups the most effective way of revising/adapting these manuals? If not, how should this be done?*

Agreement The most effective way of revising the manuals in accordance with the requirements of the provinces is to have working groups in which there is participation of the departments themselves, since they are the end users. Revisions required can be pinpointed and incorporated in the manuals. This will facilitate approval by the departments and the manuals' adoption later.

2. *Yardsticks for equipment/repair/replacement costs were prepared for tube wells, drains, canals, and flood bunds under ISM I. How can these yardsticks be updated yearly to reflect actual rates and cost estimates?*

Agreements These yardsticks should be updated by the PIDs yearly to reflect the increased cost of the labor, material, and equipment based on regular market surveys.

PAs will follow up on revision of yardsticks and provide assistance as needed.

- *What level of priority is given by the PCs to the value and need for such yardsticks?*

Agreement This is a high priority for the PIDs, as annual yardsticks which enable them to prepare their annual budget.

3. *What is the status of the training modules that were developed under ISM I? What needs to be done to get them tested and into use?*

ISM I developed eight properly shaped modules. In Phase I, training was imparted for the four PIDs, and 230 individuals were trained. The response from the PIDs was very encouraging.

The Irrigation and Power Departments are very keen to have more of these training modules sessions. The Punjab Engineering Academy (PEA) is currently running two training modules very effectively at Multan, and more training modules are scheduled for the current year. This training is in line with the PC-1 and Project Paper provisions and about 700 slots have been provided for all the four provinces in ISM II.

Agreement Punjab will investigate sending PEA teams to other provinces to provide training.

Local engineering universities and colleges can also provide the training, supplemented by skilled engineers.

How and when to do the training and by whom will be decided after study/recommendations from the TA and USAID PSC training advisors in consultation with PIDs.

4. *What should be done about the Hydraulic Design Criteria and the Simplified Criteria?*

The Hydraulic Design Criteria was originally agreed upon conditionally by three provinces (NWFP, Baluchistan, and Sindh). Punjab was totally opposed because of certain hydraulic constraints. The Punjab has now evolved simplified design criteria which has been put on a computer system and is currently being used to redesign problematic channels being rehabilitated under the ISRP II Project.

Agreement Monitoring should be done immediately to determine the effectiveness and usefulness of the HDC by ACOP/WAPDA.

5. *What further actions should be taken to implement the recommendations made in the report on the improvement of O&M in the PIDs?*

In the study, eight functional areas were identified as part of an overall O&M operation improvement program:

- a. Full Funding Budgets: Already discussed in Question 2 above.
- b. Maintenance Yardsticks: Already discussed in Question 2 above.

Agreement c. Management Systems: MIS and other management systems should be explored by TA consultants (Harza/USAID) for implementation.

Agreement d. Inspection Systems: An independent inspection unit from within the PID to periodically inspect the channels in the various divisions, and submit a report to the Chief Engineer for necessary corrective measures.

e. Equipment Management: Discussed by Group 4.

f. Training: Group 2 discussed this issue.

- g. Transport Systems: Group 5 discussed this topic as part of questions 5 and 7.
- h. Telecommunications: This area should be explored by the consultants and recommendations developed and implemented.

Agreement Harza will assess work that must be done to set up telecommunications systems and design the scope of work. All provinces are interested in this study.

6. *What other products, produced under ISM I, need to be evaluated and potentially utilized by ISM II?*

Reports have been developed in the following four areas under the ISM I:

- a. Engineering Team
- b. O&M
- c. Planning and Management
- d. Training

For example, a computer strategy report and an organizational study report for each province have already been evaluated and ISM II strategies developed based on these reports and lessons learned from ISM I. This strategy is being implemented in all four provinces now.

Agreement All other reports prepared by ISM I in above areas should also be reviewed and evaluated to define TA team's implementation strategy for ISM II. The review should be done by consultants in TA team responsible for specific content areas and by USAID.

3.1.4 Planning for Long-term Viability of "Institutions"

- Financial viability of irrigation systems
- Viability of administrative management units
- Computer cells
- Design cells
- Equipment task force
- Workshops
- Management information flow center
- Training advisory committees
- Equipment management units
- Hydraulic monitoring directorates and units

1. *What is the role of water charges in maintaining the financial viability of irrigation systems? How realistic is it to expect full cost recovery for the recurring costs of the irrigation systems?*

To maintain the financial viability of the irrigation systems, the water charges must be maintained at appropriate levels (i.e., increased periodically at the inflation rate and when support prices increase) and recovered fully as far as possible. If the assessment and collection are also improved, full recovery of O&M costs is possible.

Agreement Efforts should be made to have the assessment of water charges assigned to the PIDs in Sindh and Baluchistan.

2. *What are the implications of the GOP staffing and financing limitations on the ability of the PIDs to institutionalize computer cells and design cells?*

Agreement We see no limitation on PIDs to institutionalize small computer and design cells. There should be a small computer cell within the PID Secretariat and that cell should support the computerization activities of the department.

The existing staff, wherever computerization is intended, should be trained in the use of computers.

3. *How will the design cells be integrated into the existing design directorates?*

Agreements The design cells should be small and manned by design specialists who are recruited and retained through incentives provided by provincial governments and be made part of the existing design directorates.

The directorates have mainly review functions, but these cells may do actual design work.

PID design directorates could be reduced if private sector firms are used to provide design services.

4. *How can equipment task forces be made more effective and institutionalized in each PID? Who should call for and take minutes of the task force meetings?*

Agreements PIDs should "own" these equipment task forces. These should be headed by officers of Chief Engineer level.

Regular meetings should be called by the PCs and minutes also recorded by a PID officer.

The use of Mainsaver reports will make equipment task forces more effective.

Note: All other cells, committees, directorates, and units begun under ISM I should be implemented in each PID and evaluated over the next year by the PCs, PAs, TAs and M&E unit of ISM II so that final determination can be made of the need for and usefulness of each of these "institutions" to each PID. This review concerns all the groups listed at the beginning of this issue category.

- *Some PIDs are leasing or renting equipment to contractors, but are having problems receiving payments for this rental. How have other PIDs handled this problem?*

PIDs in Punjab and Baluchistan rent out equipment to the contractors and recover the rental charges from contractors. Other provinces can do the same, whenever necessary.

5. *Sophisticated workshops have been set up but are not being used to capacity. The reasons for this limited use appears to be the time it takes for approval of the repairs, the lack of skilled technicians to perform the repairs, lack of spare parts, and the availability of private mechanics and workshops who can do the repairs quicker.*

- *How can these workshops be managed and operated more efficiently?*

Agreements Workers should be trained properly

More skilled workers should be inducted

PIDs should take administrative steps to improve discipline in workers.

PIDs should require field units to send equipment to the workshops for repair/overhaul.

- *How can the paperwork required for approval of repairs be simplified?*

Agreement PIDs have to follow their normal procedures. With effort, approvals can be sought within a reasonable time.

- *How can spare parts be readily available to cut down on the time needed for repairs?*

Agreement Mainsaver computer program should be used and the spares ordered locally or abroad to replenish the stocks.

- *In the long run, are government workshops really needed or should planning begin now for some privatization of these workshops? How could this be done?*

Agreement Government workshops are needed to facilitate repairs under controlled conditions. However, the workload and discipline must be ensured by top administration.

- *What is needed to make these workshops operational and a resource for the PIDs?*

Agreements During the current year, the Technical Assistant for equipment and workshops will assist in getting the workshops operational.

After one year, the PID workshop situation should be reviewed to determine the future direction (public/private) of the workshops.

6. *What are the pros and cons of setting up a separate circle for rehabilitation work under the PC, rather than having the work done by District XENs?*

The rehabilitation of a channel is determined from its current condition and past performance, where the input of the in-charge Field Division is necessary. Moreover, rehabilitation through a separate rehabilitation circle will encroach upon the jurisdiction of the O&M staff when the work is to be carried out on an operating channel. On the other hand, a separate circle will devote all its attention to rehabilitation work.

- Punjab has already created rehabilitation circles under the PC and their experience will be of interest.
- It is, however, considered necessary that staff at the field working level must be strengthened if quality and quantity are to be insured. The scheme preparation and direct supervision is done by the Sub-Engineer, guided by SDO. Therefore, additional Sub-Engineers, and where workload justifies, additional SDOs should be provided in existing Field Divisions.

7. *How can the Management Information Flow Centers be used more efficiently?*

Agreement Management Information Flow Centers (MIFC) should be established, equipped, and manned with suitable staff in each PID and placed under the Additional Secretary or another high-level secretariat officer where Additional Secretary's position does not exist.

This center should plan, collect, record, and disseminate information to users. The Computer Center/Cell should support it and the MIFC should be institutionalized as part of each PID's monitoring system.

Note: Over the next year, the PRC/Checchi report on MIFCs should be reviewed and decisions reached on how to proceed with MIFCs. The Centers should also be used for local PID training.

8. *Is it realistic to build Engineering Academies in Sindh and NWFP? Could or should these academies be funded under ISM II?*

Agreement The Project Paper allows for possible support to develop a Sindh engineering academy and combined NWFP/Baluchistan Academy as well as support further development of the Punjab Engineering Academy. USAID will fund feasibility studies for these institutions, but would not

proceed further unless there first were well developed plans, a strong commitment and priority by the respective PIDs, and a clear sense that the institutions would be viable and sustainable. As a practical matter, it is doubtful that this groundwork could be completed in time to establish the institutions during the lifetime of this project.

9. *How can PIDs learn from each others' experiences in terms of implementation approaches that have worked?*

Agreement There should be six-month inter-provincial seminars/workshops in all four provinces by rotation. GOP should coordinate.

Clarification of terms used to define the institutions or units within PIDs:

Several units are mentioned within PIDs, i.e., Administrative Management Unit, Equipment Management Unit, Training Task Force, Management Information Flow Center, and Equipment Task Force. Too many units become confusing and unmanageable.

- Equipment Task Force: It should handle all aspects of equipment, assisted by the Mechanical/Equipment staff and field staff as necessary. There should be no other unit dealing with equipment.
- Management Information Flow Center: It should provide information on training as well. It could be called Management Unit. There should be no other units.

3.1.5 ISM II is scheduled to end on 5 June 1993

1. *How can all project activities be accomplished in this timeframe?*

- Agreements
- a. In yearly work plans, clarify project priorities within provinces in light of overall project objectives.
 - b. Establish schedule of project review meetings to assess progress and to adjust work plan in each province.

Note: It will probably not be possible to accomplish all project activities before 5 June 1993.

2. *Will funds be available as planned in the PC-1s or will adjustments be made? If so, how will these adjustments be made?*

Yes. Funding will be available as planned in the PC-1s. If necessary, adjustments can be made in the PC-1s. USAID schemes should be given priority.

3. *Can and should funds programmed for 1991 and 1992 be moved forward so work can begin earlier?*

Probably not possible this year for USAID funds.

