

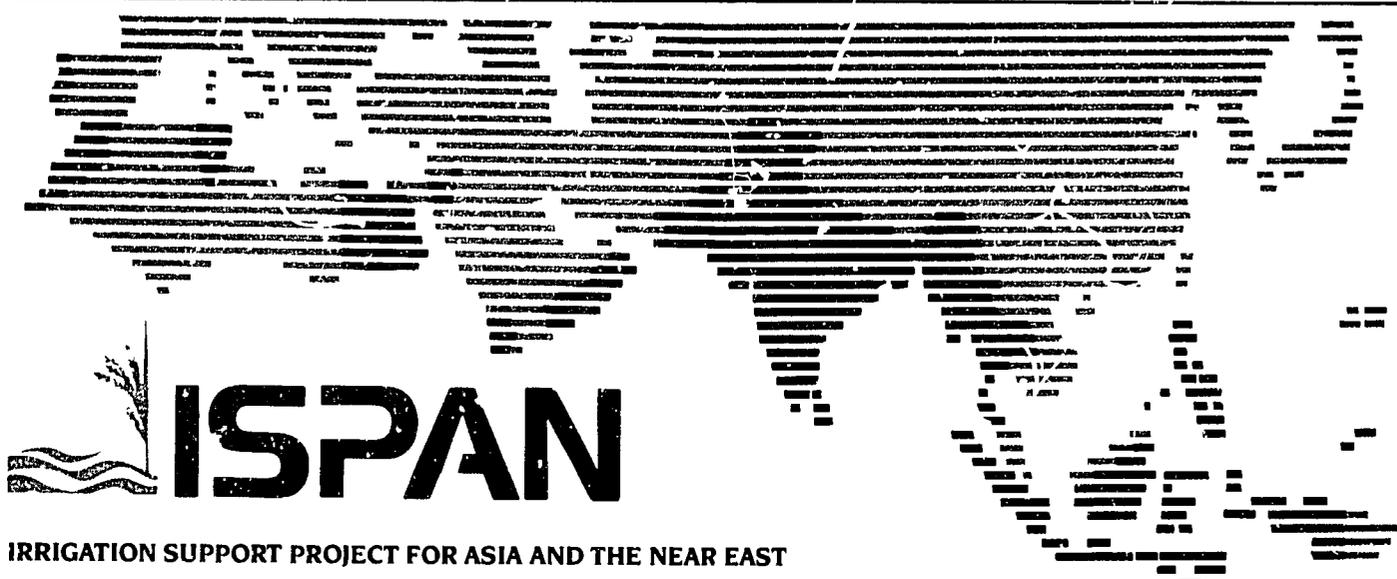
PREVENTIVE MAINTENANCE PROJECT/ CHANNEL MAINTENANCE PROJECT COMPONENT OF THE IRRIGATION MANAGEMENT SYSTEMS PROJECT: START-UP WORKSHOP REPORT

ALEXANDRIA, EGYPT

August 1-5, 1989

ISPAN Activity No. 656B

ISPAN Report No. 20



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.
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The University of Arizona

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Alexandria, Egypt
August 1-5, 1989

Prepared for the GOE Ministry of Public Works and
Water Resources and USAID/Cairo
under ISPAN Activity No. 656B

by

Thomas C. Leonhardt
and
Susan Gant

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Susan Gant
Tom Leonhardt

ACRONYMS AND DEFINITIONS

EPADP	Egyptian Public Authority for Drainage Projects
<i>Feddan</i>	Equals 1.038 acres
GOE	Government of Egypt
IBRD	World Bank (International Bank for Reconstruction and Development)
IMS	Irrigation Management Systems Project
IPSA	Irrigation Public Sector Authority
IS	Irrigation Sector
ISPAN	Irrigation Support Project for Asia and the Near East
<i>Mesqas</i>	Quasi-privately owned farm header ditches
MKE	Morrison-Knudsen Engineers, Inc.
MOA	Ministry of Agriculture
MOH	Ministry of Health
MPWWR	Ministry of Public Works and Water Resources
NITI	National Irrigation Training Institute
PEC	Public Excavation Companies
PMP/CMP	Preventive Maintenance Project/Channel Maintenance Project
TC	Technical Committee
USAID	United States Agency for International Development
WRC	Water Research Center
WRI	Weed Research Institute

EXECUTIVE SUMMARY

From August 1 to 5, 1989, a highly successful project start-up workshop was held in Alexandria, Egypt, for the Preventive Maintenance Project/Channel Maintenance Project (PMP/CMP) component of the Irrigation Management Systems Project. The workshop was attended by 41 participants, (30 Egyptians and 11 Americans), representing various offices of the Ministry of Public Works and Water Resources; the Office of Irrigation and Land Development of USAID/Cairo; Morrison-Knudsen Engineers, Inc. (the contractor for the project); two public excavation companies; various directorates; and PACER, a local consulting firm subcontracted to MKE. (See Appendix A for the participant list.) The venue was the Sheraton Montazah Hotel in Alexandria.

The workshop was conducted by two facilitators, Tom Leonhardt and Susan Gant. The main objective of the workshop was to disseminate critical project information to the multitude of players who will eventually be involved in the implementation of the PMP/CMP. Secondary objectives were as follows:

1. To begin defining management roles and responsibilities
2. To study critical issues and concerns involved in starting up the project
3. To make recommendations about future steps

The greatest challenge faced by the facilitators was to handle both the training and administrative aspects of the workshop while conducting a completely bilingual program.

The workshop outcomes can be categorized into four major products:

1. Agreements reached
2. Next steps
3. Definition of roles and responsibilities and
4. Recommendations for addressing the critical issues

These products will serve as a basis for planning and action over the next six months. They can be found in Chapter 3 of this report. Probably the most important outcome of the workshop was the development of a team spirit among the individuals involved in the execution of the project and the chance to meet and begin discussing its various components. Overall, the participants rated the workshop very highly, making such comments as:

1. Everything was done very well; more than excellent
2. If I could mark it on a scale of 1 to 5, I would give it a 5.
3. All workshop activities were well done.

Areas in which the participants felt improvement might be made included:

1. More small group work addressing issues and concerns
2. Air-conditioned meeting room
3. More emphasis on implementation strategies

Key recommendations made by the facilitators were:

1. Make sure all parties involved in the planning and implementation of start-up workshops understand their respective roles and responsibilities.
2. Arrange start-up workshops at a time when the technical assistance team has more facilities in place (phones, etc.) so that logistical arrangements are not overwhelming.
3. Continue to invite key players who are in a position to answer critical questions about the project.
4. Continue to do bilingual workshops.

Chapter 1

INTRODUCTION

1.1 Background

Early in 1989, USAID/Cairo asked the Irrigation Support Project for Asia and the Near East (ISPAN) to conduct a project start-up workshop for the Preventive Maintenance Project/Channel Maintenance Project in Egypt. PMP/CMP is one of ten components of the Irrigation Management Systems Project (IMS) which is sponsored by USAID and the Egyptian Ministry of Public Works and Water Resources. (See Appendices B-E.) This was the fifth start-up workshop conducted by ISPAN. It was facilitated by Susan Gant, a self-employed consultant, and Tom Leonhardt, a senior training consultant for Training Resources Group.

In 1984, the Government of Egypt (GOE) initiated a national program to improve and rehabilitate irrigation canal networks in "new" as well as "old" lands in the Nile Valley and delta. The GOE's strong interest in the PMP/CMP stems from its concerns over the country's growing dependency on imported foodstuffs. To help counter this trend, the GOE is looking for ways to increase agricultural production and, at the same time, conserve water in the "old lands". The conserved water would provide more water for "new land" development or other uses.

The basic approach of the PMP/CMP is to keep an irrigation system and its attendant maintenance equipment in good condition. To provide adequate maintenance requires establishment of a first echelon maintenance capability consisting of trained management and staff with upgraded repair facilities and shops. The objective of PMP/CMP is to develop and implement an integrated system for upgraded maintenance of irrigation systems. The ultimate goal is to increase agricultural output.

The primary activities of the PMP/CMP will be to evaluate the Gharbia directorate model project; inventory channel structures; evaluate maintenance equipment; and develop a channel maintenance cycle and a cost recovery program.

Engineer M. Kashef is the project director and is aided by Morrison-Knudsen Engineers, Inc. (MKE) as a technical assistance team. The project team leader for MKE is Robert Dixon who is assisted by a resident staff of 7; the PACER consulting group will provide services on an as-needed basis.

1.2 Terms of Reference

ISPAN was requested to provide two training specialists/facilitators to:

1. Interview a cross-section of government representatives who will be working on the project, members of the contract team, and USAID staff to identify project start-up issues and concerns.

2. Analyze the interview information to determine goals and issues and then develop the workshop design and schedule.
3. Conduct a 4-day start-up workshop using a mixture of full group and small group problem-solving activities based upon the general guidelines in the publication, "Facilitator Guide for Conducting a Project Start-up Workshop" (Edwards and Pettit, WASH Technical Report No. 41, March 1988).
4. Produce a summary field report in draft before departure from Egypt with workshop results and agreements.

1.3 Interviews

Interviews were conducted with approximately half the participants in preparation for the workshop. The interviewees included Ministry staff, USAID staff, contractor staff, and representatives from the Tanta and Minya Irrigation Directorates. The Tanta and Minya interviews were conducted in focus group style and were done with the aid of an interpreter since many of the interviewees were not proficient in English.

The interviewers asked questions about each participant's expectations for the workshop, the role that each played in the existing irrigation program, and perceptions about the project. During the interviews, the facilitators asked questions about difficulties the interviewees had in carrying out their work and their major preoccupations and concerns.

The interview data were analyzed and used to guide selection of workshop topics and sequencing of the sessions. Issues selected for workshop discussion and problem solving were the ones about which a majority of participants expressed concern.

Upon completion of the interviews, the facilitators developed a workshop agenda, schedule, and list of critical issues. These were presented to the workshop steering committee for final discussion and approval. The steering committee consisted of Messrs. Dixon (MKE), Kashef (MPWWR), and Maxwell (USAID).

1.4 Interview Findings and Critical Issues Identified

During the pre-workshop interviews, most participants were enthusiastic about the possibility of attending the workshop. They were very much in the dark and viewed this as an opportunity to learn more about it. They also expressed interest in meeting with everyone associated with the PMP/CMP and looked forward to the occasion to talk with MPWWR officials.

The facilitators identified several critical issues:

1. Management expectations (roles and responsibilities)

Even though this topic was already scheduled for discussion at the workshop, almost every person interviewed raised concern about the area. The PMP/CMP is unusual in that it has a large number of actors who will be carrying out the project. There are primary actors in the project (USAID, GOE, and MKE) and secondary actors (PACER, World Bank, NITI, etc.). Each organization needs to coordinate its role with the others and sort out the basic project responsibilities.

2. Language

The PMP/CMP, by the very nature of its mandate, reaches from the highest level of government down to those who will actually be responsible for carrying out the basic maintenance functions at the local level. A technical assistance team is working at all these levels. The ability of these groups to communicate with each other is critical to the successful implementation of the project. Language is also important for training, reading directions for running equipment, writing reports, and for giving effective feedback.

3. Incentives

Almost without exception, those interviewed expressed concern about incentives. It is essential to be able to hire technically qualified people to carry out the tasks and activities of the project. There are constraints on the project's ability to provide incentives. Given this situation, the interviewees wanted to know what could be done to develop and implement a fair incentive plan for all concerned parties, one that is in agreement with existing institutional policies.

4. Training leading to sustainability

It is important to make sure that there is proper transfer of appropriate skills and knowledge to the correct groups at the most opportune moment, not only for carrying out the project's tasks, but also for assuring that work will continue past the project's time frame. Training needs to be conducted at all levels and in a multitude of different content areas (management, maintenance, supervision, technical skills, etc).

5. Timely phasing of project activities and accountability for their execution

Given the number of different parties involved in the project, their different tasks and activities, and the complexity of the technical aspects of preventive maintenance, proper timing of all project activities becomes critical. Not only do the project's activities need to be carried out on time, but those parties responsible for their execution need to be held accountable for the agreed-upon results. The time frame available

to the project for carrying out its activities has been shortened with no reduction in the number of tasks.

6. Policy considerations related to technical issues

Since the PMP/CMP has a large technical component, many interviewees expressed concern about specific technical issues that they will have to deal with during the life of the project. Examples are the following: mechanical vs. biological vs. chemical control of weeds; validity of using small or large equipment on the canals (using labor intensive techniques vs. more costly machinery); using locally made equipment or buying imported machinery; building and maintaining warehouses, storage facilities, etc.

