

INSTITUTE
OF
MANAGEMENT DEVELOPMENT

PROJECT PREPARATION DEPARTMENT
FINAL REPORT

Prepared by: Messrs. Herb Williamson and Raafat Rashad
Workshop Facilitators
Institute of Management Development
The American University in Cairo

January 1993



THE ABDUL-LATIF JAMEEL
CENTER FOR MIDDLE EAST MANAGEMENT STUDIES

THE AMERICAN UNIVERSITY IN CAIRO

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ACKNOWLEDGMENTS

The facilitators wish to thank all those who helped them with the PPD Workshop. Special thanks to the management and staff of MPWWR, PPD, USAID/Cairo, and the IMS Projects Monitoring Office.

We are particularly grateful to Eng. Gamil El-Sayed, Chief Under Secretary of State MPWWR; Eng. Zenab El-Gharably, PPD Director; Dr. Mohamed Allam of USAID/Cairo; and Engineers Sarwat Fahmy and and Mahmoud Abbas of the IMS Monitoring Office.

Thanks also to Mrs. Lamia Ali, Mrs. Mona El-Gharib, and Mr. Salman Ahmad for the superb job they did providing clerical support.

ACRONYMS

GOE	Government of Egypt
IIP	Irrigation Improvement Project
IMS	Irrigation Management System
IMD	Institute of Management Development
LOB	Local Operating Budget
MPWWR	Ministry of Public Works and Water Resources
O&M	Operation & Maintenance
PPD	Project Planning Department
TDY	Temporary Duty
USAID	United States Agency for International Development

WORKSHOP EXECUTIVE SUMMARY

The Project Preparation Department (PPD) is a component of the Ministry of Public Works and Water Resources' (MPWWR) Irrigation Management Systems (IMS) Project. The main objectives of PPD are to provide quality technical and economic feasibility studies which analyze investment options open to MPWWR and to prepare reports in English for submission to international donors.

The PPD workshop was held in Port Said at the Helnan Hotel from November 12 - 15, 1992. The objective of the workshop was as follows:

1. Review and discuss the current status of the project and major issues facing it, reaching agreement on how to manage the issues.

The workshop was designed and facilitated by Messrs. Herb Williamson and Raafat Rashad of the American University in Cairo's Institute of Management Development (IMD). In preparation for the workshop, the facilitators interviewed 21 of the 24 workshop participants and then identified the following five issues which were discussed during the workshop:

1. Sustainability
2. Project Extension
3. Project/Client Communication
4. Training
5. Clarification of PPD Mission

(During the workshop, the group decided to make project extension issue #1 and move sustainability to issue #2.)

The workshop began on the evening of November 12 with words of welcome from representatives of MPWWR, PPD, and USAID. The facilitators then presented an overview of the workshop. The evening ended with a reception for all the participants (list of participants - Appendix A).

The first full day of the workshop began with an overview of PPD followed by presentations on the studies which are either recently completed or in progress. After hearing the presentations, the participants spent most of the remaining day and a half discussing the five issues and reaching agreement on how to manage the issues. Although a session was scheduled for Sunday, November 15, the group was able to complete their work by the end of Saturday.

The workshop ended with the participants completing evaluation forms. The majority of the participants rated both the workshop and the facilitators' performance very highly.

Engineer Zenab El-Gharably, PPD Director, officially closed the workshop.

CHAPTER ONE

PPD WORKSHOP AGENDA

1.1 WORKSHOP AGENDA

The workshop was comprised of eleven sessions. The following is a breakdown of the agenda.

Thursday, Nov. 12:

- 16:00 - 18:00 Travel to Helnan Hotel, Port Said
- 19:00 - 20:00 Welcome and Workshop Overview
 - o Eng. Zenab El Gharably, PPD Project Director
 - o Eng. Gamil Mahmoud, MPWWR Head of Planning
 - o Dr. Mohamed Allam, USAID Project Officer
 - o Messrs. Herb Williamson and Rafaat Rashad
- 20:00 - 22:00 Reception

Friday, Nov. 13:

- 9:00 - 9:20 PPD Project Overview
 - o Eng. Zenab El Gharably, Project Director
- 9:20 - 9:30 Discussion
- 9:30 - 9:45 "Repairing Idfina Barrage" & "West Samalut Wells"
 - o Eng. Loucy Helmy
- 9:45 - 9:55 Discussion
- 9:55 - 10:10 "Improving Irrigation in the Tail of El Atf Canal"
 - o Eng. Bahaa Ghonaim
- 10:10 - 10:15 Discussion
- 10:15 - 10:25 "Shoubra-Bas Regulator Study"
 - o Eng. Ghada Barakat
- 10:25 - 10:30 Discussion
- 10:30 - 11:00 Coffee Break
- 11:00 - 11:15 "Lake Burullus: Ecology, Economy, and the Nile Water Conservation"
 - o Eng. Zenab El Gharably
- 11:15 - 11:20 Discussion
- 11:20 - 11:35 "El Salaam Canal Project Third Phase: Reclamation of 135,000 Feddans in Sinai"
 - o Eng. Zenab El Gharably
- 11:35 - 11:45 Discussion
- 11:45 - 14:00 Lunch
- 14:00 - 15:30 Presentation of Issues
- 15:30 - 16:00 Coffee Break
- 16:00 - 17:00 Discussion of Issues

Saturday, Nov. 14:

9:00 - 10:30 Discussion of Issues
10:30 - 11:00 Coffee Break
11:00 - 12:30 Discussion of Issues
12:30 - 14:00 Lunch
14:00 - 15:30 Discussion of Issues
15:30 - 16:00 Coffee Break
16:00 - 17:30 Discussion of Issues (if needed)
21:00 - 23:00 Project Workshop Dinner

Sunday, Nov. 15:

9:00 - 10:30 Review Agreements and Evaluation
10:30 - 11:00 Coffee Break
11:00 - 13:00 Wrap-up Session

CHAPTER TWO

WORKSHOP OUTCOMES

2.1. BACKGROUND

The issues stated below were identified after six days of participant interviews conducted by the facilitators. These issues were most frequently mentioned by the participants.

During the workshop, the participants were divided into small groups and given at least 45 minutes to develop recommendations for managing the issues. To help formulate their recommendations, the participants were asked to answer the following seven questions:

- o What can be done to solve/manage the issue?
- o Who is responsible for managing/implementing the solution?
- o How will they implement the solution?
- o When will they do it?
- o Where will they do it?
- o Who follow up to ensure that the solution has been implemented and the issue has been resolved?

After developing their recommendations, each group selected a representative who presented their findings to all the participants. The group-at-large then discussed the recommendations and frequently revised them. Eventually an agreement was reached on every issue.

2.2 ISSUES AND AGREEMENTS

1. Project Extension: Identify and justify the need(s) for extending the project.

Agreement: According to the agreement between USAID and MPWWR, the local operating budget (LOB) of PPD will be funded 100% by the Ministry after September 1995. In the meantime, the Ministry is gradually providing more funds for the LOB while USAID is reducing its support. During this transition period, the group agreed to the following two recommendations:

1. USAID needs to extend their support to cover PPD's local operating budget until September 1995.
2. If justified and required, the IMS miscellaneous budget could be used to finance TDY's, off-shore training, and equipment for the following reasons:
 - a. TDY's and off-shore training are needed to provide on-the-job training for both the six newly assigned PPD engineers and the existing staff.
 - b. Since the Ministry issued a new policy assigning PPD the feasibility study responsibilities for all MPWWR projects, PPD will need financial support to absorb additional staff and train them.
 - c. TDY's are needed to develop the criteria for and priority of IIP feasibility studies.

Beginning this month (November) Engineers Zenab and Gamil will implement and follow up on these recommendations.

2. Sustainability: A comprehensive strategy needs to be developed to ensure the sustainability (i.e. financial, staffing, and equipment O&M) of PPD once USAID support is finished.

Agreement: To resolve this issue the group developed the following two separate agreements:

1. Financial Sustainability: The group agreed that PPD must list in its budget important expenses such as:

- a. Operation and maintenance costs
- b. Supplies
- c. Contract staff
- d. Local consultants
- e. Training

The group further agreed that either a certain percentage of project investment must be allocated to PPD for studies or PPD can estimate the itemized cost of the study to be charged to the department or authority which is implementing the project.

PPD Project Director and Planning Sector Head are responsible for implementing this recommendation which will begin with the 1993/94 budget.