4. *What USAID constraints have led to the current delay in project implementation? Can these be minimized in the future? How?*

Constraints:

- a. Availability of funding
- b. Close scrutiny of AID/W and USAID/Islamabad Mission and uncertain funding environment.
- c. Potential changes in procurement rules.

It is not certain that these constraints can be minimized in the future, but efforts will be made to do so.

5. *What is the status of project vehicle procurement?*

Sixty-five vehicles are currently being procured. Optimistic arrival time is 90 days.

Subsequent vehicle procurement will depend upon budget allocations and priorities.

6. *Where and why are there delays in processing Project Implementation Letters (PILs) for PID requests? How can procedures be streamlined and improved?*

Present procedures are effective; delays have resulted from delayed funding allocations.

7. *Have the basic ground rules and priorities of USAID changed since ISM I? If yes, what are the changes and the implication of these changes on ISM II?*

a. Emphasis of the project is on system and subsystem rehabilitation.

- b. Expectation is for closer involvement of TA team with PIDs.
- c. Emphasis is on selection and utilization of equipment.
- d. A mechanism for delivering training has yet to be determined and is not now part of the Harza contract.
- e. AID/W is interested in policy issues of full cost recovery and full O&M allocations.

- *Will it still be possible to procure vehicles?*

Vehicle procurement: See #5, above.

- *Will some projected ISM II project funds be returned to AID/W for reprogramming?*

Return of funds:

- Not this year's funds.
- Possible for future years.

8. *How can monitoring and evaluation of project activities and results be done most effectively?*

An evaluation and monitoring plan is being drafted to meet the needs of the PIDs, USAID and the project team.

A separate hydraulic and socioeconomic impact evaluation of selected rehabilitation schemes is also planned.

9. *How can coordination be improved between the mechanical/machinery wing and the civil works/construction wing of PIDs?*

Group was not aware that this was a significant problem.

Agreements If it is a problem, the equipment task force should address this issue. For example, equipment utilization rates should be analyzed in collaboration with civil works people to arrive at reasonable rates.

Other options:

- **Divest equipment to private sector.**
- **Consider giving equipment over to civil circles.**

3.2 Project Management Expectations

The participants met in their respective groups (GOP, USAID, HARZA) and discussed how they want to work with the others involved in implementation of ISM II. A matrix was used to help define the expectations about information sharing, working relationships, report writing, decision making, monitoring of performance, involvement in planning, and any other areas of cooperation the groups felt needed to be defined. See Appendix D for the completed matrices from each group.

3.3 Work Plan

The four provincial work groups, the federal cell and TA staff, and USAID staff met individually to review the draft technical assistance work plan and identify their priorities for the remainder of the project.

After presenting the priorities from each of the provinces, the federal cell, and USAID, the participants agreed to the following next steps for completion of the work plan:

- **Fax any additional ideas on the work plans through the USAID liaison offices to Jim Ringenoldus by 20 March 1990.**
- **Send the next draft of the overall work plan to the provincial advisors by 27 March 1990 for review by provincial authorities.**
- **Provincial Irrigation Department comments should be back to Jim Ringenoldus and the FCC (after involving the Secretaries) by 11 April 1990.**
- **Final overall work plan will be completed by David Miller of Harza by 2 May 1990.**

See Appendix G for provincial, FCC, and USAID priorities.

Chapter 4

PARTICIPANT EVALUATIONS

Thirty-three participants completed the written evaluation. (See Appendix H for a complete evaluation report.) The evaluation results show a high rate of achievement of the workshop goals and participants expressed a high level of satisfaction with the workshop, both in oral and written comments.

On a scale of 1 (low, goal not achieved) to 5 (high, goal achieved very well), participants rated the overall achievement of workshop goals at 4.43. The highest goal achievements were rated 4.76 (provide an opportunity for the project team to become better acquainted), and 4.64 (exchange current project information that is essential to the implementation of the project).

The other goals were rated in the following order:

- Clarify expectations for working together (4.55)
- Agree on the roles and responsibilities of USAID, the FCC, PIDs, and the Harza Technical Assistance Team (4.40)
- Discuss and develop strategies for dealing with the most important issues that will affect the project (4.30)
- Gain agreement on and commitment to project goals and activities (4.27)
- Agree on procedures for managing the project (4.27)
- Review and agree on draft work plans for the first year of the project (4.27)

Some of the primary benefits of the workshop mentioned by individuals in the written evaluation were the following:

- "It has made me acutely aware of the goals and objectives of the project, how they will be achieved and what my role will be in achieving them."

- **"To my mind, this workshop was of a very unique nature. The primary benefit of this workshop was exchange of valuable information amongst the participants."**
- **"Understanding of the project objectives, improvement in working relations and familiarization with the concerned parties' roles and limitations."**
- **"The workshop has given a clear idea about the project goals and how to achieve them."**
- **"Established a friendly atmosphere for carrying out the project."**
- **"The primary benefit has been to share project-related information, get acquainted with the key personnel from all agencies dealing with the project and arrive at a consensus on procedures and methodologies for implementation."**
- **"Exchange of information/ideas about the project, draft work plans prepared, project objectives clarified, and roles of different players identified."**
- **"Having the opportunity to meet the various officials I will have to be working with."**
- **"The Harza, USAID, and especially PID personnel have been brought nearer to each other and everybody knows who is who. All of the participants now know something more than before. (Most of the PID personnel were blank and new on the project)"**

When asked what could have been done to improve the workshop, most participants felt that everything was done well. Several participants suggested devoting additional time to work plan and project goals, while another thought that additional time could have been allocated to setting project priorities.

When asked about unresolved issues that should be dealt with in follow-up activities, most individuals responded that these issues would come up later as implementation proceeds. One individual commented on the need for resolution on specifics of manual requirements and final resolution on priorities for equipment and vehicle requirements and provincial work plans for rehabilitation jobs. One participant said, "This is a complex project with many activities. Not all were discussed and not all issues resolved. But the major issues were. There was a good sense of priorities in discussing issues. We almost never bogged down in smaller issues."

The group was happy with the workshop arrangements and with the Quetta Serena Hotel. The only negative comments centered on the size of the meeting room used during the first two days and the request that next year's workshop be held in a larger, more airy room.

Finally, the group was pleased with the performance of the workshop facilitators. Comments included "excellent," "would gladly work with them again," "really professional in their approach towards conducting workshops," "hope to be with us in the next workshop," and "was a much better result of keeping things moving than I thought possible. Drew results/conclusions and decisions out of the group in a very useful way."

Chapter 5

RECOMMENDATIONS AND CONCLUSIONS

The thoughtful and detailed agreements reached during the workshop characterize the interest and enthusiasm that participants showed in making sure that ISM II is implemented. To ensure that this work is not wasted, the group must be committed to following up on the commitments that were made during the workshop.

- The Federal Coordination Cell director, TA Team Leader/Chief of Party, provincial coordinators, provincial advisors, USAID project staff, and PSCs should continue their discussions about the most effective role for the provincial advisors in each PID. It was obvious during the workshop that each province should be treated as a separate case and that each provincial advisors' role will be different based on the specific needs of the provinces.
- The agreements made at this workshop should be monitored on a regular basis by the USAID project officer, FCC coordinator, and TA team leader
- A series of provincial start-up/review workshops should be scheduled in the next several months to ensure provincial involvement in the implementation of the project. The workshops should be scheduled for a minimum of three days and participants should include provincial secretaries and field staff who are involved with the project (design cells, computer cells, workshop committees, etc.) as well as the provincial coordinator. NESPAK and ACE representatives should also participate in these provincial workshops. It would be important to have an outside facilitator run these workshops so that the provincial advisors can actively participate in the discussions, rather than be responsible for running the workshops.
- A project review workshop should be planned with ISPAN and held with this same group of participants in one year to review progress made on the agreements from this workshop. The workshop should be at least four days long to allow adequate time for discussion of issues that have arisen during the first year of implementation.

The facilitators were impressed with the enthusiasm and interest of the participants during the workshop. Their willingness to discuss issues openly and develop implementable agreements showed a developing team spirit that will help in the next three years.

It is important that the participants continue in this spirit of collaboration and open discussion so that the project can move forward. Continued sharing of information about the project and shared decision making will help build a strong team to implement the project.

Appendix A

PARTICIPANT LIST

<u>Name and Address</u>	<u>Phone</u>	<u>Fax</u>
Federal Coordination Cell		
1. Mr. F. H. Usmani Federal Coordinator for ISM Project Office of the CEA/CFFC Ministry of Water and Power Islamabad	824359	811980
Irrigation and Power Department - Sindh		
2. Mr. Masaud A. Arbab Provincial Coordinator for ISM Project Irrigation and Power Department Government of Sindh, Tughlaq House Karachi	510688	
3. Mr. M. N. Mathrani SE Mechanical Irrigation and Power Department Hyderabad	20936	
4. Mr. Shuja Ahmed Junejo Superintending Engineer Irrigation and Power Department Hyderabad	610280	
Irrigation and Power Department - Punjab		
5. Mr. Chaudhry Mohammad Ashraf Provincial Coordinator for ISM Project Irrigation and Power Department Government of the Punjab Lahore	58882	

6. Mr. A. H. Zaidi 63846
Additional Secretary
Irrigation and Power Department
Punjab
7. Mr. Mansoob Ali Zaidi 58882
SE, Rehabilitation
Irrigation and Power Department
Punjab

Irrigation and Public Health Engineering Department - NWFP

8. Mr. Saleemullah Khan 73262
Provincial Coordinator for ISM Project
Irrigation and PHE Department
Government of NWFP
Peshawar
9. Mr. Allah Bakhsh Baloch 73262
XEN (Mechanical)
Irrigation and PHE Department
Peshawar
10. Mr. Ayub Jan 73262/76069
XEN ISRP
Irrigation and PHE Department
Peshawar

Irrigation and Power Department - Baluchistan

11. Mr. Shirin Khan Loni 41749
Provincial Coordinator for ISM Project
Irrigation and Power Department
Quetta
12. Mr. Mohammad Amin
Chief Engineer
Irrigation Department
Quetta

- | | | |
|-----|---|-------|
| 13. | Mr. Khudadad Khajjak
Dy Coordinator for ISM/
Systems Analyst
Irrigation and Power Department
Quetta | 42818 |
| 14. | Mr. Mohammad Naseem
Director Planning
Planning and Development Department
Quetta | 75761 |
| 15. | Mr. Zain-ud-Din
SE Irrigation Circle
Sibi | |

NESPAK - (National Engineering Services, Pakistan)

- | | | |
|-----|---|--------|
| 16. | Mr. Mohammad Ehsan
General Manager
House 10-A, Block A
Faisal Town, Lahore | 865537 |
|-----|---|--------|

USAID/Islamabad

- | | | | |
|-----|--|--------|--------|
| 17. | Dr. Alvin P. Newman
Chief, Water Resources Division
Office of ARD
USAID/Islamabad | 824071 | 824086 |
| 18. | Dr. Jan Emmert
Project Officer ISM II
Office of ARD
USAID/Islamabad | 824071 | 824086 |
| 19. | Mr. Muzammil Hussain Qureshi
Chief Water Resources Engineer
Office of ARD
USAID/Islamabad | 824071 | 824086 |