Chapter 2

THE WORKSHOP DESIGN

2.1 Overview of the Workshop

The start-up workshop concept and process are based on the need to shorten the time required to get a project up and running and to forestall implementation problems. This can best be accomplished by bringing the project's major stakeholders together and systematically addressing the issues determined in the interviews, providing uniform project information to all parties, and developing and/or reviewing draft work plans for the life of the project.

Participating in this workshop were several groups:

1. USAID: The office director for irrigation attended full time as did the project officer. They were accompanied by the technical engineer for irrigation.
2. Ministry of Public Works and Water Resources: Six officials from the Ministry attended full time.
3. Public Excavation Companies (PECs): These parastatals were represented by two delegates. The PECs will eventually have a role to play in the execution of the project.
4. Directorates: Tanta and Minya directorates were well represented since the project will be starting work in these two areas. Other directorates were also in attendance even though the project will start in their areas at a later date.
5. PACER: The president of PACER attended full time. This consulting organization is to assist the project's technical assistance team on an as needed basis.
6. NITI: The Professional Development Program, with responsibility for constructing and staffing the National Irrigation Training Institute, was represented at the conference by a delegate.
7. Morrison-Knudsen Engineers, Inc.: The entire staff of MKE attended the workshop full time. (There is one remaining staff position yet to be filled by the home office.)

The workshop was designed as a series of team building activities involving the entire project team. Participants were given tasks to complete in mixed small groups and to report back to the full plenary session. As recommendations and agreements were reached, they were recorded by the secretarial and interpreting staffs and were typed for distribution. Final review was impossible due to the

necessity of having to translate into two languages. Copies of the proceedings were given to the participants before leaving the workshop.

The facilitators directed the process, giving instruction to the group, monitoring the small group work and discussion, and facilitating the full group agreement and discussion processes. The entire workshop was conducted in both Arabic and English.

2.2 Workshop Goals

The workshop was designed to meet the following objectives:

1. Exchange current information about the project that is essential to starting up and to achieving common understanding about the project's mandate.
2. Achieve agreement on and commitment to project goals and objectives.
3. Provide an opportunity for the entire project team to become acquainted with each other.
4. Agree on management roles and responsibilities of the contractor, Ministry, and USAID as well as for the secondary players.
5. Agree on some procedures for managing the project.
6. Improve the ability to work together as a team.
7. Discuss and develop strategies or recommendations for the most important issues that will affect the project.
8. Review the draft work plan.

2.3 Workshop Schedule

The workshop was organized to take three and a half days. It started on August 1 with a reception and dinner, and ended on August 5 at noon. Following is a schedule of activities:

Wednesday, August 2, 1989

- | | |
|-------|-----------------------------------|
| 9:00 | Introduction |
| 9:30 | Rationale for a start-up workshop |
| | Objectives |
| | Norms |
| | Methodology |
| | Expected outcomes |
| | Review of schedule |
| | Administrative details |
| 10:30 | Coffee break |

11:00 Panel of experts on the PMP/CMP
13:00 Lunch
15:00 Small groups convene to prepare questions for the panel
16:00 Panel reconvenes to answer questions
18:00 Break for dinner

Thursday, August 3, 1989

8:30 Bridge from Day One to Day Two agenda
Lecturette on management issues, roles and
responsibilities
9:00 Small group work on management expectations (matrix)
13:30 Lunch break
15:00 Small groups present their expectations
18:00 Dinner break

Friday, August 4, 1989

8:30 Bridge to Day Three work
8:45 Groups review other groups' expectations
9:30 Discussion, agreement, and recommendations
10:30 Break
11:00 Discussion (continued)
12:00 Lunch and prayer
15:00 Small groups discuss critical issues
16:30 Small groups present recommendations and discussion
18:30 Dinner break

Saturday, August 5, 1989

8:30 Bridge to Day Four work
8:45 Presentation on the 10 IMS components
10:00 Break
10:15 Presentation of draft work plan and discussion
11:00 Next steps, closure, and evaluation

2.4 Session Descriptions

In this section, a brief description is given of each session. The results of the sessions will be explained in the next chapter.

2.4.1 The Workshop Opening

This session began at 8 p.m. on August 1 with a formal reception and dinner held at the Montazah Sheraton. Immediately following the meal, a welcome speech was made by Eng. Mazen stressing the importance of the workshop and the PMP/CMP for

irrigation in Egypt. On the following morning, the participants and facilitators reconvened to begin the actual workshop.

After the two facilitators introduced themselves, each participant did likewise. One of the facilitators then proceeded to lay the foundations for the sessions to follow. After briefly explaining the rationale for doing a start-up workshop, he listed the objectives for the workshop and made sure that the participants, many of whom had never participated in such a meeting, were clear about how the meeting would be conducted. Next on the agenda, workshop norms were developed, stressing the bilingual nature of the encounter and the need for patience and linguistic tolerance. The facilitator, anxious to calm any anxieties about the "new" methodology, took time to explain the participatory nature of the workshop and how the success of the meeting would depend entirely on the participants and their willingness to give input into the program. The facilitator then explained what outcomes were expected and outlined the schedule that would be followed for the next few days. The MKL administrator explained logistical and administrative arrangements.

2.4.2 The Information Panel

After a short break, the session reconvened and the panel, consisting of officials from the project, took turns explaining various aspects of the project (see Appendix E). The objective of this session was to permit everyone associated with the project to have the same information base. The panel continued until lunch. After lunch, the participants in small groups developed questions that they wanted to ask panel members. Each group then took a turn asking a question of the panel members (see Appendix F). Remaining questions were noted and the facilitator stated that if, by the end of the workshop, they had not been answered to the satisfaction of the group, they should be brought up on Saturday morning.

2.4.3 Management Roles, Responsibilities, and Expectations

Day Two began with the facilitators explaining briefly about the interviewing process that had taken place the week before. They stated that the most important critical issue to be dealt with during the workshop was the one concerning management roles of the various players involved in the project. The facilitator gave a short lecturette on management trouble spots and explained that the exercise which would follow was designed to help overcome some of the common management problems that occur during project start-up. The participants were divided into small groups representing the major players in the project, i.e., MKE, USAID, PECs, Directorates, and the Ministry. The groups worked until lunch break. Following lunch, they presented their findings (see Appendix H and 3.3). There was no discussion at this time.

The following morning, Day Three, each group had the opportunity to respond to the others' expectations. Discussion ensued, and many misunderstandings about roles were cleared up. As many participants remarked, more meetings will need to take place in this area, due in part to the large number of organizations involved in the project's implementation (see Appendix I).

2.4.4 Small Group Work on Issues and Concerns

During the afternoon of Day Three, the participants were allowed to sign up for a critical issue they would like to study. The issues were

- language
- training,
- incentives, and
- timely phasing of project activities.

A special management group was also convened during this time; its objective was to study the organizational structure of the project at the various levels of its implementation. Each group worked for approximately one and one-half hours and following a short break, each group presented its recommendations for addressing the issue (see 3.2). The management group was last to present (see Appendix G).

2.4.5 Closure

Saturday morning, the last day of the workshop, was devoted to two main presentations. During the week, a request had been made for someone to explain the 10 IMS components, and Joe Carmack of USAID undertook this task (see Appendix B). Following his presentation and questions, the MKE group presented its work plan draft to the participants. Discussion of the work plan, the nature of the various project activities, the directorates involved, etc., followed the presentation.

The facilitator asked individual participants to complete three sentences which would begin to outline next steps for the project. These were collected without discussion, due to time constraints. The results can be found in Section 4.2. Following Engineer Nadar's closing speech and distribution of gifts to the support staff, the participants filled out the evaluation form.

Chapter 3

RESULTS AND AGREEMENTS

3.1 Overview of Outcomes

Participant evaluation form responses and informal feedback given to the facilitators following the workshop indicated that the workshop achieved its objectives. The major results were as follows:

1. A common understanding was reached about the project and the roles and responsibilities of the various groups involved. Preventive maintenance was defined in several ways (although no consensus was reached), the objectives of the project were somewhat clarified, and the participants recognized the complexity of the project due to the large number of players.
2. Information was exchanged and agreements were made on several important management issues.
3. The workshop provided several key individuals the time to step back from their busy schedules and spend time together exchanging ideas, solving problems, and discussing potential project implementation issues.
4. Team building was fostered by increased understanding of how individuals will work together and how the various organizations will collaborate. Overall, commitment to the project and its goals was increased.
5. Each organization involved in the implementation of the project had the chance to review the draft work plan and develop a more realistic idea of what can be accomplished in the time frame.
6. Recommendations were made and accepted with regard to language, incentives, training, management, and phasing of project activities.
7. Expectations were stated and agreement reached among the primary and secondary players of the project on the planning process, sharing information, organizational hierarchy, roles and responsibilities, reports, decision making, and quality control.

3.2 Issues and Concerns Identified During Interviews: Major Recommendations from the Workshop Groups

3.2.1 Language

The problem of language was of primary concern to all the participants. The group which studied this issue made several recommendations about how the

project might go about addressing this potential obstacle to smooth project implementation.

- Chauffeurs and drivers who are capable of doing interpreting should be hired to accompany staff members on field trips.
- Each group involved in project implementation (technical assistance teams and directorate officials) should begin language classes and should make a real effort to learn each other's language.
- Technical assistance team members and their counterparts should make a real effort to speak clearly and slowly.

3.2.2 Training Leading to Sustainability

The group which studied this concern addressed it on two levels. The first level related to training that will take place during the life of the project. Such training needs to be timely (i.e. take place at the right moment for it to be useful) and should also be tied directly to the needs of those involved. This, the group felt, could best be accomplished by a needs assessment to help ensure that only relevant training is done. This needs assessment should also be on-going.

The second level concerned project sustainability which is best guaranteed by having properly trained people to take over once the technical assistance team departs. Some of this training will need to take place outside of Egypt, but the group expressed the hope that much of it will be done at the National Irrigation Training Institute (NITI), which is in the process of being set up for just such activities by the Professional Development component of the IMS.

3.2.3 Incentives

The group which studied incentives emphasized that there are alternatives to monetary incentives. They put forward several specific recommendations and suggested that these be tied to production and production levels based on the work plan.

They also stressed that "mesque" incentives were a problem area which would need addressing soon. They proposed that one powerful incentive would be to allow people to travel, both to the United States for further training and to other countries to observe irrigations projects. Several of the Egyptian participants expressed the opinion that training is not always viewed as an incentive.

The group put forward the following definition of incentive:

"Any payment above normal salary for additional production or as a reward."

The group also stressed that incentives are not tied to overtime (which is a matter of policy) and are to be distinguished from allowances. Allowances are paid to field workers for trips away from their posts and might be increased as a kind of incentive.

The final recommendation was that incentives are important for the success of the project and should be submitted to a special group for further discussion.

3.2.4 Timely Phasing of Project Activities

The group defined what it meant by timely phasing of project activities since there was some discussion about the meaning of this term. It was defined as follows:

"Implementation of each project component in a timely manner to ensure project completion on schedule and within the allotted budget."

This group's principal recommendations were to

- Clarify scopes of work and individual and group responsibilities, and
- Establish an evaluation (monitoring) system for keeping track of progress as measured against benchmarks.

3.2.5 Special Management Group

A special group was convened to discuss overall managerial issues related to the PMP/CMP. The group felt that it would like to start clarifying various management responsibilities such as aquatic weed control and channel maintenance. It was suggested that this group continue to meet on a regular basis. Recommendations stemming from this first encounter include the following:

- Define a PMP/CMP/Directorate organization chart,
- Have the directorates designate those staff assigned to the project and give those names to the project director, and
- Review weed control chemical recommendations.

The specific notes from this meeting can be found in Appendix G.

3.2.6 Policy Consideration Related to Technical Issues

The participants of this group felt that this concern, identified by many of the interviewees as of paramount importance, was one that should not be addressed at the workshop. The technical issues are very complicated and in order to

address them properly, certain specialists will need to be present. The group recommended that the specialists be convened and begin work on defining the specific technical concerns related to the project (some have already been identified) and how the project, MPWWR, and other ministries (MOA and MOH) might proceed.

3.3 Summary of Project Management Agreements

3.3.1 The Directorates: Expectations

The directorates were quite specific in their expectations of the MKE technical assistance team. The directorates felt they should be responsible for preparing the waterways and structures inventories, and that MKE should accompany them on their field trips. They would prefer that communications pass through the Ministry in Cairo and that reports be prepared by the governorate director with a representative from MKE.