2. Staffing Sustainability: The group also agreed to recommend that the Ministry have a policy to ensure that PPD staff not be moved to non-PPD departments or authorities, including employees who are promoted. Engineer Gamil approved this recommendation.

Engineer Gamil also approved the horizontal expansion of PPD to include six new engineers in January 1993.

3. Project/Client Communication: Improve the working relationship between PPD and its clients (e.g. MPWWR departments and authorities, and other ministries and organizations) in order to promote, improve and institutionalize PPD services.

Agreement: The group agreed to the following six recommendations:

1. PPD Project Director is required to contact MPWWR departments and authorities to encourage the implementation of the Ministry's policy concerning the involvement of PPD in all feasibility studies.
2. PPD could conduct client seminars after the approval of a study.
3. PPD could publicize its activities both inside and outside the Ministry.
4. Before performing a study, PPD is required to get Engineer Gamil's approval to form a committee consisting of both PPD and client staff in order to follow up the project. Any modifications to the study recommended by this committee could be used during project implementation.
5. PPD could monitor and follow up the implemented projects which were studied by PPD to evaluate their performance.
6. PPD may consider establishing a marketing unit.

These recommendations are effective immediately and will be implemented by Engineer Zenab. Engineers Zenab and Gamil will follow up.

4. Training: More training is needed in the areas of economics, report writing, and analysis of structure failure.

Agreement: The group agreed that an evaluation to determine the strengths and weaknesses of each staff member should be conducted. Subsequently, the most cost effective training should be arranged. This training will be a combination of off-shore, in-house, TDY and local training. If off-shore is required, it must be justified and, if approved, funded from the IMS miscellaneous budget. In-house training could

be provided by local experts and academics who are brought into PPD for seminars. Until September 1993, TDY training could be funded by the Harza contract. After September 1993, such training must be justified and approved for funding from the IMS miscellaneous budget. Local training may be provided by a wide range of local firms and universities.

The group also agreed that PPD employees should attend a one year course in agricultural development offered by the Institute of National Planning and beginning in 1993, if possible.

PPD Project Director will follow up on the implementation of these agreements.

5. Clarification of PPD Mission: There is some confusion about PPD being the only provider of feasibility study services within MPWWR.

Agreement: The group agreed that the memo (Appendix B) approved by Minister Engineer Essam Rady sufficiently addresses this issue.

PPD Project Director and the Head of the Planning Sector will begin immediately to implement the policy described in the memo.

CHAPTER THREE

WORKSHOP EVALUATION RESULTS

3.1 BACKGROUND

The workshop evaluation used five ratings:

5	4	3	2	1
(Excellent)	(Very Good)	(Good)	(Fair)	(Poor)

The results mentioned below represent the average score for each question. The last three questions did not use numerical ratings and instead asked for written feedback.

3.2 RESULTS

Question One: How well have we achieved the objective of the workshop?

Rating: 4.32

Question Two: Efficiency and effectiveness of the facilitator?

Rating: 4.12

Question Three: Working hours during workshop?

Rating: 3.78

Question Four: Location and place of workshop?

Rating: 3.94

Question Five: Which workshop activity could have been done better?

- o Review of recommendations
- o The sound system
- o Not enough free time during the day

Question Six: What were the benefits you derived from the workshop?

- o Learned more about PPD
- o Discussing the issues and making recommendations

Question Seven: What recommendations can you give us to improve our effectiveness in future workshops?

- o More free time
- o Get more involved with the discussions
- o Keep up the good work