20. Mr. Mohammad Naseem
Program Specialist
Office of ARD
USAID/Islamabad 824071 824086

21. Mr. Sahibzada Asif Mahmood
Project Engineer
Office of ARD
USAID/Islamabad 824071 824086

USAID/Lahore

22. Mr. M. I. Chishti
Project Advisor
Office of ARD
USAID/Lahore 305082-4

23. Mr. Naseer Rana
Senior Systems Specialist
Office of ARD
USAID/Lahore 305082-4

24. Mr. M. Kifayatullah Chaudhry
Project Engineer
Office of ARD
USAID/Lahore 305082-4

Harza

25. Mr. Jim Ringenoldus
Chief of Party
Harza Engineering
Islamabad 812167 811980

26. Mr. Gene White
Provincial Advisor for NWFP
Development Alternatives, Inc./Harza
c/o Irrigation and PHE Department
Peshawar 73247

27.	Dr. Carlos Gandarillas Provincial Advisor for Baluchistan Harza Engineering c/o Irrigation and Power Department Quetta	43723	
28.	Mr. Rue Boswell Provincial Advisor for Punjab Harza Engineering c/o Irrigation and Power Department Lahore	877936	
29.	Mr. Russ Stoneman Provincial Advisor for Sindh Development Alternatives, Inc./Harza c/o Irrigation and Power Department Karachi	440091	
30.	Mr. Tom Liston Equipment Specialist Harza Engineering c/o Irrigation and Power Department Lahore	877936	
31.	Dr. Gene Thompson Design Specialist Harza Engineering c/o Irrigation and Power Department Lahore	876233	
32.	Mr. Adil Hasni Training Specialist Harza Engineering Islamabad	811979	811980
33.	Mr. Javed Awan Mechanical Engineer Harza Engineering Islamabad	811979	811980
34.	Mr. Mehboob Karim Monitoring & Equipment Specialist Harza Engineering Islamabad	811979	811980

35. Major Abdul Hammed
Equipment Engineer
Associated Consulting Engineers/Harza
Baluchistan, Quetta

36. Dr. David Miller 812167 811980
Harza Chicago Coordinator 811979
c/o Harza Engineering, Islamabad

ACE - Associated Consulting Engineers (Pvt), Ltd.

37. Dr. A. R. Siddiqi 877081-3 870970
Project Coordinator
ACE (Pvt) Ltd./Harza
1/C-2, M. M. Alam Road
Gulberg-III, Lahore

USAID Coordination and Support Staff

38. Mr. Adil R. Malik 824071 024086
Program Assistant
Office of ARD
USAID/Islamabad

39. Mr. Sohail A. Sheikh 824071 824086
Program Assistant
Office of ARD
USAID/Islamabad

ISPAN Facilitators

Ms. Kathy Alison 703-243-7911 703-525-9137
ISPAN HRD Program Manager
1611 N. Kent St., Suite 1001
Arlington, Virginia, 22209 USA

Mr. Lee Jennings 703-548-3535 703-836-2415
Senior Management Consultant
Training Resources Group
1021 Prince Street
Alexandria, Virginia, 22314 USA

Appendix B

OVERVIEW OF THE ISM II PROJECT

OVERALL OBJECTIVES:

**EQUITABLE
RELIABLE
WATER DELIVERY**

FINANCIALLY SUSTAINABLE IRRIGATION SYSTEM

|
**IMPROVED
COST RECOVERY**

|
**LOWER COST INCR.
EFFICIENCY**

PROJECT DESCRIPTION:

INSTITUTIONAL STRENGTHENING OF PIDS

3 MAIN PROJECT COMPONENTS



**INCREASE
UTILIZATION OF
EQUIPMENT**



- MONITOR/PLAN USE, CONDITION, AND MAINTENANCE
- EFFECTIVE MECHANICAL WORKSHOPS
- OVERHAUL PROG.
- EQUIPMENT REVIEW
- EQUIP. TASK FORCE
- NEW EQUIPMENT

**STRENGTHEN O&M
EFFECTIVENESS**



- O&M EQUIPMENT TRIAL
- O&M EQUIPMENT EXPANSION
- POLICY
 - ROUTINE MAINTENANCE
 - ADEQUATE FUNDS
- O&M MANUALS
- TO BE DETERMINED

**REHABILITATE
CANALS & DRAINS**



- SYSTEMS APPROACH IN SELECTION/DESIGN
- LEAVE WHOLE SUB-SYSTEMS BEHIND:
 - IN GOOD CONDITION
 - BEING MAINTAINED ROUTINELY
 - NOT REQUIRING REHABILITATION

SERVICE COMPONENTS:

COMPUTERIZATION



- MAINSAVER

- PLANNING/ MONITORING AND INFORMATION MANAGEMENT

- PLANNING/ MONITORING AND INFORMATION MANAGEMENT

TRAINING



- SPECIAL EQUIPMENT TRAINING

- O&M MODULES

- DESIGN

**MONITORING &
EVALUATION**



- MONITOR O&M EQUIPMENT TRIAL
- MONITOR O&M FUNDING/ EFFECTIVENESS

- HYDRAULIC AND SOCIOECONOMIC MONITORING OF REHABILITATION SCHEMES

+ AID PURPOSE LEVEL
MONITORING

Appendix C

ISSUES IDENTIFIED DURING INTERVIEWS

A. CLARIFICATION OF ROLES/RESPONSIBILITIES OF:

- PROVINCIAL ADVISORS (PAs)
- TEAM LEADER (TL)-- Chief of Party (COP) and Advisor to the Federal Coordination Cell (FCC)
- TECHNICAL ASSISTANCE (TA's) ADVISORS for:
 - Equipment and Workshops
 - Design
 - O&M
 - Computerization
 - Monitoring and Evaluation
- OTHERS (USAID personal services contractors (PSCs), etc)

The ISM II project, funded by USAID, has many players who will be working to implement the project. The technical assistance team will be in Pakistan for a short period of time (Project Completion Date is June, 1993)

The emphasis in the project paper is clearly on close collaboration with the Provincial Irrigation Departments (PIDs) so that the PA/TA teams can effectively advise and assist the Provincial Irrigation Departments in implementing project components assigned to Harza, including:

- canal/drain rehabilitation planning and design
 - O&M capability and
 - equipment management and utilization
1. How can the PA/TA team effectively support and work with the Provincial Coordinators?
 2. What kinds of outputs and deliverables are expected from the PAs and TAs?
 3. How will PA/TA performance be monitored/evaluated? What criteria should be used? Who will monitor/evaluate their performances?

4. **How can the PA/TA team members properly balance the potentially conflicting roles of effectively advising the PIDs with the desire to actually do the work?**
5. **Can the team help synchronize systems and procedures between PID's, FCC and USAID? How?**
6. **What is the flow of communications between the PA/TA team members and USAID? Direct or through the TL?**
7. **What is the role of the USAID personal services contractors in relation to PAs and TAs and the USAID project staff?**
8. **What is the role of the team leader in relation to the FCC, to the team and to USAID and to the World Bank Irrigation Systems Rehabilitation Program (ISRP)**
9. **What is the role of NESPAK in relationship to the USAID engineers?**
10. **How can the skills and experience of the technical assistance team members be utilized beyond the scope of their specific assignments (ie, PA may have a strong training background)?**
11. **How will local hire consultants be integrated into the project? What are their roles/responsibilities?**
12. **What should/could be done to help create effective Provincial teams?**

B. PROVINCIAL IRRIGATION DEPARTMENTS: IDENTIFICATION OF NEEDS AND PRIORITIES

1. How can the priority needs of the PIDs be identified and built into the implementation of ISM II? (Baluchistan, NWFP, Punjab, Sindh)

Possible priorities include:

- Rehabilitation of canals or drainage systems
- O&M
- Computerization
- Training
- Workshops
- Design
- Commodity/equipment procurement/overhaul of equipment
- Other

2. Can funds be reprogrammed by the project, if desired, to meet current specific needs and wishes of the PID's (ie, a serious need to improve drainage systems in one of the provinces)?

3. How much flexibility is there for treating each PID as a unique case or situation?

Can one or two PIDs go forward with increased computerization if the provinces/GOP are willing and able to provide positions and funds, while other provinces reallocate funds originally programmed for expanded computerization or other activities for other, more pressing priorities?

4. What are the implications of the lessons from ISM I that too much was attempted with too little coordination and consultation with the PID's? What can be done to keep this from happening in ISM II?

5. Is there a way, under ISM II, to improve communications for the canal/drainage systems? If yes, how?

6. Is there a need for hydraulic data studies of canals before going ahead with rehabilitation designs? If yes, how will they be done and who will be responsible for doing them?

7. How can ISM II assure that equipment supplied by the project will be appropriate to the needs of the individual PIDs?

- 8. How can PID training needs be identified, prioritized and coordinated?**
- **Who will do in-service, on the job training?**
 - **How will trainees be selected?**
 - **Who coordinates/organizes overseas training?**
 - **How will training of personnel be planned and coordinated so that planned project activities can be completed on time?**
 - **How will the decision be made about the amount of in-country training vs. overseas training that will be necessary under this project?**
 - **How could a rotating system of training PID personnel be established so that all key staff receive basic training in areas related to their responsibilities (ie, basic computer skills, design and construction supervision skills, cost estimates, etc)?**
 - **Can private sector construction engineers be trained as part of ISM II to improve their design and construction skills?**

C. SALVAGING/MAKING USE OF PRODUCTS DEVELOPED UNDER ISM I

ISM I developed a number of products. Most of these products have not been institutionalized, although some have been.

1. What should be done with the O&M manuals that were developed as part of ISM I: Canal Management, Water Measurement, Canal Embankments, and Structures?

How important is it to revise and eventually adopt these manuals?

If these are not appropriate, what needs to be done to improve O&M?

Are PID working groups the most effective way of revising/adapting these manuals?
If not, how should this be done?

2. Yardsticks for equipment/repair/replacement costs were prepared for tube wells, drains, canals and flood buns under ISM I.

How can these yardsticks be updated yearly to reflect actual rates and cost estimates?

What level of priority is given by the PCs to the value and need for such yardsticks?

3. What is the status of the training modules that were developed under ISM I? What needs to be done to get them tested and into use?
4. What should be done about the Hydraulic Design Criteria and the Simplified Criteria?
5. What further actions should be taken to implement the recommendations made in the report on the improvement of O&M in the PID's?
6. What other products, produced under ISM I, need to be evaluated and potentially utilized by ISM II?

D. PLANNING FOR LONG TERM VIABILITY OF 'INSTITUTIONS'

- FINANCIAL VIABILITY OF IRRIGATION SYSTEMS
- COMPUTER CELLS
- DESIGN CELLS
- EQUIPMENT TASK FORCES
- WORKSHOPS
- MANAGEMENT INFORMATION FLOW CENTER

1. What is the role of water user fees in maintaining the financial viability of the irrigation systems? How realistic is it to expect full cost recovery for the recurring costs of the irrigation systems?
2. What are the implications of the GOP staffing and financing limitations on the ability of the PIDs to institutionalize computer cells and design cells?
3. How will the design cells be integrated into the existing design directorates?
4. How can equipment task forces be made more effective and institutionalized in each PID?