Meetings should be held in the governorate office, and the project manager at the directorate level should make decisions after consulting with the MKE representative and the governorate undersecretary. Planning should be done with as many actors involved as possible.

The directorates expect the Ministry to supply them with all the necessary data for assuring project implementation. Communication should come through the undersecretary at the directorate level who will attribute roles to the project manager and others. The Ministry must be informed about plans and program reports. The directorates felt that the project director should be the one to take decisions and then the general manager in Cairo is to be informed. Project directors should go on field trips to ensure quality control and then pass their comments to the general director in Cairo. Planning will take place with the committee members, including the area directors and general manager. The directorates felt that very close coordination with the PECs was essential to avoid confusion about planning and especially the purchase of equipment (conference notes appear in Appendix H).

3.3.2 The Public Excavation Companies: Expectations

The PECs expect the Ministry to provide a complete set of contract agreements just once and to make sure payments are made in a timely manner.

The PECs would like the directorates to pay monthly and to make recommendations early to avoid having to redo work. They would like a report every 15 days. The PECs felt that a life-of-project plan should be agreed upon and that individual and project monitoring should be based on this plan. They would like to have direct contact with the directorates, especially for any urgent matters.

The PECs would like MKE to cooperate fully in the implementation of the work plan over the life of the project. They expect MKE to make recommendations, and they will provide MKE with a monthly follow-up report. MKE as technical advisors

will be called upon to suggest solutions to major project problems such as those involved with training and weed control.

The most important expectation expressed by the two PECs was to have a written contract to clarify their relationship with all other project parties.

3.3.3 The Ministry of Public Works and Water Resources: Expectations

The Ministry would like a periodic meeting with USAID and bi-monthly reports. USAID will have the responsibility for approving the detailed annual work plans which are to be implemented by the project. Copies of the monthly financial IMS statement and a copy of the physical reports should be shared. Both MPWWR and USAID would like to minimize paperwork. Quality control will be through periodic visits arranged through the project director and by the monitoring office of the IMS.

The Ministry will maintain contact with MKE directly or through the project director. Counterparts should be assigned for each of the consultants and should be located in the same sites. Project reports should be jointly prepared and submitted through the project director to the proper authorities. Technical reports are submitted whenever possible. Decision making and coordination will take place with the team leader and the project director and there will be joint planning to the fullest extent possible, including coordination with PACER whenever PACER's expertise is required

3.3.4 USAID: Expectations

Most of USAID's expectations concerning both the Ministry and MKE were in the area of reports. The detailed list can be found in Appendix H. USAID staff would like to be involved in field ("show me") trips and prefer that very close coordination and contact be maintained between project parties. Decision making and planning will take place as a collaborative process, based on definition of objectives and criteria. Monitoring would be through contract reports, field trips, and the annual work plan as well as electronically through the monitoring office. The MPWWR would also be monitored through staffing covenants, cash contribution, facility construction, and storage facilities. USAID personnel expressed a desire to change payment methods to the PECs to be compatible with new technology for channel maintenance.

The Ministry will maintain direct contact with the PECs through official channels. They will expect a monthly progress report and an equipment justification report. Any decisions to be made involving a PEC and MPWWR will consider the company's chairman as well as the project director. Quality control will be carried out through periodic progress reports. The MPWWR asks to be informed about future planning for the selection and operation and maintenance of equipment. As a last expectation, the Ministry would like more cooperation with the PECs' project staff.

The Ministry will continue to have direct contact with the directorates through the assistant director in each governorate. MPWWR would like monthly progress

reports, and decisions should be taken through normal official channels. Quality control will also be done through official procedures already set up. Planning will take place jointly as needed.

3.3.5 MKE: Expectations

MKE would like the directorates to begin information sharing immediately. All data relevant to the project should be shared. Formal reporting by MKE will be through the Ministry; however, informal relationships will be necessary as will counterparts for MKE staff. MKE has no formal reporting line with the directorates. Any decision regarding the directorates will be made in conjunction with the project director. Information and data used by MKE for quality control will be accumulated by the directorates in accordance with the approved system. For planning purposes, MKE expects the directorates to compile information and data which will be sent to the project director so that a life-of-project program can be prepared.

MKE expects the Ministry to share all relevant project information and data. The working relationship will be both informal and formal on a day-to-day basis. MKE feels the need for counterparts. Reports will be provided by MKE, and those specified in the contract are deemed sufficient. Special reports will be per project director instruction. Decisions will be taken jointly by the MKE staff and the project director to the greatest extent possible. MKE is contractually bound to develop a monitoring system with various components. Planning is to take place in full cooperation with the project director.

MKE expects to share information with the PECs through a wide variety of means and to the extent necessary to guarantee complete communication. They also feel that the ideal working relationship will involve a great deal of communication through formal and informal methods. MKE would like reports from the PECs on a large number of topics and also expects to send them reports on equipment recommendations, progress, and other project developments. Decisions will be taken jointly and will be based on many considerations. Monitoring the projects will be done against the work plan and contract terms, visually (through photos) and in written reports. Monitoring of individuals will be criteria referenced. MKE representatives said they would like to be fully involved in planning with the PECs.

Much of what MKE expects of USAID can be referenced to contractor/contractee relationships. Communication will be formal and informal with the project officer, involving scheduled and unscheduled visits, written notes, letters, and official contract modifications. This should take place in a timely fashion. MKE would like USAID to identify the reporting structure and to make clear the departmental functions. MKE would like timely responses to requests for information and prompt action on documents which it submits for consideration as well as for changes in the contract. MKE also expects prompt payment. Decisions will be made jointly, in a timely fashion, and will be based on contract terms. Monitoring will be carried out according to contract terms and or a "go/no go" response. MKE expects USAID to participate in planning by giving guidance when necessary, recommending changes, and reviewing and approving when appropriate.

Chapter 4

RECOMMENDATIONS

4.1 Issues and Recommendations Related to the Workshop Itself

The workshop facilitators found themselves having to handle logistics both before and during the workshop itself. This distracted from their ability to focus on workshop content, and as a result, several sets of small group recommendations slipped through the cracks.

Recommendation:

During planning of start-up workshops, make sure that role definition is clear. A full-time logistical person needs to be hired well before the workshop starts and should continue in that role during the workshop. That person should have no other responsibilities except logistics (hotel accommodations, supervision of the secretarial pool, etc.).

The workshop venue received mixed results. Although the food and beverage services were excellent and the hotel staff courteous and helpful, the training room was not air conditioned; there were no rooms available for small group work; the reception staff never set up a sign-in table as promised, etc.

Recommendation:

Explore other venues, especially if the workshop is to be held at the hottest time of the year.

Members of the technical assistance team were preoccupied with settling into houses and getting their offices set up. Facilities such as phones were not available and this greatly hampered logistical arrangements.

Recommendation:

Perhaps it would be wise to wait just a little longer into the life of the project to have the start-up workshop, at least until the team has had a chance to take care of its basic needs before exploring project issues and concerns.

Holding the workshop early in the life of the project forces the participants to focus more on information issues than on strategies for addressing project concerns, since many of the participants had no idea that the project even existed, let alone what their role in it might be.

Recommendation:

If this is to be the purpose with other start-up workshops, amend the workshop objectives to reflect the informational nature of the proceedings.

By inviting directorate and MPWWR officials to participate in the workshop, the opportunity for them to interact was increased greatly. It appears that they do not often have the opportunity to meet and interact as a group entity.

Recommendation:

This practice should be continued and officials should be invited to as many of the follow-up activities as possible.

Having upper-level officials from MPWWR and USAID attend the workshop was extremely helpful since questions about the project's scope of work could be answered immediately and authoritatively.

Recommendation:

Continue to invite decision makers to start-up workshops and other meetings where decisions need to be made on the spot.

Conducting the workshop in two languages was most worthwhile. Although time consuming, it allowed everyone to follow all the proceedings. People felt free to ask questions in either language and this reduced embarrassment due to lack of facility in the second language. The interpreters did an excellent job considering that two were technical people from the university and not trained interpreters. Having an interpreter for the facilitators during non-technical portions was also helpful.

Recommendation:

Continue this practice whenever possible, especially when directorate people are involved.

In order to distribute documentation from the workshop as quickly as possible to the participants, a full support staff is necessary.

Recommendation:

At least three secretaries (bilingual) are necessary. Depending on the participant profile, one or two of the secretaries should concentrate only on Arabic texts.

Holidays hindered the planning of the workshop since many critical players were not available or were difficult to reach. Decisions crucial to the workshop were postponed.

Recommendation:

Schedule workshops for times when people are in their offices and available to make important decisions about hotel arrangements, venue, dates, etc.

Several of the office machines rented for the workshop did not function at all and caused delays in typing and distributing workshop notes to the participants.

Recommendation:

Since sophisticated word processing and copying equipment is necessary for this type of workshop, it should be ordered and tested well in advance of the workshop in order to avoid delays due to repairs.

Almost all participants felt that this workshop was a good start but, due to time factors, couldn't possibly address all the issues.

Recommendation:

A follow-up workshop should be held in six months to continue the work now started.

Institutionalizing the capacity to facilitate workshops of this type would greatly reduce their cost and would allow host country nationals the opportunity to conduct workshops as needed during the implementation of projects.

Recommendation:

Organize a training-of-trainees/facilitators workshop for those who might be interested in undertaking such a role in the future.

Many participants suggested that technical issues, especially concerning weed control, will need a forum of their own.

Recommendation:

Convene a technical issues workshop as soon as possible with appropriate specialists and concerned ministries (MOA and MOH).

4.2 Next Steps

During the last day, the participants individually completed three sentences which were designed to give an indication of what needs to happen next. The first phrase, "In order to continue what we started here, we must...." yielded the following summarized information:

* Completed forms are available on file at ISPAN.

1. Many participants said they hoped to remain in contact with each other and to open further the channels of communication established at the workshop.
2. Participants were eager to learn more about the Gharbia project's evaluation results and the lessons learned therefrom. This should be the subject of a meeting upon completion of the project evaluation.
3. Many participants suggested another seminar in six months and, many said regular inter-organizational meetings are essential. Work should continue on unresolved issues.
4. Many participants expressed a desire to have roles further clarified.
5. Many participants said that project activities should start as soon as possible. They cited procurement of equipment and construction of warehouses and workshops as examples of activities that are time consuming and should be started right away.
6. Some wanted a signed, contractual agreement between certain parties who participated in the workshop.
7. One participant wanted directorate-level officials assigned to the project for its implementation.

The second question dealt with issues, concerns, and problems that needed additional and further attention. This question elicited the following responses:

1. Further clarify roles and develop written job descriptions for all units.
2. Develop channel maintenance cycles.
3. Obtain funding for preventive maintenance workshop construction.
4. Continue to probe the issues of incentives and staffing.
5. Continue to examine the issue of training and what is meant by a training facility.
6. Research the kinds and types of weed cutting equipment; expedite importation of equipment.
7. Examine further all technical questions (herbicides, equipment, labor intensive vs. machine intensive) and the supply of spare parts.

8. Look at the Ministry's role vis-à-vis other ministries for the implementation of the project (MOH-MOA).
9. Clarify and address the language problem.
10. Provide for long-term availability of spare parts.
11. Review more closely the MKE work plan.

The last question asked participants to list concerned groups or individuals who were not at the workshop, but who need to be informed about what happened and the agreements that were reached.

Participants responded with the following suggestions:

1. Engineer Sawaf, Project Director at Shoubra
2. World Bank (cited many times)
3. Asian Development Bank
4. Weed Research Institute
5. Other PECs
6. Representatives from MOH and MOA
7. Farmer representatives
8. Everyone and anyone who will have role in the project
9. Drainage Authority

Chapter 5

PARTICIPANT EVALUATION RESULTS

The participants evaluated the workshop as a positive experience and indicated that objectives of the workshop were met. The following represent the average weighted scores for the various workshop objectives on the evaluation sheets.

1. To exchange current information	4.4
2. To gain commitment to project goals	3.7
3. To become acquainted	4.6
4. To agree on roles and responsibilities	4.0
5. To agree on procedures for project management	3.4
6. To clarify expectations for working together	4.2
7. To discuss and develop strategies	3.7
8. To develop work plans	3.4

When asked what could be done to improve the workshop, most participants responded that the workshop had been well run. Several participants felt that there had not been enough time to discuss real strategies instead of just making recommendations. The venue received mixed reviews; however, participants had been allowed to bring their wives with them (and several took advantage of this) which helped soften any criticism of the hotel and the arrangements. Almost all participants felt that the workshop was an excellent activity to introduce the project and related participants and to engage in professional discussions and decisions. They expressed a desire to continue with similar experiences in the not-too-distant future. They indicated that many issues still needed discussion, especially those of a technical nature. The facilitators received high marks for their patience and understanding.

Appendix A

Participant List

Appendix materials were prepared at the workshop for use by participants. They have not been edited or changed from their original form in preparation of this report.

**Participant List for Preventive Maintenance / Channel Maintenance
Start-up Workshop
Alexandria - August 1-5 1989**

Ministry of Public Works & Water Resources:

<u>Name</u>	<u>Title</u>	<u>Job</u>	<u>Address</u>	<u>Tel.</u>
1) Eng. Mohamed Nadar	1st. Undersecretary of State.	Ministry of Public Works & Water Resources	Cairo	3549124
2) Dr. Mahmoud Abu Zeid	Chairman W.R.C.	Water Research Center	22 El-Galaa St. Bulak, Cairo	760474
3) Eng. Mokhtar M. Emara	Undersecretary of Maintenance of Public Works & Water Resources	Ministry of Public Works & Water Resources	Al-Sheikh Rehan St. Cairo	3542465
4) Eng. Mahmoud Abbas	Senior Irrig.	Monitoring Office IMS	Ministry of Irrig. Rehan St.	3541478
5) Eng. Mustafa Kashef	Director F.M./ C.M.F.	Ministry of Public Works & Water Resources	13 Murad St. Giza	628144
6) Eng. Said Abd-El-Mawla	Director of Works	Tech. Director Irrig. Sector	Cairo	3545530

Public Excavation Companies:

7) Eng. Amin Mostafa Ismail	Chairman	Egyptian Dredging Co.	96 Ahmed Orabi St. Mohandessin, Giza	3475961
8) Eng. Ali Hosny El-Ghroory	Chairman	Mechanical Excavation Co.	Delta Barrage Near Police St.	2444437

Directorates:

9) Eng. Aly Rafie	1st. Undersecretary for Upper & Middle Egypt for Irrig.		Menia	326133 323133
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Upper Egypt:

10) Abd-El-Raouf Abo-El-Noor	Undersecretary of Drainage	Menia Governrate	Menia	326233
11) Eng. Samir Yousef Ali	Gen. Director	Ministry of Public Works & Water Resources	Beny Sweaf	322304

<u>Name</u>	<u>Title</u>	<u>Job</u>	<u>Address</u>	<u>Tel.</u>
12) Eng. Ezat Habib Bolos	Assistant Inspector	Sohag Irrig. Directorate	Borsaid St. Engineering Houses, Sohag City.	322577
13) Eng. Ashor Abd-El-Aziz	Assistant Inspector	Giza Directorate	El-Agouza St. Giza	725700 721593
14) Eng. Adel Shawly Yanni	Irrig. Eng.	North Assiut Directorate	Assiut	322011
15) Eng. Mohamed El-Badry	Irrig. Eng.	Menia Department	Menia	323133
16) Eng. Fahmy Tawadros	Asst. Gen.	East Menia Department	Menia	323133
17) Samir Samy Ayad	Director of Works	East Menia Irrig. Department	El-Menia	323133 328229

Delta Region:

18) Eng. Fathy Hamed El-Shaer	Gharbia OXM Pr- oject Director	Irrig. Directorate	Tanta Gharbia	325515
19) Eng. Foyez Hammouda	Chief Mech. Eng.	Gharbia Directorate OXM Project	Tanta	333591 334500 334918
20) Eng. Gamal El-Shafei	Director of Works	Tech. Office of Delta Dep.	Tanta	332759
21) Eng. Abd-El- Hamid El-Gaiar	Director of Works	Monofeia Directorate	Irrig. Houses Shebin El-Kom	324220
22) Eng. Abd-El- Aliem Okasha	Inspector of Kafr El-Shaikh	Kafr El-Shaikh	Irrig. Houses Kafr El-Shaikh	323063
23) Eng. Rady Mahmoud Fayed	Irrig. Eng.	Kaliobeia Irrig.	Banha	477127
24) Eng. Nabil Amis Farag	Eng.	Gharb El-Behi- rah Directorate	Damanhour	326744
25) Eng. Fouad Mansour Mohammed	Irrig. Eng.	Nobareia Irrig.	Houses of Irrig. El-Nasreia, El-Amreia	980060
26) Eng. Farag El-Sayad Ali	Civil Eng. Irr.	Salheia Directorate	Abu-Hmmad, Sharkeia	322311 322312 Zagazig
27) Eng. Ahmed Mohammed Soliman	Irrig. Eng.	El-Sharkeia Irrig. Dept.	Gamal Abd-El- Nasser St. Zagazig	322152
28) Eng. Botros Samir Amin	Civil Eng.	West Dakahleia Irrig. Department	Mansoura- Talha	323636 322100

Special Guests:

29) Paul Koluvek	Irrig. Eng.	Sheladia Assoc. (Professional Development Project (NIT))		2203037 2203038
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Pacer:

30) Dr. Husen Ismail	Consultant	Pacer	72 Mousadak St. Dokki, Cairo	3484835 3492825
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<u>Name</u>	<u>Title</u>	<u>Job</u>	<u>Address</u>	<u>Tel.</u>
<u>Morrison-Knudsen:</u>				
31) Robert E. Dixon	Team Leader	MKE	13 Morad St. Giza	628142
32) Mike Monnot	MKE Equip. Specialist	MKE	13 Morad St. Giza	628142
33) Bill McCarthy	Procurement Specialist	MKE	13 Morad St. Giza	628142
34) Robert Brown	Maint. Eng.	MKE	13 Morad St. Giza	628142
35) Richard C. Fitz	Gen. Mgr. Business	MKE	13 Morad St. Giza	628142
36) Gary Hansen	Weed Control Spes.	MKE	13 Morad St. Giza	628142
37) Lawton P. Bourn	Training Specialist	MKE	13 Morad St. Giza	628142
38) Ibrahim El-Sayed Attalla		MKE		628142 142

AID:

39) W.J. Carmack	Office Director Irrig. & Land Development	USAID	106 Kasr El- Aini St. Cairo	3573208
40) Carl Maxwell	Project Officer	USAID	Cairo	3573206
41) Shawky Boctor	I.M. Eng.	USAID	Cairo	3573206

ISPAN:

42) Susan Gant	Facilitator	ISPAN	2 La Bolsita Orinda, CA 94563 (USA)	415- 254- 4948
43) Tom Leonhardt	Facilitator	ISPAN	1611 N. Kent St. Room 1001 Arlington, UA	703- 243- 7911 22209

Interpreters/Translators:

44) Ms. Nermin Nazim			10 Hassan Murad St. Garden City Cairo, Egypt	3515090
45) Dr. Mohamed Salama	Assoc. Prof.		Cairo University Giza, Egypt	Faculty of Eng. 859370 Cairo Univ.
46) Dr. Ahmed Samy El-Zaher	Asst. Prof.		Cairo University Giza, Egypt	Faculty of Eng. 847251 Cairo Univ.

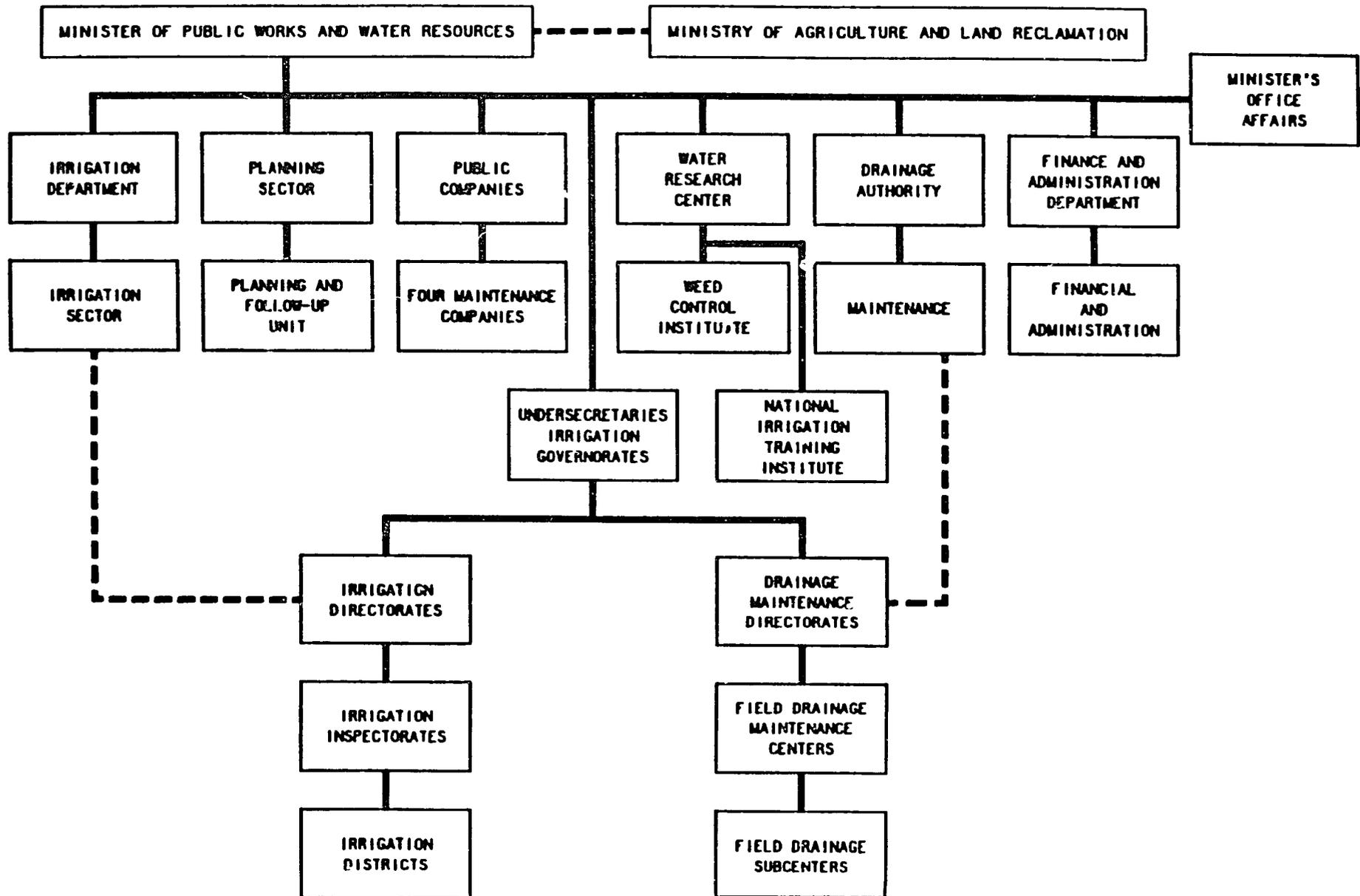
Secretaries:

47) Ms. Nairy Kamberian	Exec. Sec.			
48) Ms. Barbara Wazir	Exec. Sec.		52 Beirut Street Heliopolis, Egypt	668554
49) Ayman Roushdy	Exec. Sec.			2606524