Is this a priority for the PCs?

Who should call for and take minutes of the task force meetings?

Some PIDs are leasing or renting equipment to contractors, but are having problems receiving payments for this rental. How have other PIDs handled this problem?

5. Sophisticated workshops have been set up, but are not being used to capacity. The reasons for this limited use appears to be the time it takes for approval of the repairs, the lack of skilled technicians to perform the repairs, lack of spare parts, and the availability of private mechanics and workshops who can do the repairs quicker.

How can these workshops be managed and operated more efficiently?

How can the paperwork required for approval of repairs be simplified?

How can spare parts be readily available to cut down on the time needed for repairs?

In the long run, are government workshops really needed or should planning begin now for some privatization of these workshops? How could this be done?

What is needed to make these workshops operational and a resource for the PIDs?

- 6. What are the pros and cons of setting up a separate circle for rehabilitation work under the PC, rather than having the work done by Divisional XENs?**
- 7. How can the Management Information Flow Centers be used more efficiently?**
- 8. Is it realistic to build Engineering Academies in Sindh and NWFP? Could or should this academy be funded under ISM II?**
- 9. How can PIDs learn from each others' experiences in terms of implementation approaches that have worked?**

E. THE ISM II PROJECT IS SCHEDULED TO END ON 5 JUNE 1993.

1. How can all project activities be accomplished in this timeframe?
2. Will funds be available as planned in the PC 1s or will adjustments be made? If so, how will these adjustments be made?
3. Can and should funds programmed for '91 and '92 be moved forward so work can begin earlier?
4. What USAID constraints have led to the current delay in project implementation? Can these be minimized in the future? How?
5. What is the status of project vehicle procurement?
6. Where and why are there delays in processing Project Implementation Letters for PID requests? How can procedures be streamlined and improved?
7. Have the basic ground rules and priorities of USAID changed since ISM I? If yes, what are the changes and the implication of these changes on ISM II?

Will it still be possible to procure vehicles?

Will some projected ISM II project funds be returned to AID?W for reprogramming?

8. How can monitoring and evaluation of project activities and results be done most effectively?
9. How can coordination be improved between the mechanical/machinery wing and the civil works/construction wing of PIDs?

Appendix D

MANAGEMENT EXPECTATIONS

FCC/PIDS Expect of:

Expectations	USAID	Harza
1. Sharing information	<p>Annual funding available with USAID, ISM with components.</p> <ul style="list-style-type: none">● Equipment procurement programs● Present ground rules regarding equipment procurement, civil works, training, and change in this regard, whenever made.● TOR of Harza Team (agreed), PSCs.● List of all personnel deployed on ISM, along with brief description of rules. <p>Information to be provided promptly whenever updated.</p>	<p>Through (quarterly and monthly) monitoring reports as well as any problem-specific study reports prepared.</p>
2. Ideal working relationships	<p>Present relationship is okay.</p>	<p>Assistance to be provided as per agreed TOR under guidance and direction of FC, PCs.</p>
3. Written reports	<ul style="list-style-type: none">● Amendatory agreement(s)● Copies of reports produced for ISM (all through USAID staff or PSCs or consultants)● Equipment procurement reports	<p>Mentioned under 1 above</p>
4. Decision making	<p>By mutual consultations.</p>	<p>Mutual consultations.</p>
5. Monitoring performance	<p>Regular feedback on the basis of USAID's own methods</p>	<p>COP to provide feedback on all activities.</p>
6. Involvement in planning	<p>Advice for planning activities.</p>	<p>Advise at appropriate time.</p>
7. Other	<p>Prompt action on various requests sent to USAID.</p>	<p>List of Harza PA/TA, ACE, DAI, with locations plus roles. NESPAK would also like copy of this list.</p>

Harza Expects of:

Expectations	FCC/PIDs	USAID
1. Sharing information	<ul style="list-style-type: none"> ● More volunteered information (daily basis) ● Status of paper movement (as needed) ● Timely notification of meetings ● Copies of project document—between FCC and PIDs ● Within PIDs personnel changes 	<ul style="list-style-type: none"> ● Informally through COP to group (frequently) ● Administrative information through liaison offices ● Changes in procurement policy—(as occur) ● Notification of visits to project locations—coordination of AID personnel
2. Ideal working relationships	Person to person (through PA) team approach. Two way, full accessibility (including secretary)	Person to person
3. Written reports	<p>Harza to provide:</p> <ul style="list-style-type: none"> ● Monthly memo PA-PC ● Quarterly report PA-PC-COP ● Quarterly report COP-GOP/AID ● Technical reports (from specialists) ● PA observations to PC <p>GOP to provide:</p> <ul style="list-style-type: none"> ● Monthly progress (workshop/equipment) ● Minutes of meetings ● Monitoring reports ● Copies of scheme for problematic channel when they come to the central cell. 	<p>Quarterly report COP/AID</p> <ul style="list-style-type: none"> ● Procurement status ● Computer status
4. Decision making	Advise, suggest, recommend	
5. Monitoring performance	<ul style="list-style-type: none"> ● M&E workplan ● Regular meetings and discussion ● Receive various progress reports 	AID requirements for M&E workplan
6. Involvement in planning	<ul style="list-style-type: none"> ● Fully assist GOP in planning their activities ● Inform of plan for TA activities (informal and written) 	Fully inform of plans for TA activities (informal and written)
7. Other	Facilitate TA activities	<ul style="list-style-type: none"> ● Logistic support from liaison offices ● Rapid processing of our invoices

USAID Expects of:

Expectations	FCC/PIDs	Harza
1. Sharing Information	<ul style="list-style-type: none"> ● Continuation of quarterly FRB meetings attended by all competent authorities ● more informal get-togethers with FCC/CEA/Rauf/PIDs 	<ul style="list-style-type: none"> ● Informal frequent contacts with COP/TAT ● Informing PAs of staff visits to PIDs ● Quarterly meetings with TAT and PIDs
2. Ideal working relationships	<ul style="list-style-type: none"> ● A fully open sharing of views even if negative 	<ul style="list-style-type: none"> ● Through project teams ● Through free and frank discussions
3. Written reports	<ul style="list-style-type: none"> ● Prompt minutes of all joint meetings ● Concise and interpretive reports by GOP's consultant acknowledging importance of readable "executive summaries" 	<ul style="list-style-type: none"> ● Monthly copy of PA report to PC ● Quarterly copy of PA/COP report to PC/FCC ● Provision of executive summaries
4. Decision making	<ul style="list-style-type: none"> ● Collaboratively and quickly ● Availability of competent authorities on matters requiring urgency 	<ul style="list-style-type: none"> ● Collaboratively and quickly
5. Monitoring performance	<ul style="list-style-type: none"> ● Informal communication re USAID or contractor performance to appropriate USAID staff ● Formal written notification regarding project activity shortfall 	<ul style="list-style-type: none"> ● Informal communication to appropriate USAID staff ● Formal written notification regarding project activity shortfall
6. Involvement in planning	<ul style="list-style-type: none"> ● Totally collaborative openness except for information which may still be in process of development 	<ul style="list-style-type: none"> ● Totally collaborative openness
7. Other	<ul style="list-style-type: none"> ● PIDs must involve FCC in all project proposals—costing included (make reference to ACOP equipment) ● PIDs to send CC to USAID regarding all proposals sent to FCC—with cost information ● PIDs must respond to requests for comments within reasonable time 	<ul style="list-style-type: none"> ● Close cordial relations between Harza/TAT and PIDs ● Clear financial and manpower contract accounting

Appendix E

ISM II WORK PLAN DISCUSSION PAPER

INTRODUCTION

The overall objective of the Irrigation Systems Management-II Project is to increase agricultural production by improving the reliability of water delivery and the equity of water distribution to irrigated lands throughout the four provinces of Pakistan. The Project is designed to achieve this objective by providing technical assistance to the Provincial Irrigation Departments, the Pakistani institutions responsible for operating and maintaining canal systems. In particular, ISM-II will focus on strengthening the physical tools and the organizational resources available to the PIDs to maintain the vast canal systems under their charge. Because the four provinces vary widely in their requirements and resources, the general framework presented in this scope of work will be tailored through consultation with PID officials to determine Project priorities within each province.

ISM-II will stress functions that can be sustained by the PIDs after the project's completion. Therefore, we will devote relatively little effort to development or introduction of new methodologies. Rather, we will place our emphasis on evaluating the functions that must be performed in an effective program of canal maintenance, on realistically appraising how these functions may most successfully be performed by the PIDs and in providing technical assistance for institutionalizing these functions. To the extent possible, we will build upon work begun under ISM-I so that these initiatives can be sustained by the PIDs after the project's completion.

The plan of work is divided into 5 components:

- 1) Design and Rehabilitation
- 2) Operation and Maintenance
- 3) Equipment and Workshop Maintenance and Management
- 4) Evaluation and Monitoring
- 5) Training

The remainder of this paper will be devoted to a discussion of each of these components.

DESIGN AND REHABILITATION

Purpose: Many canal systems and subsystems require rehabilitation before they will perform adequately. The purpose

of this project component is to improve the capability of the PIDs to perform the design, review and supervisory functions required to effectively carry out this rehabilitation. Our emphasis will lie in assisting the PIDs in strengthening the professional design environment at the field and central office levels.

Approach to Work: In each province the PA, the Chief Design Engineer and the Provincial Coordinator will review present strategies for system rehabilitation to identify shortcomings in this function and to develop a program to remedy significant deficiencies. Emphasis will be placed on establishing a systematic program of data collection, design, review and construction management.

Among the activities to be included in this review are the following:

- 1) Selection of schemes requiring rehabilitation.
- 2) Collection of data for rehabilitation including surveys, and hydrological and geotechnical data.
- 3) Production of designs, drawings and specifications suitable for rehabilitation.
- 4) Provision for systematic review of calculations and drawings.
- 5) Assessment of the role of consultants in rehabilitation activity and the capability of the PID to direct and review consultant's work. Depending on the capabilities of the PID, requirements for consultants may range from being highly specialized to more routine.
- 6) Supervision of rehabilitation construction.

After addressing the relative significance of these and other aspects of system rehabilitation, the TA team will assist the staff of the PID in evaluating how any recommended improvements in the PID's approach to rehabilitation can be incorporated into the department's structure.

Among the possibilities are the following:

- 1) Modifying criteria for selection of subsystems to be rehabilitated.
- 2) Strengthening of approval and control of design inputs and modifying standards for investigation and survey work.
- 3) Reviewing and standardizing design procedures for canal lining, bridges, headworks and other features requiring rehabilitation.