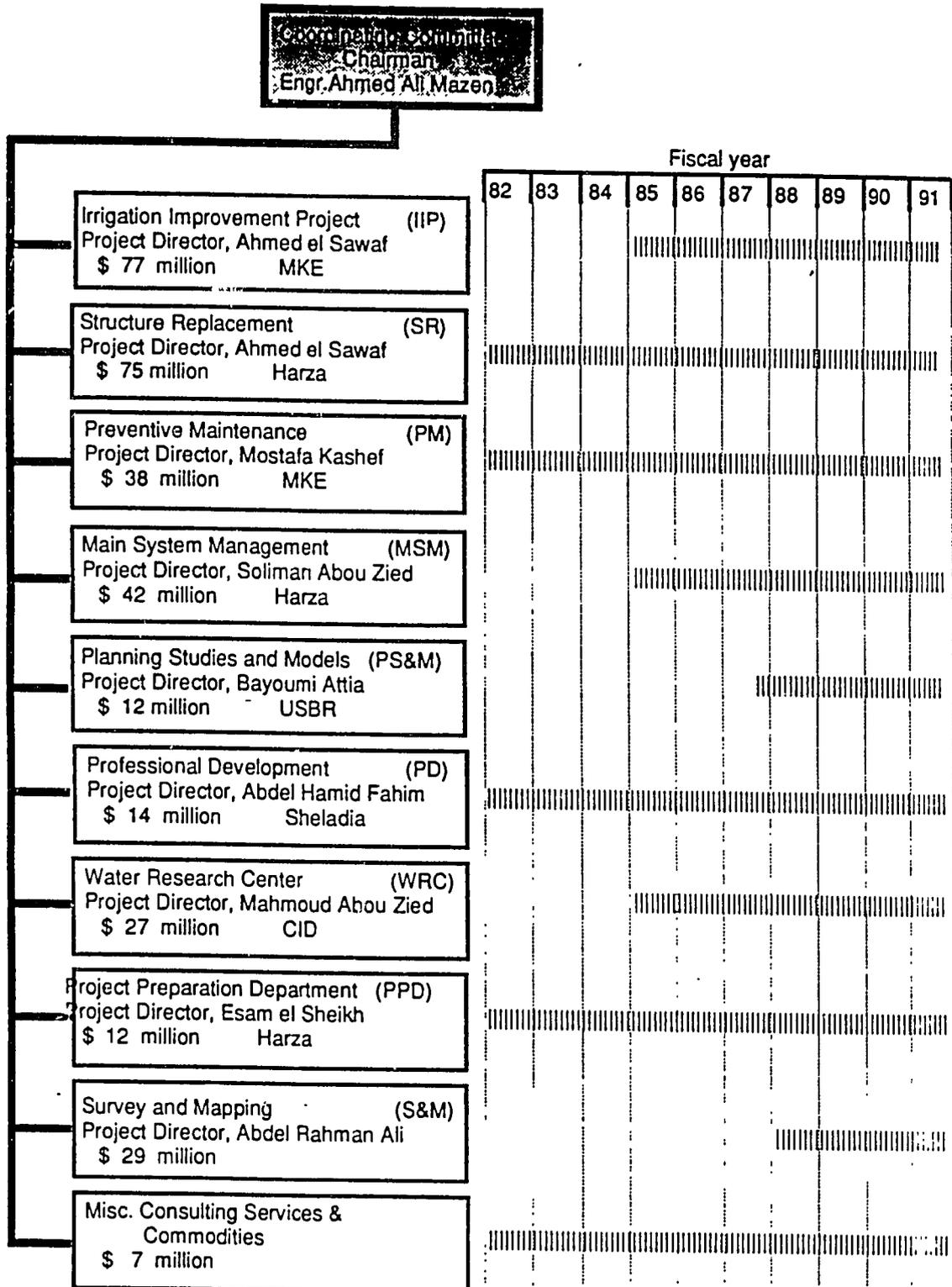
Appendix B

Organization Chart for PMP/CM?
and Irrigation Management Systems Project

PWR AGENCIES DIRECTLY INVOLVED WITH PMP AND CMP



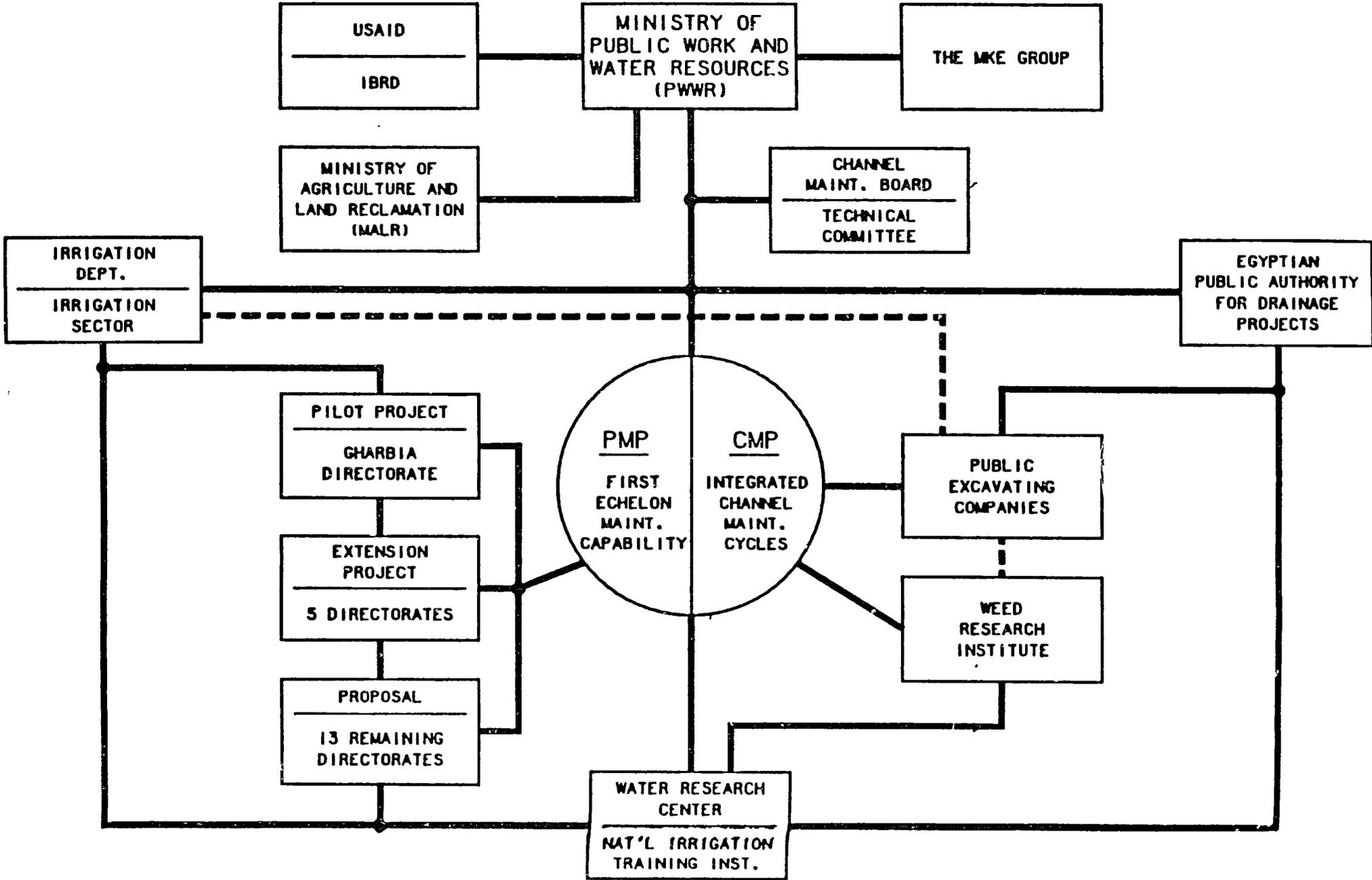
COMPONENTS OF THE IRRIGATION MANAGEMENT SYSTEMS PROJECT



Appendix C

IMS and PMP/CMP Chart

IRRIGATION MANAGEMENT SYSTEMS INTERRELATIONSHIPS TO ACCOMPLISH PM COMPONENT



Appendix D
Overview of PMP/CMP

OVERVIEW OF PM/CM PROJECT

A. Preventive Maintenance Project (PMP)

1. Sustained Maintenance Program for the Information Sector (IS).

a. Implementation of the Preventive Maintenance Program in the Gharbia Directorate:

Planning, inventory of facilities requiring maintenance, procurement of equipment, construction of workshops and office facilities are essentially complete. Maintenance activities began in January 1988. This pilot effort serves as the basis for expansion of the preventive maintenance concept into other Directorates. The Project includes the development of the full range of management factors leading to a balanced maintenance program. These include: (1) development of an organization capable of executing a preventive maintenance program; (2) staffing necessary for execution; (3) training of professional and technical and executing staff; (4) development of inspection and other procedures to identify maintenance needs and maintenance standards to be incorporated in a written manual; (5) establishment of workshops, (6) inventory of facilities requiring maintenance; (7) policies and procedures for scheduling and executing maintenance; (8) management controls; and (9) budgeting and financial controls.

The basic steps to be followed will be: (1) development of an implementation plan for each Directorate; (2) assignment of key professional staff; (3) construction of civil works to include workshop and office facilities where needed; (4) development of policies, procedures and assignment of responsibilities; (5) inventory of existing facilities; (6) procurement of the needed equipment and spare parts and (7) implementation.

2. First Echelon Maintenance Capability

A first echelon maintenance capability will be established within the IS. In addition, policies and procedures will be developed for management of higher echelon maintenance which normally will be carried out through contracts.

To support implementation of this capability, workshops will be established at the Directorate, Inspectorate and District levels. Equipment and staffing will be provided to support the operation of the workshops.

3. Institutional

a. Reorganize and strengthen the management staff at the National and Directorate levels:

A unit will be established in the office of the Under Secretary for Maintenance in the Irrigation Sector. This unit will be responsible for the analysis, planning, training, and other preparatory activities necessary for expansion and then for continued National level support. A Director General will be assigned who will have primary responsibility for project implementation. The staff of the Director General will include maintenance engineers (civil and mechanical), maintenance specialists, administrative and other appropriate support staff.

In each Directorate, a staff unit will be formed headed by a Director of Works who reports directly to the General Director for the Irrigation Department. This staff will be responsible for planning and implementation at the Directorate Level. The staff will include civil and mechanical engineers, work supervisors, accountants, clerical and other support staff.

b. Implement a preventive maintenance training program:

Training activities for preventive maintenance will be a combination of on-the-job training (OJT), off-shore training, in-country training arranged through the National Irrigation Training Institute (NITI), and in-country training arranged and conducted by the Central Office and Directorate level maintenance staffs. Training will be in accordance with training plans developed by the Central Office staffs and the Directorate Office staffs. Training plans will deal with the full range of issues involved in the planning and implementation of a maintenance management program and a first echelon maintenance capability.

B. Channel Maintenance Project (CMP)

The project will be implemented through existing institutions of the Ministry of Public Works and Water Resources (MPWWR), namely, the IS, the Egyptian Public Authority for Drainage Project (EPADP) and the WRI with the First Under Secretary of the IS providing the key role of Project Director. Policy direction and project coordination will be provided by establishing a Channel Maintenance Board (CMB) and a Technical Committee (TC) in the MPWWR by a Ministerial decree. The proposed strengthening of the concerned agencies and the coordination between them would maintain the present relationships of responsibility and authority.

1. Establishment of Integrated Channel Maintenance Cycles

General integrated maintenance management cycles have been established for different categories of channels. Detail cycles will be developed and refined during project implementation.

Small channels of up to 2 m bed width will be maintained without the use of herbicides. The maintenance cycle for these channels will include periodic desilting and frequent mechanical weed mowing. Maintenance works will be awarded to private or public contractors on the basis of local competitive bidding (LCB) procedures acceptable to the International Bank for Reconstruction and Development (IBRD), with award of contracts at the Directorate level.

For channels of more than 2 m bed width, the integrated channel maintenance cycle will include periodic desilting, mechanical weed mowing followed by herbicide spraying of re-growth and subsequent spot mowing and spot application of herbicides for the control of ditch-bank weeds. Until a better alternative is available, submersed aquatic weeds will be managed with the use of Acrolein 1/ applied in the early summer followed by mechanical excavation and weed mowing on spot locations.

The Public Excavation Companies (PECs) will be utilized for all maintenance activities, including herbicide applications placing the responsibility on a narrower group of personnel.

1/ Acrolein has Dermal toxicity that can cause severe skin irritation. Training in application and safe use will be provided by contractor.

Introduction of the new system will take sometime, and will be phased in a way which is consistent with readjustment of working practices, the availability of equipment and training of personnel. The proposed transition is based on using or modifying the existing equipment as far as possible, while introducing new equipment primarily as a replacement for worn out machinery.

2. Equipment and Spare Parts for Maintenance

The project will provide for phased replacement of the existing heavy equipment by a balanced mix of mowers, excavators, and self propelled herbicide sprayers as well as support equipment and vehicles for the PEC's. The existing equipment will also require investments in spare parts and assemblies for limited rehabilitation. Draglines will be replaced by more efficient, hydraulically operated excavators and wheel tractors with side mounted booms, each type equipped with both mowing blades and mud buckets. The cost of spare parts for new equipment is estimated to be 5-10% of purchase cost for each operating year. Training services will be included in contracts for heavy equipment and herbicide sprayers (including the handling of herbicides).

The project will also provide minimum necessary new equipment and machine tools for strengthening the existing workshops to cater for the needs of new machinery, as well as data processing equipment for the upgrading of PECs operational and inventory control systems. Mobile workshops and testing equipment will also be provided.

3. Equipment, Vehicles and Residences for IS and Weed Research Institute (WRI)

Upgrading of vehicles and office equipment is required for effective implementation of the project. Office equipment for WRI will include computer facilities for data processing, recording, statistical analysis, inventory control and monitoring studies. In addition, WRI will be provided with specialized field and laboratory equipment to conduct aquatic weed studies and monitor herbicide residue. Appropriate vehicles will be provided to WRI and IS.

4. Procurement and Use of Herbicides

Improvement of the effectiveness of herbicide use in channel maintenance will be accomplished by procurement of appropriate herbicides and development and implementation of procedures to assure the safe use of herbicides.

MPWWR will put into effect regulations to ensure the safe transport, storage, handling and application of herbicides, including Acrolein. In addition to following the general safety directives of MPWWR and the manufacturers' recommendations, such regulations will require (1) steel containers; (2) training for PECs personnel; (3) training of MPWWR and EPADP supervisors; (4) a testing and monitoring program and (5) the monitoring of Acrolein and a mid-term review of the effectiveness of the safety measures in force.

The project will provide for the construction of four stores for the storage of herbicides by the IS and then turned over to the PECs. Herbicides will be procured by the project as stipulated by the IBRD/MPWWR Loan Agreement.

5. Institutional

a. Organizational and staffing adjustments:

All key positions in the Central Office of the IS, the WRI and in the Irrigation Directorates will be filled with adequately qualified personnel; such positions to include the General Directors, Inspectors, District Engineers, Chief Engineers for Maintenance, Maintenance Assistants and other technical and support staff.

The office of the Undersecretary for Maintenance in the IS will be strengthened by the addition of a Director General and a senior engineer for planning and follow-up, a manpower coordinator and his assistant, two accountants, a training coordinator, and necessary support staff. This staff will be responsible for overall project management and will serve as the secretariat for the Channel Maintenance Board (CMB) and Technical Committee (TC).

To strengthen the existing structure for channel maintenance activities, a position of Chief Engineer for Maintenance will be established in each Irrigation Directorate and a Maintenance Assistant in each Irrigation District.

The WRI is responsible for conducting applied research to evaluate different methods of aquatic weed management and O&M of open channels. The Weed Control Unit of WRI will be strengthened by the addition of one senior botanist, two weed research scientists, two laboratory technicians and five botanically trained weed scientists and technicians.

b. Monitoring and Evaluation Unit:

A Monitoring and Evaluation Unit will be established in WRI to monitor the effectiveness of the proposed maintenance cycles, particularly the use of chemical herbicides and their residues. This unit will require the addition of two analytical chemists, two computer system analysts, five data coders, a senior monitoring engineer and five field monitoring assistants with appropriate training. The unit staff will provide training to, and receive assistance from, the field staff of both the IS and EPADP in establishing and conducting monitoring activities. The maintenance assistants in Districts and Centers will be trained in weed control and monitoring and assigned these tasks as additional duties.

A mid-term review of the Project will be conducted at the end of 1990. This review will involve the MPWWR, IBRD, USAID, and the Contractor. Emphasis will be given to: (a) progress on the introduction of integrated maintenance and its impact on keeping channels clean; (b) efficiency in the storage, handling, and application safety of herbicides; (c) evaluation of weed control systems and of equipment; (d) progress with manpower development programs, and (e) the impact of reforms in PEC's on upgrading their operations.

c. Channel Maintenance Board (CMB) and Technical Committee (TC):

Through the CMB, the MPWWR will ensure the effective implementation, coordination and monitoring of the project. The CMB will meet as necessary to: (a) ensure coordination among the implementing agencies; (b) review and approve consolidated Annual Work Plans (AWPs) and financing plans; and, (c) monitor the status of project execution.

The TC will be chaired by the First Under Secretary, IS, and have the Under Secretary Maintenance, as its Executive Secretary. The TC will meet at least once every three months to: (a) monitor project activities; (b) review the AWP's for project implementation; (c) review specifications for all project related goods; (d) evaluate equipment performance and recommended payment rates to the CMB; (e) monitor training programs, and, (f) other work or studies.

d. Establish a training and professional development program

The training coordinator of the IS, assisted by the channel maintenance specialist, will design the training program in coordination with MPWWR's National Irrigation Training Institute (NITI). Training and study tours will be used. WRI will develop and implement an on-the-job training program in the use of herbicides.

6. Develop a Cost Recovery Program

During the period of project implementation the MPWWR and the IBRD will from time to time exchange views and reach an understanding on the specific targets and measures for recovery of the maintenance costs of irrigation and drainage channels. Such measures will be discussed in the context of an action plan formulated by the MPWWR in accordance with the MPWWR's regulations in force and will aim at achieving such cost recovery in the time frame of the project. The research, planning, and development of a cost recovery program will be carried out in conjunction with a similar program which is a part of the Regional Irrigation Improvement Component (RIIP) of the IMS Project.

7. Public Excavation Companies (PEC's)

The organizational structure, staffing and facilities of the PEC's are generally adequate to meet their traditional pattern of work.

However, with the introduction of new machines, and the proposed work cycles based maintenance system, improvements of the management information and inventory control systems of the PEC's will be necessary. Included are:

a. Establishment of a Corporate Planning Unit and Management Information System (MIS):

A planning and monitoring unit will be established in each PEC. Each company will also establish a computer based MIS.

b. Establishment of a Financial Management System:

PEC's will develop and set up financial management and inventory control systems, including support for introducing computer facilities for both these systems.

Appendix E

Notes from the Information Panel

Preventive Maintenance
And
Channel Maintenance

The main aspects to get a proper work plan done are summarized in seven points.

1. The first point is Organization and Management: to provide a chief engineer in charge in the directorate for operation and maintenance. Two engineers one mechanical, the other is civil are to be appointed following the chief engineer.
2. The Second aspect is Operation maps and physical data inventory: which show roads, communication lines and other landmarks as well as weirs, regulators, pumps stations and outlets.
3. The third aspect is Workshops: Sol directorate should comprise a small maintenance workshop quipped to do minor repair work for weed control and water level measurement. These should be large workshops in each governorate for heavy equipment such as the workshops of Edfina, Zefta, and the Barrages to manufacture weirs,....etc.
4. The fourth point is Maintenance of facilities: to be able to improve the Water Distribution Systems, there should be periodical inspection on to all facilities in order to identify weaknesses and deficiencies.
5. The fifth is the training of personnel: the most important thing in improving the operation and maintenance programs is the engineers training at the directorate, insputorate and the district level. It teaches them how to put a program and follow it up. Also there should be civil and mechanical training manpower on the technical level.
6. The sixth point s Water Control and Measurement: It is essential for a district engineer to know the amount of water flowing to each location, measuring water levels from wells, drains and canals. This way seepage and water losses could be identified.
7. The Seventh point is the Management of small channels: Meskas-constitute less than two hundred feddans; they should be maintained the Water users organization s controlling the cleaning of the meskas, but it isn't doing a good job leaving the meskas in a bad condition.

What defects do we have in our water delivery system and the extent to which the preventive maintenance project will help? violations such as illegal outlets, pipes and pumps have a bad effect on water distribution farmers who commit these violations get more irrigation water than others. District engineers could remove these violations if they had the necessary equipment. The project is going to purchase all these equipment.

Water is lost through leakage from regulators and aqueducts. However with the necessary equipment purchased and movable workshops leakage could stop and any hydraulic structure could be repaired. The same thing goes for siltation and weed growth that causes defects in the Water Control System. Good treatment in the River Nile is required following the policy of the ministry not to pollute the water, the lining of sand canals is important as water is lost.

The kind of laborers, personnel and equipment should be identified to fit the type of labor we have and its capacity, and this task concerns the MKE procurement specialist.

Finally, Eng. Naddar hopes that great benefits are achieved from the project.

Eng. Kashef

Eng. Kashef gave an overview of the MIE groups. He said that there is a survey of channels & preventive maintenance problems in 5 directorates (Dalahlia, Ialiohia, Sharlia, Beheira & Menia). These governorates were chosen because they represent most of the Delta area. In the future the project will extend to cover the rest of the governorates. This project is expected to end in 1991.

To start the implementation of the project these specialities should be existent :

- 1) Specialists in equipment maintenance.
- 2) Weed control specialists.
- 3) Preventive maintenance specialist.
- 4) Budget & administration specialist.

The FMP & CMF started in the Gharbia governorate in 1988. Then the implementation of the project would extend to Iafir-El-Shaikh. Loans from the World Bank have been granted for buying the necessary equipment.

Eng. Fathi El-Shaer

To implement a project & taking Gharbia as an example, there are problems & challenges.

What is essential at the start of any project :

- 1) Data collection
- 2) A work plan entailing scheduling, staffing
- 3) Evaluation of work done

These steps have been taken before in the Gharbia project that started in 1983.

The most important things that should be prepared before the start of the project.

- 1) prepare offices of the project.
- 2) Select staff.
- 3) Select technical staff for workshops & train them.
- 4) Cost estimation
- 5) Buy necessary equipment for the project.

90% of the Gharbia project has been implemented. The project has workshops with trained technicians & an operation & maintenance work plan.

August 2, 1989
Day 1
Session 3

Dr. Ismail

- It is well known that the increase in the population requires increase in the agriculture production. This in turn requires increasing the irrigation system efficiency and this is the main goal at the project.

- As a historic background, King Mina was the first to introduce an engineering project to control the flood. Then in Mohmaed Ali era, Barrages were constructed for water distribution and flood control however, it was not complete control, flood hazards were still exist. After High Aswan Dam, complete control of the river was achieved. A cooperation between Civil Engineer and the agriculture engineer for the benefit of the contary.

- PACER is a multidisciplinary consulting officie. It's role is to provide the ministry with the technical assistance as required. One of the strongest aspect of the officie is the computer equipment facilities are available for any test as required.

PREVENTIVE MAINTENANCE PROJECT/CHANNEL MAINTENANCE PROJECT

DEFINITION OF PREVENTIVE MAINTENANCE

"To keep an irrigation system and maintenance equipment in good operation condition"

Three Categories of Preventive Maintenance:

1. Emergency Maintenance.
2. Day to Day Maintenance.
3. Deferred or Scheduled Annual Maintenance.

Examples of Each Category:

0 Emergency Maintenance Consists of:

- a. Immediate repairs to a leaking channel or control structure.
- b. Immediate repairs to a piece of equipment such as a broken spring, replace hydraulic hose, oil seal or other malfunctions where the equipment will not start or operate.

0 Day To Day Maintenance Consists Of:

- a. Along irrigation or drainage channels; cutting weeds, applying herbicides, desalting channels and improving operation roads with a motore grader.
- b. Services equipment fuel and air filters, change oil and filters at scheduled periods, lubricate moving parts, check water in battery and radiator.

0 Deferred Or Scheduled Annual Maintenance Consists Of:

- a. Convenient repairs such as protective coating of metal surfaces, removing and repairing control gates when water is drawn down or channels emptied as scheduled.
- b. Overhaul equipment engine, transmission, hydraulic pump and motors, rebuild track rails all when equipment shut down is convenient or scheduled.

To provide adequate maintenance requires establishment of a First Echelon Maintenance capability consisting of trained management and staff, upgraded repair facilities and shop(Machinery, efficient equipment utilization and sufficient available budget to finance day to day maintenance costs.

Objective of preventive and channel maintenance projects is to develop and implement an integrated system for upgraded maintenance of irrigation systems.

Mr. Dixon
MKE

Page 1

MKE Role in Project:

Provide the G.O.E. and PMP/CMP project director with technical assistance.

For PMP:

- Evaluate Gharbia directorate Model Project.
- Inventory channel structures and evaluate maintenance equipment requirement.

For CMP:

- Develop Channel Maintenance Cycle.
- Develop a cost Recovery program.

MKE Goal:

- More efficient and cost beneficial implemented maintenance program.

MKE Accomplishments:

- Visited directorates Gharbia, Minufiya, Beheria, and Minya.
- Evaluation of the Gharbia Model Project and Review of maintenance program in programs.

August 2, 1989
day 1
Session 3

Mr. Maxwell
USAID

Several question be in mind.

1. What are we maintaining?
2. How can we maintain these structures and canals?
3. When can we start the maintenance?
4. Who can do this job?

Now, we are here to answer these questions.

August 2, 1989
Day 1
Session 3

Mr. Carmak
USAID

Some Basic Definition:-

1. Preventive Maintenance

- It is a complicated issue, it consists of many aspects; inspection, measurements,....

- It is a maintenance and management system.

2. Channel Maintenance.

- Maintenance method will be changed.

- Mechanical maintenance usually affect the channel cross section, hence increasing the weed problem.

- Chemical and biological maintenance system are proposed to be used.