- 4) Determining an appropriate system of review for designs created at various levels within the PIDs.
- 5) Determining the appropriate level of responsibility for preparation of specifications and bid documents.
- 6) Providing training in surveying, construction management and contract supervision to appropriate PID personnel.

One important item for discussion among PID and TA personnel will be an appraisal of the proper function of the central Design Cells. At present little rehabilitation work appears to be directed to these cells. The TA team will assist each PID in making a realistic determination of the role the design cell should play in design and review of rehabilitation schemes. Based on this assessment, the TA team and the PID personnel will develop a program either to make these cells fully operational or to redirect the resources of the cells to tasks where they may be of greater service.

OPERATION AND MAINTENANCE

Purpose: To strengthen the PIDs' capabilities to perform routine maintenance on canals and ancillary structures. The TA team will stress development of an effective program that includes maintenance of both newly rehabilitated canals as well as older works.

Approach to Work: O&M activities will emphasize completion of work begun during ISM-I. Specific activities to be performed by the TA team include the following:

- 1) Review of the four O&M manuals will be completed by the PIDs. Comments and suggestions from this review will be incorporated into revised manuals suited to the requirements of each province.
- 2) Yardsticks will be completed for each of the provinces to be used in preparation of the annual O&M Budgets and Workplans.
- 3) The TA team will advise the PIDs in development of annual O&M Budgets and Workplans.

As well as continuing activities begun under ISM-I, technical assistance will be provided in the following new activities.

- 1) The TA team will facilitate implementation of the pilot maintenance equipment program. Provincial advisors will advise in establishing this pilot. As impediments arise, the TA team will assist in aiding the PID in resolving these

problems. While the equipment provided in this pilot program is suitable only for maintaining canal banks, implementing and monitoring this trial should provide USAID and the PIDs with valuable insights into the feasibility of operating and maintaining equipment at the sub-division and division level.

- 2) Development of manual on drain maintenance. Technical assistance will be provided to produce a manual on maintenance of drains to serve as a companion to the other O&M manuals. This manual will emphasize problems such as weed growth and sloughing associated with surface drains.

The overriding objective of the O&M component will be to assist the PIDs in developing a vision of how they intend to perform effective operation and maintenance. Ultimately, all components of ISM-II are designed to bring this vision to life.

EQUIPMENT AND WORKSHOP

Purpose: The E&W component is designed to institutionalize the management of mechanical activities and upgrade the skills of relevant personnel so that the PIDs may confidently plan, organize and carry out mechanical activities. Improving utilization and maintenance of equipment will enable the PIDs to more effectively rehabilitate and maintain irrigation systems. We anticipate that while the scale of this project component will vary among the provinces, the general pattern of activity will be relatively consistent throughout the country.

Approach to Work: The TA team will collaborate with PID officials in the following two major areas:

- A) Planning and implementing physical improvements and training activities designed to strengthen the PIDs capacity to operate and repair equipment. Considerable progress was made in this area during ISM-I.

- B) Advising on institutional measures designed to better integrate the mechanical and civil operations of the PIDs.

While the bulk of the TA activity will be devoted to the first area, we believe that for the equipment and workshop program to succeed, the capabilities of the mechanical sections must not only be developed, they must be used. For this reason, policy decisions on how best to utilize the resources of the workshops will be important. An example of this will be PID policies determining which repairs must be undertaken by the workshop and which may be performed by the private sector.

A. Physical Improvements and Training Activities

Activities in the first area of concentration include the

following:

1. Procure missing parts to fully mobilize equipment at the 6 main workshops.
2. Complete installation of MAINSAVER and apply the program to systematize organization of stores.
3. Begin overhaul of a limited number of machines.
4. Finalize spare parts list for major procurement for equipment overhaul program.
5. Determine training needs for workshop personnel - plan training program.

B. Institutional Development

In parallel to developing the capabilities of the workshops, the TA team will assist in evaluating the role of the shops within the PIDs. The following are among the activities involved in this process:

1. Assist the PIDs in preparing annual construction equipment utilization plans.
2. Institutionalize Equipment Task Force in each province.
3. Organize monitoring and evaluation activities through periodic progress reports. Tracking of equipment utilization and status with MAINSAVER is expected to be an important contribution of this activity.

Institutionalization of the Equipment Task Force is of particular significance because it is this body that will be the forum for developing policies on use of No Objection Certificates and other measures that will govern how repair work is directed to the shops. In provinces having more than one workshop, routing of work and parts among the facilities may be another topic appropriate for review by the Equipment Task Force.

In the event that the workshops have difficulty retaining skilled mechanics and machinists, the Equipment Task Forces may be compelled to consider adjustments in pay scales for workshop personnel or the possibility of privatizing the workshops to enable mechanics from the private sector to repair PID and other vehicles while renting workshop facilities.

MONITORING AND EVALUATION

Purpose: The purpose of the M&E component is to develop a reliable and efficient monitoring system to track

project performance. The project's long-term aim is to institutionalize sustainable monitoring activities within the PIDs.

Approach to Work: The project team believes that the concept of purpose level monitoring as presented by USAID provides a valuable and consistent framework for all monitoring activities within this project. Therefore, a early activity of the M&E program will be to advise in the development of key indicators and critical events to be used in appraising the progress of each project component in each of the provinces.

During the life of the project monitoring activities will be conducted at three levels:

- 1) Strengthen monitoring capability within the PIDs
- 2) Satisfy project monitoring requirements of AID
- 3) Provide progress monitoring for use by project team

1) Development of Monitoring Capabilities Within the PIDs

Two long-range institutional objectives of the M&E program will be to meet requirements within each PID for hydraulic data and for management information.

hydraulic monitoring

A goal of ISM-II is to institutionalize within each PID the capacity to monitor data on canal system operation and condition. This data will aid in assessment of system condition and will serve as a basis for rehabilitation designs. In response to this requirement the TA team together with PID personnel will assess each PID's needs for hydraulic data and their present sources of such data. Based on this assessment, the TA team will advise the PIDs on measures to strengthen their institutional capacity to systematically conduct condition surveys and to collect and distribute other needed data. Avenues that may be considered in addressing these needs include:

- 1) Training of PID personnel by ACOP in monitoring of alluvial channels.
- 2) Establishment within each PID of a Hydraulic Information Directorate to manage collection and distribution of hydraulic data.
- 3) Creation of Hydraulic Monitoring Units at the circle level to be responsible for measurements of discharge and sediment. Sediment laboratories attached to the HMUs would perform analysis of sediment loads.

- 4) Rather than creating new units as in 2 and 3, the TA team may consider alternatives such as maintaining the existing PID structure by assigning hydraulic monitoring activities to XENs and their field staffs.

management information

As well as its activities in collection of hydraulic data, the M&E program is responsible for providing a central facility for presentation of management information compiled from all offices of the PIDs. The Management Information Flow Center (MIFC) has been conceived as a facility where staff conferences may be held and management information presented and discussed. The TA team will review with PID personnel the current status of the MIFC and discuss potential uses of this resource. We anticipate that presentations on the status of workshop utilization, canal condition, training requirements and other topics can be organized by the pertinent PID and project staff for presentation at the MIFC. Certain types of training may also be appropriate for scheduling at the MIFC.

2) Satisfy AID Monitoring Requirements

The USAID Mission office is currently developing a Purpose Level Monitoring (PLM) system for ISM-II. This system is designed to track progress towards purpose-level objectives by carrying out the following procedures.

- 1) Define project purpose. The established purpose of ISM-II is "To assist the four PIDs and the Federal Coordination Cell to develop the capacity for sustained and proper (efficient) management operation and maintenance of rehabilitated irrigation systems."
- 2) Select indicators that track progress toward this purpose.
- 3) Report data indicating project status relative to these indicators.
- 4) Analyze data to assess rate of progress and to identify impediments.

3) Internal Monitoring for use by Project Team

Internal monitoring will be performed by a simplified PLM system. The functions of this monitoring will be as follows:

- 1) Clarify project objectives.
- 2) Provide information for review and establishment of priorities.

- 3) Provide background information for discussions on policy and institutional issues.
- 4) Warn of unresolved issues or difficulties project personnel should anticipate.

TRAINING

Purpose: The training component is designed to provide local and overseas training to PID staff to enable them to perform key roles in operation and maintenance of canal systems. As well as addressing short-term requirements for training, this component will focus on institutionalizing training activities within the PIDs through development of the Administrative Management Units (AMUs).

Approach to Work: The TA team will assist PID personnel in developing training programs that are congruent with project priorities in each province. The training component will emphasize workshops in equipment maintenance and repair, surveying, construction management and other skills directly related to improving D&M activities. Whenever suitable, training modules developed during ISM-I will be used in teaching these workshops. Specific training activities involving the project team include the following:

- 1) Assist the PIDs in identifying appropriate course topics and institutions capable of carrying out training of PID personnel. An effort will be made to establish a solid working relation between each PID and a local institution.
- 2) Assist the AMU's in evaluating the service pattern, training history, job assignments and other qualifications of PID personnel eligible for training.
- 3) Assist the PIDs/Federal Cell in preparing the 4 year (1990-1993) In-Country and Overseas Training Plan. This plan will be based on the Training Needs Assessment (TNA) produced by each PID.
- 4) Assist the PIDs/Federal Cell in formulating the detailed In-Country Training Plan for each year and in setting up training schedules.
- 5) Assist in institutionalization of the Administrative Management Units (AMUs) within the PIDs. These units are designed to develop and administer training programs and to handle personnel records including information on posting, length of service and other data. Full utilization of the computers located in the AMU's may also enable these units to contribute to the evaluation and monitoring activities of the departments.

Appendix F

JOB DESCRIPTION AND WORK PROGRAM OF THE PROVINCIAL ADVISORS

MEMORANDUM

To: Provincial Advisors
From: J.C. Ringenoldus
Subject: Job Description and Work Program

04 November 1989
01 January 1990
06 February 1990

This memorandum represents my current understanding of the job of the Provincial Advisors (PA). It is based on the Statement of Work, the Scope of Work, the Project Paper, and discussions with participants in the Project. Our mutual understanding of the job requirements of the PAs will grow and improve with time and experience. Each PA should further develop this job description as a part of the process of preparing the individual work plan required for each PA within 90 days of reporting on the project.

Objective

The overall objective of the Irrigation Management Systems Project is to increase agricultural production through increasing the safety of water delivery and improving reliability and equity in water delivery to the watercourses. It will also address improvements in surface and open drainage facilities.

"The purpose of this amendment (Phase II) is to support the institutional development of the four Provincial Irrigation Departments and the Federal Coordination Cell to build the capacity to provide sustained and proper operation, maintenance, and management of the rehabilitated irrigation system. The focus is on institutional strengthening and regular maintenance of rehabilitated subsystems so they will not require major rehabilitation in the future." (PP pg 27). Therefore, the primary emphasis of our assignment is on improved operation and maintenance, primarily maintenance, and the activities which will support the institutionalization of routine improved maintenance. Maintenance improvements have been designed for the channel systems that have been rehabilitated/redesigned under the Project but they are not being universally implemented.

The function of the Provincial Advisors is to advise and assist the respective Provincial Irrigation Departments (PID) in the implementation of the components of the ISM Phase-II Project assigned to the Harza/DAI contract. These are:

1. Canal and drain rehabilitation planning and design,
2. Operation and maintenance capability,
3. Equipment management and utilization.

The strategy for improvement in rehabilitation, O&M, equipment management and maintenance, and training, is to attempt to implement those recommendations and technical criteria that were developed in Phase I and accepted by the PIDs and the donors. This will require familiarization with the accepted recommendations of Phase I (primarily through study of PRC/Checci reports), identification of province-specific constraints to implementation of the recommendations, and seeking ways to eliminate the constraints. It is not anticipated that we will make significant introductions of new techniques or concepts. It is also unlikely that all of the recommendations for improvement will be implemented during our tenure. Our strategy should be to identify those improvements that would have the most significant return and that are realistically implementable and concentrate on them, rather than trying to do everything at once.

The PA will be responsible for coordination and monitoring of provincial project activities. This function will be accomplished by direct, day-to-day interaction with the respective Provincial Coordinator and frequent contact with the Provincial Secretary of Irrigation.

Mode of Work (Ref pg 7 PP)

The PAs will provide technical assistance to the PIDs within the range of their personal expertise. Each PA will be assisted by one local design engineer and one local equipment engineer who will be under his supervision. They also will have available the assistance of a Design Engineer and an Equipment and Workshop Engineer on the expatriate team. Other local experts available to assist the PAs will include an O&M engineer, training experts (project and AID), and monitoring and evaluation (M&E) expert. Short term expatriate experts will also be available as needed.

Since each PA will have a different set of personal skills and expertise, we will try to assist one another to the extent that it is not detrimental to the Provincial responsibilities of the PA. As Chief of Party, I will try to arrange for mutual assistance among the PAs and for scheduling inputs from the Design and Equipment Engineers and the other local experts. I also expect that we will try to have periodic meetings of the entire team, probably in Lahore, to identify opportunities for mutual assistance.

The PAs primary working strategy should be to have frequent, preferably daily contact with the Provincial Coordinators (PC) less frequent contact with the Secretaries of Irrigation, perhaps weekly. The PAs should use these contacts to keep themselves informed of all project activities, to identify constraints to implementation of project objectives, and to offer their assistance wherever it can be useful.

Description of Project Activities

The project activities in the components included in the Harza/DAI scope are described in detail on page 32 through 57 of the Project Paper. For an overview, the headings in that section are copied in outline form in an attachment. (The designators and the format of the headings are not consistent in the PP.)

The discussion that follows highlights some of the activities and issues in Phase II that should be given particular attention by the Provincial Advisors. The discussion is not all-inclusive and issues and emphasis will vary among provinces. Comments and contributions toward improvement of this discussion will be welcomed.

Rehabilitation/Civil Works

Selection of Schemes. "Schemes selected for rehabilitation must normally be part of complete subsystems for which physical rehabilitation and improved operation and maintenance are planned." "A subsystem must comprise a network of channels which, in order to develop a rational rehabilitation design, require simultaneous analysis with regard to hydraulics and sediment flow" (PP Annex O pg 3). Generally, a subsystem can be defined as a distributary and its off-taking minors. (Originally the criterion was "system" comprising of a main or branch canal and its subsidiary channels. However, the donors compromised on the reduced scale of "subsystems" for Phase II.)

The selection of subsystems for rehabilitation/redesign is done by the field divisions and the proposed schemes have often not included entire subsystems. The PIDs have preferred to rehab/redesign individual channels on a piece meal basis and this was accepted by the donors in Phase I in order to eliminate specific hazards of breaches or other accidents. The donors are expecting Harza/DAI to make efforts to get the PIDs to conform to the agreed criteria of rehab/redesign by subsystems.

Data Collection. Data collection for monitoring canal performance to determine its need for rehabilitation and to provide data for analysis and design has been a problem because it has been done by the field divisions often without proper equipment and training (especially for measurement of discharge and sediment transport). In Phase II, the Alluvial Canals Observation Project (ACOP) will expand its role in data collection. The Chief Design Engineer will work with ACOP and NESPAK on improving data collection. The Provincial Advisors should become familiar with the procedures used and issues involved regarding data collection in their provinces. An important aspect of the data collection activity is to collect data on a continuing basis after canal rehabilitation to provide input for evaluation of the effectiveness of the rehabilitation and subsequent maintenance.

Design. Design for rehabilitation of channels that are deteriorated because of deferred or inadequate maintenance is performed by the field divisions. These designs and cost esti-

mates are reviewed by the Supervisory Consultants NESPAK and if satisfactory are passed on to the Federal Coordinator for transmittal to the donors. Channels deemed to be "problematic" are redesigned by the provincial design cells. The Provincial Advisors should become familiar with the process, attempt to identify departures from the agreed terms of reference of the Project, identify issues that may be delaying implementation, and try to resolve issues.

A major issue in Phase I of the project was over the adoption of Hydraulic Design Criteria (HDC), or HDCS (Simplified) for alluvial channel design in place of the Lacey method that had been in universal use. Our approach should be to try to persuade designers to use the more modern design methods, but to acknowledge that traditional methods may also be appropriate. Actually, considering the generally poor quality of data, especially sediment data, available, the successful design of a regime channel is probably due more to experience and judgment than to any particular design procedure.

Gene Thompson, Chief Design Engineer, should visit each Provincial Advisor's office as soon as the PA feels he is ready use his assistance in making an initial assessment of the status of design and the design issues in the province. Thompson will then be available for further assistance whenever needed.

Construction. The Provincial Advisors should familiarize themselves with the character of construction activities and procedures and try to determine if construction quality is meeting the desired level. If there are deficiencies noted in construction quality, an attempt should be made to identify the reasons (inadequate inspection, inadequate training of construction supervisory personnel, underfunded contracts, etc.). Construction is monitored by the Supervisory Consultants NESPAK with whom the PAs should maintain liaison.

Operation and Maintenance (O&M) Capability

Improved operation and maintenance, especially maintenance, of rehabilitated systems and subsystems is the subject area to be given greatest emphasis in our work. An attitude that we must try to overcome is that the rehabilitated channels/subsystems/systems do not need any budget for maintenance for several years after the completion of works. The provision of full-funding budgets for annual preventive maintenance of rehabilitated channels is a high priority with the donors.

The key to providing appropriate maintenance for rehabilitated channels is inclusion of a program of maintenance work in the PID's annual work plan, which is due to be completed by 31 July each year. The work plan is essentially a listing of activities and their estimated cost, comprising a budget. The budget should be developed using "maintenance yardsticks" -- general unit costs for providing routine maintenance to various types and sizes of facilities. The PA's should attempt to get involved in the preparation of the annual work plan, and through persuasion,

the preparation of the annual work plan, and through persuasion, try to get full-funding provisions, base on maintenance yardsticks, for maintenance of rehabilitated channels included.

Priority Areas for O&M Improvement. Eight priority areas for improvement in O&M were identified by PRC. Descriptions of problems and recommendations for improvement are given in the report "Recommendations for Improved Operation and Maintenance of Rehabilitated Canal Systems" dated February 1986. This report and other PRC reports on specific operation and maintenance procedures for water measurement, canal maintenance, irrigation structure maintenance, etc., should be reviewed. The scope of recommendations for improvements in these reports is so vast that the tendency in the PID's has been to not adopt any of them. In Phase II, the PA's should try to identify specific O&M improvements that are reasonably implementable and would give a high return for effort and cost. Then efforts should be focussed on adoption and institutionalization of these improvements. The greatest challenge would be to accomplish the institutionalization of an internally self-generating process for expansion of the subject areas of improvement.

Pilot Maintenance Equipment Program. Equipment specially suited for small and medium scale channel maintenance is being procured in 1990 on a pilot basis. These equipment sets are intended to be used on the Subdivisional level and the Division level. Although this equipment will probably not be delivered until near the end of the year, the PAs should make whatever efforts appear appropriate to assure that preparations are made by the PIDs to utilize the equipment in the intended manner on its arrival. For example, specific divisions and subdivisions should be designated for receipt of the equipment. If special funding, employee recruiting, training, etc., arrangements will be required, these should be undertaken. Note that the equipment is intended to be used on rehabilitated systems, and the designated subdivisions should be under the designated divisions.

Monitoring and Evaluation. An important element that should be included in improved operation and maintenance for rehabilitated channels is provision for monitoring and evaluation of channel behavior. These provisions should include "hardware" for measuring the physical performance of the system, such as discharge measurement devices, and "software" in the form of procedures and activities to routinely collect, process, and evaluate information. Broader scale monitoring and evaluation is discussed in a later section.

Equipment Management and Utilization

Two issues dominate the subject of equipment management and utilization and these should be the focus of the PAs' attention. They are underutilization of construction and maintenance equipment procured by AID and underutilization of workshops for maintenance and repair of equipment. An important reference for this subject is the audit report of July 1988 entitled "Utilization and Maintenance of Selected Equipment in Pakistan".

Equipment Utilization. Monthly utilization reports on project-supplied equipment flow to the Federal Coordination Cell through the Provincial Coordinators' offices. The PA should monitor these reports and, with the assistance of the project's local mechanical engineer, try to determine the reasons for situations of gross underutilization and to seek ways to improve equipment utilization.

Workshop Utilization. In general, the level of utilization of USAID provided equipment in the provincial equipment repair workshops is far below desirable. Among the reasons are non-functional machines, lack of spare parts, inadequate training, lack of incentives, and reluctance of field units to send equipment to the workshops because of expectation of poor workmanship and delays. With the help of the Equipment/Workshop Advisor, the PAs should try to identify reasons for low utilization of workshops and to suggest and promote measures for improvement.

Mainsaver Program. A specialized computer program for equipment management and spare parts inventory control is being installed in the main provincial workshops. The PAs should get a general understanding of the functions of this program from descriptive documents. It is intended to have a seminar for technical assistance staff on the Mainsaver program as soon as staffing level is nearly complete. The USAID Computer Advisor is responsible for installing the program and for training of users. The PAs should monitor use of the program by PID workshop staff, encourage the continuing expansion of its use, and identify and resolve constraints in its application.

Monitoring and Evaluation

An extensive program of monitoring and evaluation (M&E) will be carried out under the Project. Among the purposes of the program are providing management information for the PIDs and for the Federal Coordination Cell, feedback for research and design improvements, and project-effectiveness information for the donors. A monitoring and evaluation program will be developed by a local expert with TDY guidance. This program will include collection and compilation of information on physical and financial progress on implementation of rehabilitation/redesign schemes, O&M activities, equipment and workshop utilization, training, and socio-economic impact. An important component of the M&E program will be the preparation of semi-annual "Purpose Level Monitoring" (PLM) reports desired by the AID Mission Director.