3. The maintenance system must be self sustained in order to keep its efficiency.

4. Farmers should form an Association in order to speak on their behave with the government, about:

5. It s very important to make both the american experts and the Egyptian experts set together, exchange information for the benefit of the project.

Appendix F

Clarification about Information from the Panel

CLARIFICATION ABOUT INFORMATION FROM THE PANEL

August 2, 1989
Day 1
Session 4

Questions

Dr. Mahmoud Abu Zeid

What's the definition of preventive maintenance? and what is the difference between the CMP and PMP?

Mr. Carmack

Answer:

Preventive maintenance means that there should be a program for maintenance management.

Mr. Maxwell

The objectives that the project will accomplish are most important.

Eng. Nadar

The preventive maintenance project is a comprehensive one that includes all components of an irrigation network (Irrigation works etc.)

Channel maintenance project includes channels only (dredging - weed control) and each project is funded from a different agency.

Question:

Mr. Bourn

Could the PMP project responsibility be extended so that it covers open drains?

Answer:

Eng. Naddar

The current policy of the ministry separates between the drainage authority and the irrigation authority. However, the project covers canals and drains.

Mr. Bill

Question:

Meskas are full of weeds, how could farmers be compelled to do the maintenance work on their own expense?

Answer:

Eng. Naddar

The minister of Public Works & Water Resources decided that channel maintenance works and fees are to be collected by the Ministry of agriculture. The Ministry of Agriculture is establishing some companies to do the dredging of canals.

Mr. Carmack

There is no current specific solution to this subject.

Dr. Abu-Zeid

We couldn't separate between a part of the network and its other part. Work should be done in it as a whole.

Eng. Naddar

This issue was included in the terms of the project. It was found that a of fund was needed. Accordingly we are going to ask the USAID to include Meskas maintenance n the project.

Question:

How could the continuity and sustainability of the funding of the project the USAID stops its funding?

Eng. Naddar:

The governorate will give the necessary will give the funds necessary and that took place n the Gharbia governorate. The real problem is funding the equipment and heavy machines.

Question:

In terms of employees, there are government employees and contract employees and both are subject to training. If the project comes to an end would the contract employees leave work?

Answer:

Mr. Carmack:

There is a difference between government employees and contract employees. Contract people are needed at a certain point of the project, they are intended to leave after the project ends. Therefore, government employees are preferred here.

Eng. Naaddar:

Government employees are to be officially on equipment and machinery by a foreign expert so that they could replace him the time he leaves.

Question:

Dr. M. Abu-Zeid

The project will concentrate on a governorates.
Why isn't the generalized for the rest of governorates?

Answer:

Eng. Naddar

All governorates are represented here and there are mutual visits among all governorates.

Mr. Maxwell

Mr. Maxwell agreed with Eng. Naddar and said that the project is planned to be implemented in the rest of the governorates. It all depends on funds.

Question:

What could be done to minimize approval cycles and decision processes?

Answer:

Eng. Naddar

Preparation for the Gharbia Project took years as a result the project took 3 years. Learning from that experience the implementation of the project in 5 governorates will take less than 2 years. Hindrances and routine problems are overcome to facilitate the project implementation.

Question:

What are the plans decided upon to keep spare parts and equipment in stores and ware houses to ensure a long term operation for the project.

Answer:

Eng. Naddar

Every governorate will prepare stores, ware houses and workshops. This isn't included in the control but it could be funded through it.

Answer:

Eng. Naddar

The stores are the responsibility of the Ministry. The World Bank didn't agree to fund the procurement of pesticides till it was certain of the existence of 50 stores. Concerning Training, there's a program with the Training and Manpower Department in the Ministry that implements the training program of the employees.

Questions:

Could we separate between the Main Canal system and the Inspectorate Canal in terms of Weed Control by means of certain device on the branch canal?

Answer:

Eng. Naddar

These are all suggestions that are under study.

Questions:

Who pays the costs of violations and where does the money go?

Answer:

Eng. Naddar

Violations are requested by laws. Whoever incurred the violation would bear the costs and the revenues are collected in a sort of money or account that follows government regulations. This money is an official income to the government and is used within the government.

Appendix G

Notes from the Special Management Group

NOTES FROM THE SPECIAL MANAGEMENT GROUP

August 4, 1989
day 3

Introduction

This is a special group requested by the Ministry personnel to discuss overall managerial concerns with the PMP and CMP.

Management is one of the most important aspects should be defined to know the different responsibilities. Lots of different maintenance activities are taking place such as aquatic weed control and channel maintenance. Who is in charge for all of that is needed to be known. What is the suggested plan. MKE and the project director should find answer and through the sub-committee of the project the inception report should be submitted.

Special Management Group

Management-for PM/CM project

- o Groups.
- o Roles.

I. Groups Involved.

1. JS
2. EPADP
3. WRC
4. NITI
5. USAID
6. IBARD
7. PACs

II. Roles

1. IS-Executing Pm/CMP in directorates.
2. EPADP - Implementation of open drain maintenance.

3. WRC - Training & monitoring chemical weed control.
 4. NITI - Training - all types.
 5. USAID - Grant funding - PMP.
 6. IBRD - Loan funding - CMP.
 7. PECs - Executing maintenance.
(Assisted by MKE).
- o Define PM/CMP directorate organization chart.
 - o List to staff assigned to PM/CMP—next two weeks to project director.
 - o Review TC 2 year program for CMP.
 - o Report weed control chemical recommendations.
 - o Upgrading PECs management W/computors.
 - o Review maintenance programs by other.

Appendix H

Notes from Management Expectations Exercise

NOTES FROM MANAGEMENT EXPECTATIONS EXERCISE

August 3, 1989
Day 2
Afternoon

Directorates

With regards to MKE

1. Sharing Information, the group answers:

The directorates prepare inventory about waterways and structures including their conditions. Both the directorate and MKE will go on field trips and decide the afternoon maintenance schedule.

2. Ideal Working Relationship:

Communication should take place through the headquarter office in Cairo.

3. Reports:

Should be prepared by governorate director monthly with an MKE representative. Meetings should be in the governorate office.

4. Decision making:

Project manager in directorate makes the decision after discussions with the MKE representative and the undersecretary.

5. Quality Control:

The directorate manager and his staff with the project general manager in Cairo could go on schedule to the project.

6. Planning:

Should take place by the chairman of committee with the project director, the MKE representative and director of works from the ministry.

7. Expectations:

Full cooperation and cooperation are expected from the other agencies.

With Regards To The MPWWR:

1. Sharing Information:

They expect the MPWWR to get all the data required helping in project implementation.

2. Relationship:

Communication should be done through the undersecretary of the directorate who will distribute among roles among the project manager and other directors.

3. Reports:

The MPWWR will be informed about the plan decisions and program reports.

4. Decision Making:

The project director is the decision maker. The general manager in Cairo should be informed about the decision without any interference from the other institutions.

5. Quality Control:

Directors of project should go to field trips, make their comments and inform the general director in Cairo.

6. Planning:

Takes place with the planning committee. It should include the area directors with the general manager of the project.

7. Expectations:

The companies should report to area managers about workplans so that confusion could be avoided. They should report an equipment in order not to purchase the same type of equipment twice.

The project representation should know about the plans of the other parties to avoid confusion.

The PCE companies don't play roles in decision making.

They will be informed about plans of maintenance project.

The companies are expected to bring special equipment for weed control and excavators.

P.E.C.

MPWWR

Directorates

MKE

- | | | |
|--|---|---|
| 1- Provides complete sets of contract, agreement just once at beginning of the project.
2 - Provides Dir's with funds in an early time. | Report every 15 days including planned implementations, value of work completed and the amounts paid.
Issue work orders in the adequate time. Remaks should be in early stages. Receive work completed in reaches periodically
Pay monthly. | Cooperates with Dir's & PEC's in plan of work during LOP. Provides his recommendation monthly
Inspects work & presents recommendations to Dir's Participates in preparing the Half-monthly rep. Office to be in Cairo. |
| 3 - | Monthly reports about any problem arising during exec. of work. | PECs provide MKE with copy of follow up report monthly. |
| 4 - (A contract should | control relationship between PEC's & all parties) Area Gen. Mgr. Of PEC informs Dir Gen. Mgr. with any problem arising to be solved if in his authority. Bigger problems to be transferred to project Dir. who should be fully authorised. | Suggests solution of major problems to project Dir. |
| 5 - | Plan for LOP to be agreed upon, divided to annual and monthly plans. The performance of individuals & of the project are monitored according to the role & to the plan. | |
| 6 - | To the full extent. | To the full extent. |
| 7 - | Direct Contact with PECs specially at urgency, not waiting for time of report. | Suggest training plans for staff, engineers & technicians. Present recommendations about weed control according to their experience. |

PWWR

U.S.AID	MKE	PEC's	Directorates
1 - 1) Meeting 2) Periodical Reports 15 days (Directors) Monthly (staff) 3) Publications	- Direct Contact - Or through Project Dir. whenever needed	Direct Contact thr. official channels	Direct contact
2 - IMS Committee Project sub - comm. monitoring off.	- MKE should be represented in sub - comm. - Counterparts should be assigned. For each consultant & be located in same site and work <u>as one team</u>	Direct cont. through Proj.	Assistant Directors in each governrate
3 - Copy of monthly financial I.M.S. statement copy of physical report (IMS - 3 month)	Project Periodic reports should be jointly Prepared & submitted to authorities through Proj. Director. - Tech. reports to be prepared and submitted whenever possible - TDY's end of mission tech. reports.	Monthly Progr. reports Equipment request justification report.	Monthly Progress reports
4 - approve annual detailed workplans to be implemented by proj.	Team leader & Proj.D.	Company's chairman & Proj.D.	Normal official channels
5 - Through periodic reports - Field visits to be arranged with proj. D. - Monitoring office (IMS)	Project.D. & team leader	- Periodic progress reports - Project staff - Ministry staff.	- Normal official procedure
6 - IMS comm. up to approval of detailed work-plan	Continuously thr. the lifetime of the Proj. co-ordinating with Proj. D.	Selection & operation & maintenance of equipment	Whenever needed

<p>7 - Discuss extending Proj. activities to other Gov.</p> <ul style="list-style-type: none"> - To examine to minimize paper work - To assist financing up to level of private ch. - Control of water Hy senth in river channel 	<p>Co-ordinating with FECER whenever local experience is available</p>	<p>More cooperation with Proj. staff</p> <p>Quality control</p>
---	--	---

USAID Group.

1) How to share information.

What type	How much	How often
A) PWWR & MKE		
1) Reports.		
Contract	Contract	Contract
2) Meeting.		
a) Scheduled		Weekly
	a) Problems	
	b) Schedules	
	c) Decisions	
	d) Changes	
b) Unscheduled	As needed	As needed
3) Field trips.		
a) Scheduled	Implementation	One per month
b) Show me	Implementation	
/ trips for (VIP)	progress & policy issue.	
4) Telephone & letters		As needed
5) Electronic		
(Monitoring office)	As required	As required
B) PWWR only		
Special reports		As needed
a) Budget		
b) Staffing		

2] MKE (1).

- 1) Professional
- 2) Open
- 3) Honest

3] Reports

- 1) Life of project plan.
- 2) Annual work plans.
- 3) Progress reports.
- 4) Quarterly fiscal reports.
- 5) Project reports & papers.
- 6) Expatriate travel.
- 7) Final report.

4] How to make decisions

Collaborative process

- a) Define objective.
- b) Develop criteria / constraints (USAID / PWR regulations & MKE policies).
- c) Look at alternatives.
- d) Select alternatives based on weighted criteria & other factors. (such as political & social)

5] How to monitor

- 1) MKE & PWR:
 - a) Contract reports.
 - b) Field trips.
 - c) Electronic (Monitoring office).
 - d) Annual work plan (Train. & Proc.)
- 2) PWR:
 - a) Covenats (Staffing)
 - b) Cash contribution (Salaries, Offices, etc)
 - c) PM workshop facility construction.
 - d) Storage facilities (CMF spare parts & herbicides).

6] Same as 4

7] Other expectations.

- a) To provide the necessary staffing, salaries & incentives as needed
- b) To change payment methods to PEC's to be compatible with new technology introduced for channel maintenance.