The Provincial Advisors and their local support staff will endeavor to facilitate the M&E program. The first output of the M&E Expert will be a general description of the monitoring activities currently underway and additional activities planned for the future. This will be followed by an M&E workplan. In the course of preparation of these outputs, the M&E Expert will visit the PAs for mutual orientation.

Training

The need for improvements in training applies to all activities of the Provincial Irrigation Departments under the ISM-II Project. The primary objective is to institutionalize training functions in the PIDs so that training and career development will continue after the Project. This will require institutional actions for establishment of policies, assessing individuals' training needs, developing relationships with training institutions, programming training activities, provision of incentives for training, and adequate budgeting. A good overview of training needs is given in Chapter VII of the PRC February 1986 report referenced above.

Although the role of the Harza/DAI team in training has not been fully defined, the Provincial Advisors should evaluate the training situation in their provinces in terms of the actions described above and try to facilitate their implementation. A local Training Expert is assigned to the team and stationed in Islamabad. He is responsible for preparing a Training Plan and for assisting the PIDs and the FCC in implementation of training activities. His first action will be to assist the PIDs, with the help of the PAs, in preparing a training needs assessment. A training expert is being engaged by AID primarily for facilitation of training in the U.S. Most in-country training will be provided through contracts with training institutions or private contractors. It has not been determined as yet how these contracts will be implemented.

The TA staff will have a more direct training role in several subject areas. These include channel design by improved methods equipment management and workshop procedures.

ATTACHMENT

Project Description Headings from Project Paper

1. Rehabilitation/Civil Works
 - a. Rehabilitation planning and design
 - (1) Selection of systems/subsystems
 - (2) Data collection
 - (3) Hydraulic analysis
 - (4) Rehabilitation design
 - (5) Rehabilitation scheduling
 - b. Physical improvements
 - (1) Commodity procurement
 - (2) Repair/replacement of gates and accessories
 - (3) Construction
 - (a) Construction standards
 - (b) Construction locations
 - (c) Rehabilitation of canals
 - (d) Rehabilitation of drains
 - (e) Fixed amount reimbursement
 - (f) Civil works supervisory consultant
 - c. Training
 - d. Monitoring and evaluation
 - (1) Objectives and means
 - (2) Internal monitoring and analysis
 - (3) External monitoring and evaluation
2. Operations and Maintenance (O&M) Capability
 - a. Planning and Design
 - i. Use of Hydraulic Design Criteria (HDC)
 - ii. Procedures
 - (a) Drainage Manual
 - (b) Operation and Maintenance Manuals
 - (c) Annual Work Plan
 - iii. Cost Recovery
 - b. Implementation
 - i. O&M Needs Assessment
 - (a) Full Funding Budgets
 - (b) Use of Funding Yardsticks
 - (c) Management System
 - (d) Inspections Systems
 - (e) Transportation and Telecommunication
 - (f) Equipment Management and Training
 - ii. Computerization
 - (a) Computerized Management Information System
 - (b) Training Program
 - (c) Mapping of Irrigation and Drainage Facilities
 - c. Training
 - i. Programs
 - ii. Support for PID Training Academies
 - (a) Sind
 - (b) Punjab
 - (c) NWFP/Balochistan

- d. Monitoring and Evaluation
 - i. Reliability
 - ii. Equity
 - iii. Maintenance
- 3. Equipment Management and Utilization
 - a. Planning
 - i. Background
 - ii. Equipment Survey
 - iii. Equipment Use Plan
 - b. Maintenance and Repair
 - i. Preventive Maintenance Program
 - (a) Heavy Equipment Overhaul Program
 - (b) Management Information Systems (MIS)
 - ii. Workshops
 - iii. Training
 - d. Procurement
 - e. Monitoring and Evaluation

Appendix G

PROVINCIAL, FCC, AND USAID WORK PLAN PRIORITIES

NORTHWEST FRONTIER PROVINCE

Legend: * = High priority.

1. Design and Rehabilitation

- * a. Collect data
- * b. Production of design
- * c. Review
- d. Construction supervision
- e. Assessment of role of consultants
- f. Select schemes

2. Operation and Maintenance

- * a. Revise yardsticks
- * b. Annual O&M plan
- * c. Pilot O&M program
- d. Review and revise Ramiz Malik's O&M plan
- e. Drainage Manual

3. Equipment and Workshop

a. Institutional Development

- * i. Institutionalize eqpt task force
- * ii. Prepare annual utilization plan
- iii. M&E activities

b. Physical improvements

- * i. Missing parts
- * ii. Training needs
- * iii. Spare parts list
- iv. Overhauling machines
- v. Use Mainsaver

4. Training

- * a. Identify course topics
- * b. Prepare overseas training plan
- c. Prepare in-country training plan
- d. AMU activities

5. Monitoring and Evaluation

- a. Strengthen capabilities
- b. Program Monitoring
- c. Monitoring for USAID

Note: * Computerization

- a. Secretary office + CE office + PC
- b. Circles

WORKPLAN PRIORITIES

PUNJAB

Legend: * = High Priority.

* 1. Design and Rehabilitation (only applicable activities covered)

Possibilities:

- a. No material change except individual channels instead of systems in particular area.
- b. At present some assistance (ACOP) needed till we establish/strengthen our monitoring/data collection system.
- c. Review and standardization of design procedures for structures is to be done.

2. Monitoring and Evaluation

- a. Necessary infrastructure will be established

3. Operation and Maintenance

- a. Yardsticks of O&M budget will be updated in consultation with the TA team
- b. Revision of other manuals under consideration

4. Equipment and Workshops

- a. Physical improvement of all the three workshops to full operational and self sufficiency level.
- b. Institutional development/strengthening of equipment task force in Punjab. Annual construction plan will be prepared/reviewed and monitored by the Task Force (Equipment specialist: maximum time in Punjab)
- c. Mainsaver Program

* 5. Computerization

The program already prepared is O.K. and that should be implemented.

* 6. Training

The program and modules already prepared and are being used. Modification in programs and procedures will be done in consultation with TA Team as required.

WORKPLAN PRIORITIES

SINDH

Legend: * = High Priority.

1. Design and Rehabilitation

- a. Obligate available funds
- * b. Upgrade design and selection procedure with special emphasis on drainage

2. Operation and Maintenance

- a. Equitable and reliable supplies and well-maintained systems

3. Equipment and Workshops

- * a. Optimum utilization of equipment in workshops with adequate backlog for systematic program for repair and overhaul.
- b. Optimum equipment utilization

4. Monitoring and Evaluation

- a. Develop field capacity through HMU for hydraulic, sedimentation embankment and structure observations and measurements
- b. Inform system for dissemination of information so it may be used effectively for maintenance planning and decision making

5. Training

- a. Has sufficient trained staff on both the civil and mechanical functions for adequate maintenance, monitoring and evaluation

6. Computerization

- a. Complete implementation of both phases of the computerization program, including training.
- b. Adequate planning for maintenance and supplies
- c. Small staff augmentation where required.

WORKPLAN PRIORITIES

BALUCHISTAN

Listed in priority sequence.

1. **Training and Computerization**

- a. Institutional strengthening.
- b. Establishment of fully-equipped computer rooms at circle/divisional level.

2. **Design and Rehabilitation**

- a. Establishment of Design Directorate.

3. **Operation and Maintenance**

- a. To devise an O&M plan on scientific basis, the ultimate outcome will be O&M manuals for small schemes in Baluchistan.

4. **Equipment and Workshop**

- a. To make workshops fully operation and self-sufficient, to achieve strengthening of institution

5. **Monitoring and Evaluation**

- a. To institutionalize sustainable monitoring activities within the PID

WORKPLAN PRIORITIES
FEDERAL COORDINATION CELL

Legend: * = High Priority.

1. FCC-COP
 - a. COP keep advised on FCC activities and status of document flow--expedite
 - b. Keep FCC advised
2. TA assistance in FCC Training responsibilities
 - a. Development of FCC Computer Cell
- * 3. Establish MIFC in FCC
 - a. Coordinate assistance of technical specialists to province
4. Specialized Technical Assistance

Operation and Maintenance

 - * a. Yardsticks and budget estimates
 - * b. Revise O&M manuals w/groups
 - c. Review other manuals/chapters
5. Equipment (all)
 - a. Review workshops
 - b. Establish local engineers
 - c. Install Mainsaver
 - d. Establish libraries
 - e. Rehab workshop equipment
 - f. Computerize parts inventory
 - g. Equipment utilization plan
 - h. Equipment task forces
 - i. Training
 - j. Workshop civil works plans evaluation

6. Training

- * a. Four year training plan with PIDs
- * b. Implement training plan
- c. Institutionalize training
- d. Identify training resources
- e. Feasibility of academies/institutes

7. Design

- * a. Review situation in each province
- * b. Recommend action/in concert with PAs
- * c. Training, development of criteria, standard designs
- * d. Computerization/software

8. Monitoring and Evaluation

- * a. Establish objectives - 3
- * b. Start-up - complete detailed plan
- * c. Review and analyze
- d. Continue monitoring and reporting
- e. Institutionalization activities

9. Computerization

- * a. Efforts toward sustainability
- * b. Applications support - AMUs, Design, Mainsaver
- * c. Computer training
- * d. Expansion of computerization - 2 phase plan and implementation
- * e. Telecommunications ?

WORKPLAN PRIORITIES

USAID

- Legend: # = Need to spend (commit) funds ASAP. Focus partly on how to do this. Also to show policy progress.
* = High priority.
** = Highest priority.
*** = Highest critical.

1. Rehabilitation Design

- * a. Review design strategy and organize in general:
- * # In each PID determine future design organization and approach
- * # Decisions about design support flow from this (commodities; Punjab cell rehab)
- b. Develop standardized design for various structures

2. Operation and Maintenance

- ** a. O&M equipment trial procurement
- ** b. Introduce/train M&E plan for equipment trial
- c. O&M manuals: Finalization and adoption. Focus: NWFP, Sindh and Punjab
- d. Yardsticks: Adoption and use in budgeting

* 3. Equipment and Workshop

- a. Major vehicle procurement
- * b. Complete deficiencies in workshops (use/equipment procurement/training)
- c. Overhaul program
- * i. Initial small procurements
- ii. Overall equipment and overhaul priorities plan
- d. Installation of Mainsaver and make operational/ functional

4. Monitoring and Evaluation

- ** # a. Get hydraulic/agro-economic M&E activity going
- *** i. GOP to sign agreement w/PERI/WMED on agro-economic activities
- * ii. Finalize design and approval of 8 sample subsystems by June 1990
- b. Set-up hydraulic monitoring strategy in each PID
 - i. Incremental procurement of measuring equipment
 - ii. Start training staff (ACOP) in hydraulic monitoring
- c. Purpose-level Monitoring

5. Training

- ** a. Resolution of how to contract and conduct in-country training (workshop/equipment modules, computer)
- b. Planning/needs review
- c. AMU: Help develop training data and planning strategies
- d. Get in-country training underway

6. Computerization

- * a. Systems analyst (18) in each PID/cell
 - i. Interim project-funded analysts are essential (especially for NWFP)
- * b. Maintenance of existing equipment
- c. Plan new equipment request in each PID
- d. New procurement
- e. Computer training
- * f. PILs for renovating new rooms for computers

Appendix H

PARTICIPANT EVALUATION RESULTS

Following are the results of the thirty-four completed evaluation forms from the ISM-II Project Start-up Workshop held March 12-15, 1990 in Quetta, Pakistan.

A. Workshop Goals:

The goals of the workshop are listed below. The number listed indicates how the participants felt about goal achievement. The scale is from 1 (low, goal not achieved) to 5 (high, goal achieved very well).

1. Exchange current project information that is essential to the implementation of the project. (4.64)
2. Gain agreement on and commitment to project goals and activities. (4.27)
3. Provide an opportunity for the project team to become better acquainted. (4.76)
4. Agree on the roles and responsibilities of USAID, the FCC, PIDs, and the Harza Technical Assistance Team. (4.40)
5. Agree on procedures for managing the project. (4.27)
6. Clarify expectations for working together. (4.55)
7. Discuss and develop strategies for dealing with the most important issues that will affect the project. (4.30)
8. Review and agree on draft workplans for the first year of the project. (4.27)

B. Opinions and Feedback:

Participants were asked to answer the following questions as thoughtfully as possible. The answers will be used to help facilitators plan other workshops in the future and also indicate areas of concern that participants feel should be addressed in follow-up activities. The number in parenthesis indicates the number of similar responses received.

1. What do you think has been the primary benefit of this workshop?

- Think I knew what project was about now I believe others do.
- The goals, expectations, roles and responsibilities have been understood in better way.
- I had not been as related to the project and had little knowledge but the workshop has given a clear concept on it. Close acquaintance will improve the communication and objectives of the project.
- All the participants acquired knowledge about execution of ISM-II Project. Certain issues which were not clear were clarified.
- The primary benefit has been to share project-related information, get acquainted with the key personnel from all agencies dealing with the project and arrive at a consensus on procedures and methodologies for implementation.
- To my mind this workshop was of very unique nature. The primary benefit of this workshop was exchange of valuable information amongst the participants.
- Exchange of information and views and benefit of working together.
- Understanding of the project objectives, improvement in working relations and familiarization with the concerned parties roles and limitations.
- Established a friendly atmosphere for carrying out the project. People generally seemed to listen well.
- Clarify project goals and getting acquainted with key players.
- The workshop has given us a clear idea about the project goals and how to achieve them.
- Getting to know each other and goal and constraints of the project.

- Getting to know each others' views on different aspects of the project.
- All important managers were brought together for developing clear understanding of project.
- Exchange of information/ideas about the project, draft workplans prepared, project objectives clarified, and roles of different players identified.
- Material exchange of information, meeting engineers from other provinces and good knowledge about the components of the project.
- Allow PID, PC, PA to better understand each other's mandate and points of view regarding the ISM project.
- The Harza, USAID, and especially PID personnel have been brought nearer to each other and everybody knows who is who. All of the participants now know something more than before (most of the PIDs personnel were blank and new on the project).
- For TA Team to gain an understanding and definition of their role and activities, and of priority actions they should take.
- It has made me acutely aware of the goals and objectives of the project, how they will be achieved and what my role will be in achieving them.
- A clear understanding of what the project is about, goals and the plans to achieve these goals.
- It has proved very successful in exchange of views, establishment of priorities and other information in ISM-II.
- Developing a common understanding of the project capabilities, meeting the people involved, and developing an understanding of expectations - then developing a draft set of priorities for a work plan.
- To understand project goals, key players and expectations from each group.
- Having the opportunity to meet the various officials I will have to be working with.
- Exchange of information on various components of ISM project.

- **Best information on project goals and objectives, an opportunity for acquaintance of different projects and key personnel throughout the country, and awareness about the hurdles likely to happen in terms of monetary affairs and policy changes.**
- **To acquaint with the ISM-II Project goals and priorities and viewpoint of other provinces was known**
- **It brought better understanding of various teams, PID, USAID and others.**
- **To acquaint with ISM-II forthcoming bottlenecks.**
- **Clarified a number of project issues, which needed clarification before implementation.**
- **Getting to know all project players and to impart the project description to GOP. Appreciation of each of our own agendas.**
- **To understand each others perspectives of the project activities.**
- **Clarification of project goals/objectives and different perspectives on them.**

2. What workshop activity could have been done better?

- **While considerable effort was made by A.I.D. to express their concerns and what could be funded - I am sure there will still be questions about minor funding for items that were done under ISM-I (i.e., supplies, personnel salaries, etc.).**
- **Had the questionnaire been handed over to participants a little before hand it would have been better.**
- **The various topics discussed should have communicated to the participants in advance so that we could have necessary thoughts to it.**
- **More group discussion would have been better on various issues.**
- **No response (3).**
- **All the activities were done up to the mark.**
- **All activities performed equally efficient.**

- Devote additional time to workplan and project goals, give clearer instructions to reporters as to their roles and the time available to them.
 - Coordinating pre-workshop meetings.
 - Every activity has been discussed thoroughly.
 - None (3).
 - Use of overhead projectors could further improve displays made by flip charts.
 - Everything was done well (5)
 - Presentations of groups wandered too much with superfluous background discussion.
 - The ISM project should have been explained in accordance with Project Paper. Many of the participants used to think that USAID is renovating and rehabilitating canals and renovating room for computers, design officers, etc.
 - All were done excellently (2).
 - The activities were satisfactory but it would have been better if more time could have been allocated to setting priorities.
 - All activities done perfectly.
 - Great job! Accomplished a great deal. Could have scheduled one day earlier to adapt to local work week better.
 - Workplan activity needed more time. Time frame discussions (monthly) could have helped.
 - The room we met in for the first two days did not help to make this a comfortable situation.
 - Don't understand this question.
- Time scheduling was very hard (too lengthy) i.e., length of classes would have been reduced by allowing short intervals.
- The workshop activity have already been better.
 - Not applicable.

- Workshop (mechanical) was bombarded from every corner. Nobody has given a serious solution for its up lifting.
 - Cannot really identify a weak spot.
- 3. Do you believe there are unresolved issues that should be dealt with in follow up activities? What are they, and what should be done about them?**
- Cannot assess at this time. Unresolved issues will come up later.
 - These will come up after we carry out what has been resolved.
 - In Baluchistan we have laid more emphasis on training which is not given due attention. In Baluchistan the nature of schemes vary from one to other and is altogether different from rest of the country. Hacrow-Ulg has developed four manuals and we need its standardization with the help of A.I.D. which will be of great help in our institutional development.
 - The issue which in my opinion remained unresolved about the efforts to be made to achieve all the targets (planned) before June 1993. No cut down on targets.
 - I don't think that any issue has been left unresolved.(3)
 - Yes - follow up meetings- (what should be done?) personal discussions and accommodative spirit.
 - Firm commitments are to be obtained from the competent authorities as a follow up exercise.
 - Clarify how institutional development is to proceed.
 - Long term viability of institutions being developed must be emphasized.
 - How to conduct the training is still to be defined.
 - Project plan.
 - These discussions were preliminary. Participants could not get much time to ponder over the problems and consult their government and other colleagues in depth. The issues can be taken further to some logical conclusions.
 - Finalization of workplan is yet to be done. However, proposed next steps seems to be alright.

- The priorities need to be correlated with project paper provisions.
- Trial O&M plan questionable, purchase of heavy O&M equipment not acceptable by A.I.D. and A.I.D. has large emphasis on O&M not shared by PID (all require further discussion and agreement).
- Same - but not expected to be resolved at workshop, e.g. implementation of in-country training. However, workshop highlighted these issues that need resolution and helped to schedule their achievement.
- None (11).
- There are a few - resolution of the specifics of manual requirements, final resolution on some priorities in equipment and vehicle requirements and provincial work plans for rehab jobs.
- Yes, however, these were glossed over and will only come up when they become an issue to project success.
- Development of the present structure of PID personnel.
- Yes, all issues are resolved and dealt with. Such workshops/seminars should follow up.
- The M&E and computer activity has not been elaborated. The provision of necessary staffing and equipment together with planned methodology needs to be followed to end results.
- Yes, numerous. These have been identified during discussions. Mechanism should be formed to clarify them as soon as possible.
- This is a complex project with many activities. Not all were discussed and not all issues resolved. But the major issues were. There was a good sense of priorities in discussing issues. We almost never bogged down in smaller issues.

4. What comments do you have about the workshop arrangements and accommodations?

- Close to ideal - especially accommodations.
- Fine, excellent, very good arrangements, first class (17).

- Simply excellent, except the working room. A larger and better ventilated space was needed.
- Excellent in general. Access on first two days to a larger conference room would have been a help.
- Very good; however, schedule was too tight.
- Excellent. The results could not have been achieved without outside facilities.
- It was excellent in Quetta. Participants did not have opportunity to run away to their rooms. It should always be away from Islamabad, Lahore, Karachi like cities which have lots of attractions and drag participants away from their job of workshop.
- Arrangements generally good although plenary session room a little small for size of group. Financial pre-arrangements could have been better established.
- Overall very good. The only negative comment is related to the size of the meeting room; needs to be larger.
- Very satisfactory.
- Wonderful.
- Quite good, except small, filled, no-window rooms lead over time to claustrophobia.
- Good. No time for sight seeing.
- It was nicely conducted with good arrangements.
- Arrangements and accominodations were very good.
- It was excellent; we have learnt a lot and will try in our workshops' functioning.
- Fine. It would have been nice to have a room with outside windows, as we did the last day.

5. What final comments do you have for the workshop facilitators on their performance?

- Quite competent.
- Fine.
- Up to the mark.
- They did very well and conducted the seminar in the most appropriate manner.
- They have done excellent and they have proved to be expert in their field.
- Excellent, outstanding (6).
- The performance of both the facilitators was really excellent and no praise can really be adequate. They were "par excellence". Congratulations - would gladly work with them whenever need be.
- Extremely good. They were able to achieve the workshop targets to larger extent.
- First rate.
- Job well done.
- Very pleasant, co-operative, helpful.
- Very good.
- Really professional in their approach towards conducting of the workshop. Well done!
- Nothing could have been better than what has been done and achieved.
- They could have been more firm in curtailing superfluous and unfruitful discussions.
- Both are very experienced persons. Excellently performed.
- Their usual superior performance.
- They done excellent job. Hope to be with us in the next workshop.
- Can't be better.

- **The facilitators were able and better informed of project activities than I thought possible.**
- **They did marvelous job.**
- **Well done, fantastic.**
- **Really they are specialists in conducting the workshop properly.**
- **They were very much pertinent and to the point. They are experts in the field. I appreciate their performance.**
- **No response.**
- **exotic, scintillating, psychedelic**
- **Beautifully done job - from layout of agenda to handling discussions and moderating the group temperaments.**
- **They have done a very good job.**
- **Was a much better result of keeping things moving than I thought would be possible. Drew results/conclusions/decisions out of the group in a very useful way.**