MKE Expectations (II)

<u>Q</u>	<u>Directorates</u>	<u>PWWR</u>
#1	<ul style="list-style-type: none">- Organizational charts- Areas of responsibilities- Background data<ul style="list-style-type: none">* Directorates* Inspectorates* Districts including :<ul style="list-style-type: none">. Kms of canals. Number of structures. Number of feddans. Staffing. Maps. Facilities- Assets<ul style="list-style-type: none">* Equipment* Spare parts- Constraints- Furnish data & info. for LOP program- Gharbia data for : Maintenance cycle, progress report	<ul style="list-style-type: none">- Organizational charts- Areas of responsibilities- All previous reports & studies- Overview briefing of local & international irrigation programs- Restrictions & constraints within directorates- PEC production data- Cost study info.
#2	<ul style="list-style-type: none">- Formal contract reporting by MKE is through PWWR, however, informal relationships are necessary- Counterparts for MKE are necessary	<ul style="list-style-type: none">- Ideal relationship is formal day to day & informal working relationship- Counterparts for MKE are necessary
#3	<ul style="list-style-type: none">- MKE has no formal reporting line with directorates	<ul style="list-style-type: none">- Reports to be provided by MKE in contract are adequate; MKE will provide special reports per pro. director instruction
#4	<ul style="list-style-type: none">- Decisions in regard to the directorate will be made in conjunction with the Proj. Dir.	<ul style="list-style-type: none">- Joint review & mutual participation with the MKE staff & the Proj. Dir. is the proposed method for decision making
#5	<ul style="list-style-type: none">- Information & data will be accumulated by the Directorates in accordance with MKE's approved system	<ul style="list-style-type: none">- MKE shall contractually develop a monitoring system which will include project's goals, milestone percent complete, a site inspection program will also be developed as part of the monitoring system
#6	<ul style="list-style-type: none">- Refer to #4- Must compile information & data to the Proj. Dir. so as LOP program can be prepared by MKE	<ul style="list-style-type: none">- Project activities will be planned in cooperation with the Proj. Dir.

Q

Directorates

PWR

- #7 - Cooperation enthusiasm
- Patience & understanding with other groups

- Cooperation enthusiasm
- Patience & understanding with other groups

- Q** **PEC**
- #1 VERBAL**
- Phone / FAX
 - Personal visits
 - * Scheduled
 - * Non-scheduled
 - * Office
 - * Field / site
 - Meetings
 - * Formal
 - * Informal
- WRITTEN**
- Short notes
 - Letters
 - * Formal
 - * Informal
 - Reports
- FREQUENCY**
- Enough to ensure complete communications

- #2 WHAT**
- Identified contact
 - Facilities
 - Staff
 - Less formal
 - Organization
 - Communicatios
 - * Phones
 - * FAX
 - * Photo copiers
 - 2-way information
 - Team concept
- WHERE**
- PEC offices / shops
 - MKE offices

- #3 FROM**
- Existing facilities, spares, staff, etc.
 - Maintenance procedures
 - Channel maintenance procedures
 - Training practices
 - PEC's mandate
 - PEC's equipment requirements
 - Current MIS & fiscal procedures
 - Timely responses to requests
- TO**
- Equipment REC's
 - Progress reports
 - Other project developments

- USAID**
- VERBAL**
- Phone
 - * W / Project officer
 - * W / other staff
 - Visits
 - * To / from
 - * Scheduled / non-scheduled
 - Meetings
 - * Workshops
 - * Coferences
- WRITTEN**
- Short notes
 - Letters (formal)
 - Contractor notices
 - Formal contract changes
 - Regulation changes
- FREQUENCY**
- Timely fashion
 - All available documents required

- WHAT**
- Specified P.O.
 - Identified reporting structure
 - Departmental functions made clear
 - Development of relationships

- WHERE**
- USAID offices
 - MKE offices

- FROM**
- Timely responses to info. requests
 - Timely action on submitted documen
 - Contract change (orders/agreements
 - Prompt payments
- TO**
- AID required responses

Q

PEC

USAID

- #4** - Jointly - not unilaterally
- Timely
- Consideration of
 * Resources
 * Personnel
 * Budget
 * Time constraints
 * Experience + capabilities
- Based on MKE Host. country contract
- Via data provided by PEC

- Jointly - not unilaterally
- Timely
- Based on contract terms

#5 PROJECTS

- Against project work plan
- Against contract terms
- Visual inspection
- Comparison photos
- Written reports
- Discussions
- Technical standards

PROJECTS

- Go / No Go response
- Adherence to contract terms

INDIVIDUAL

- Criteria referenced

INDIVIDUAL

- Accessibility

#6 FULLY INVOLVED IN

- Providing required information
- Reviewing all recommendations
- Making suggestions
- Developing strategies
- Developing reports
- Meeting deadlines & schedules

FULLY INVOLVED IN

- General project planning
- Project work plan :
 * Guidance
 * Recommend changes
 * Review / Approve

- #7** - Flexibility
- Sense of realism
- Understanding of goals

- Flexibility
- Sense of realism

Appendix I

Clarification Questions from the Management Expectations Exercise

CLARIFICATION QUESTIONS

FROM THE MANAGEMENT AGREEMENTS EXERCISE

August 3, 1989
Day 3
Morning session
Page 1

The question is addressed to MIE referring to Number 5, Monitoring Performance. Mr. Dixon answers that MIE is required to develop the monitoring system that is currently used. some specific information will be added to the present system that it is in need of.

Eng. Nadar adds that MKE has nothing to do with inspection, it is only related to monitoring. Inspection will be carried out by the general directorate.

How could a monitoring system be established without inspection ?
MKE asks.

Eng. Nadar answers that there will be an inspection report that MKE should approve of & that is presented to MPWWF for approval. It could be done jointly with MIE if they accept.

Dr. Abu-Zaid comments that the monitoring program is a routine one, the problem only is in the evaluation. The inspection report follows certain procedures & regulations. however, the MKE could participate in the data collection for the report.

Mr. Dixon says that the MIE assists only & does not get involved practically. MIE has nothing to do with inspection reports.

The question is addressed by Eng. El-Shaer. Concerning the use of the equipment purchased by the Gharbia project, would USAID allow their use in the implementation of Lafr-El-Sheikh project, and would funds be granted ?

Eng. Nadar elaborates on the point that instead of keeping the purchased equipment & the well trained staff working 30% of their capacity, they should be moved to the next project & USAID can consider this point.

The USAID answers that the project (O&M) is funded until 1989, a 2 year budget after implementation only. Nevertheless, funds could be extended to support the O&M project as it supports the other directorates involved in this project.

USAID also comments that it will define & set a list of needed equipment.

This issue needs further discussion among the parties concerned as this is not the forum.

Question of spare parts for MIE & USAID, are spare parts meant to be for a long time or for a period of 3 years only ?

MIE answers that the purchasing plan is not final yet, however adequate spare parts should be funded for 3 years.

USAID comments that it is only up to 10% of the value of equipment purchased. USAID is limited by time & funds.

" Agree ".

The question is from the PEC's, information required by MKE are required to be comprehensive including facilities, equipment, staff,...etc.

The PEC think that it should only apply to any information relevant to the project only. They have the freedom to transfer their equipment from one place to another. They present a list of their equipment to MPWWR every year.

MKE says & is emphasized by USAID, that part of the requirement of IBRD is to set a wide scope of operation. Annual work plans should be provided by PEC, the Drainage authority & the Weed Research Institute, MPWWR & all parties concerned. The reports should include the description of activities, the required funds & the progress achieved.

The directorates ask for a copy of any agreements taking place between MKE, PEC, MPWWR.

Plans & maps will be prepared to keep the directorates informed.

" Further discussion between MKE & PEC is needed concerning the amount & type of information shared with PEC "

The question is from MKE to directorates, question 3 need clarification. What role MKE is expected to play in reports presentation, for the 6 directorates or all of them ?

The directorate answers that it concerns only the 6 directorates.

MKE will assist & cooperate. The type of assistance needed will be discussed later on.

MKE asks who will be responsible for the data gathering & submission to MKE ?

The directorate says that it is the project director.

Some data required are present in a report. As soon as data could be gathered it will be presented to MKE.

MKE asks about the plans the directorate has in terms of getting & casting information to all employees in the directorate about the FM & CM program ?

The directorate will distribute English & Arabic memos, then there will be meetings for discussing the issues & clarifying them.

The question concerns the MPWWR about quality control (question #7) & who will undertake it ?

Get everyone aware of this point for field work & inspection & that is addressed to the directorates.

The question is for FEC, concerning question #1, there are monthly requirements that are asked by FEC from M&E.

1) M&E should visit sites.

2) Clarify the type of participation requested from M&E for their half-monthly report, if the report is done jointly.

M&E will assist the other parties in the preparation of their reports & would not report alone unless there is a major deficiency in management or field.

" Further discussions for details ".

" Major agreement on collaborate reports ".

The M&E monthly follow reports will be discussed.

Eng. Nadar comments that the project director is responsible for the project report, the M&E writes anything they should make field visits in which all representatives should gather & write the report (the current report) that should be presented to the project director.

There was a question raised concerning the training & MR. Bourn will develop a plan for it.

USAID asks MFWR:

There are 5 levels

- The coordinating committee - IMS committee
- The sub-committee
- Channel maintenance board
- Technical committee
- Project director

Eng. Nadar says that the IMS committee meets once every month & increases the frequency of meetings according to needs. It includes 10 project managers & the highest ranking personnel related to the projects. It presents reports to the minister for approval.

What issues should go to the committee?

There are sub-committees that are branches of the higher committee. Every project has a sub-committee, but some departments are not involved, so, the sub-committees represent all concerned people to express their views.

The USAID asks where are decisions made? Should the issue be submitted to the sub-committees, then to the coordinating committee?

MFWR says: That it is first presented to the coordinating committee then to the sub-committee for further studies. However, there could be decisions on the project director's levels; he has some power to do it.

USAID could encourage the delegation of decision making to the lowest level (project director) for the project & will be treated as one through the board of the technical committee.

Dr. Abu-Zaid suggests the minimization of committees.

" Further discussions on roles of various committees needed "

The MPWWR refers to question #7 asking for copies of reports of USAID "Has Reports" to be presented to the monitoring office. USAID has agreed to this. The USAID has some format for the quarterly report that is worded in such a manner & includes some details that are unsuitable to be published. It could be submitted on the director's level.

Concerning question #5, USAID would like to get channel Maintenance reports.

Concerning question #6, approved of work plans; should refer to roles of different committees before getting into work plans.

Eng. Nadar answers that once a detailed work plan is approved, responsibility should be carried out by the project director independently from the IMS & MPWWR.

Sometimes project directors have some difficulties because of points unclear about roles that are raised to the committees.

Dr. Abu-Zaid's clarification: AID tries to encourage lower level decision making. That was discussed on lower levels & approved. Consequently, it goes to the IMS for final approval.

Dr. Abu-Zaid does not encourage raising the discussion to the IMS, stick to terms of reference of IMS which does not necessitate the involvement of the IMS in every activity. The work plan could be raised to the IMS only for information. However, if complaints or problems are raised, then discussion on the IMS level takes place.

The USAID talks about the role of the committee regarding the project.

Question #7 : Extending project activities to the other governorates.

" Further discussion needed at committee level "

Comment from USAID : to minimize paper work done.
There difficulty in the equipment purchasing process as stated by Eng. El-Shaer. The USAID will try to facilitate it. Generally, the process is not easy or simple. However, understanding of the problem will help.

Dr. Abu-Zaid talked about commands. Their submission by MIP is necessary. Their routing could be discussed.

Assist financing Mesla Maintenance & Drains.

AID answered : IMS assigned some funds for that purpose.

Eng. Nadar : Funds are required for the dredging of meslas

drains.

USAID : Very concerned with problems at the meska level. USAID is receptive to proposals from MPWWR. MPWWR should take the initiative.

About the river Hyacent. That could be treated as an addendum to the project.

" Subject is open to further discussion beyond the conference "

Eng. Nadar comments that it is essential & relevant part of the project.

" Clear "

How long would it take the Ministry of Agriculture to set the herbicides agreed upon, as this will affect the project maintenance ?

It depends on whether those herbicides were new or old. If new, they could take some time for the approval of their usage. If tried in laboratories, then there is no problem.

The Nile Hyacent should not be covered in the project.

There were some concerns about the chemicals used.

The recommendation that was made was Amitrin is safe to use and that is in use currently in the U.S.

" Technical issue that needs studies, not in this forum "

USAID comments on use of herbicides.

It needs clarification on the phasing out of herbicides. The funds allocated are as follows :

- 1) Equipment
- 2) Herbicides

Herbicides are said to cause pollution. Mechanical & biological treatment are requested instead.

That will take a long period to be implemented so it would not affect the project.

Chemical treatment will be replaced gradually.

The directorates say that they prefer the use of Magnaside.