APPENDIX A

List of Participants

WORKSHOP PARTICIPANTS

1.	Eng. Gamil Mahmoud	MPWWR
2.	Dr. Abd El Hadi Radi	MPWWR
3.	Eng. Ali Abou El Saoud	MPWWR
4.	Eng. El Sayed Hassan	MPWWR
5.	Eng. Essam El Shiek	MPWWR
6.	Eng. Sarwat Fahmy	Monitoring Office
7.	Eng. Hassan Shoman	MPWWR
8.	Eng. Hussein Elwan	MPWWR
9.	Mr. Clemente Weber	USAID
10.	Dr. Mohamed Allam	USAID
11.	Mrs. Kim Kertson	USAID
12.	Mrs. Aziza Helmy	USAID
13.	Mr. Herb Williamson	AUC / Facilitator
14.	Mr. Rafaat Rashad	AUC / Facilitator
15.	Eng. Zenab El Gharably	PPD
16.	Mrs. Jaleen Morony	PPD
17.	Eng. Loucy Helmy	PPD
18.	Eng. Bahaa Ghonaim	PPD
19.	Eng. Ghada Barakat	PPD
20.	Eng. Ahmad El Hawary	PPD
21.	Eng. Mohamed A. Samii	PPD
22.	Eng. Hoda Salah El Din	PPD
23.	Agr. Samir Mohamed	PPD
24.	Agr. Gamal Ali	PPD
25.	Acc. Fawzy Khalil	PPD
26.	Acc. Youssef Ali	PPD
27.	Mrs. Lamia Ali	PPD
28.	Mrs. Mona El Gharib	PPD
29.	Mr. Salman Ahmad	PPD
30.	Mr. Wagih Ahmad	PPD
31.	Mr. Nabil Sayed	PPD

APPENDIX B

Minister Engineer Essam Rady's Memo

مذكرة للعرض على السيد المهندس
الوزير

- انشئت الادارة العامة لدراسات الجدوى احدى ادارات قطاع التخطيط في عام ١٩٨١ ومنذ انشائها قامت الادارة بعمل العديد من الدراسات لعدد من المشاريع الكبرى في الوزارة وساهمت هذه الدراسات في ايجاد جهات تمويل اجنبية لهذه المشروعات مثل :-

- مشروع الصرف الخامس .
- قناطر اسنا الجديدة .
- هويس نجع حمادى .

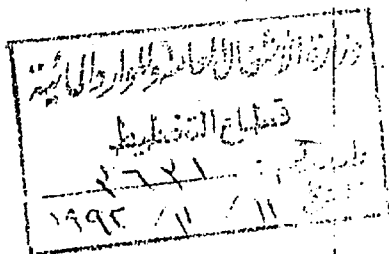
ودراسات اخرى عديدة

وخلال عمل الادارة منذ انشائها تكون لديها الخبرات والافراد اللازمة للقيام بمثل هذه الدراسات .

- لذا ارجو التكرم بالموافقة على ان ينشر على الجهات التابعة للوزارة باشتراك الادارة العامة لدراسات الجدوى بصورة فعالة في اعمال دراسات الجدوى التى تقوم بها حتى يتسنى للوزارة الاستفادة الكاملة من الخبرات المكتسبة في هذه الادارة على مدار فترة عملها الى جانب مداومة تدريب العاملين بالادارة على هذه الدراسات وخلق كوادر جديدة .

رئيس قطاع التخطيط

(مهندس / جميل السيد محمود)



Handwritten signature and date 11/11/95.

APPENDIX C

Implementation Plan 1992/1993

MINISTRY OF PUBLIC WORKS & WATER RESOURCES

PROJECT PREPARATION DEPARTMENT

IMS PROJECT 263-0132

IMPLEMENTATION PLAN 1992/1993

JUNE 1992

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Project Preparation Department
July 1992 - June 1993

IMPLEMENTATION PLAN

Background

During the last ten years, the Project Preparation Department (PPD) has carried out twenty five feasibility studies for major Agricultural/Irrigation projects for the Ministry of Public Works and Water Resources (MPWWR). A list of these studies is provided in Appendix (1).

Strategy

1991 / 1992 work plan

A) Completed Feasibility Studies

During the fiscal year 1991/1992 the PPD completed feasibility studies analysis of four different projects that had been given top priority by the Department's Steering Committee. These projects are :

1. Replacement of Shoubra-Bas Regulator

Shoubra-Bas Regulator is an old regulator on Bagouria Canal in the middle Delta. Cracks appeared on the abutment and the road over the regulator, which represented a bottleneck for the traffic; because its designed capacity is 20 tons while the present capacity of the road is 70 tons.

A feasibility study for replacing the regulator has been completed during 1991/1992.

2. Evaluation of groundwater wells for irrigation in the Delta region

This study mainly aims at the possibility of using groundwater in irrigation as a substitutable resource to the Nile water. Gharbia was chosen to represent the Delta region. The draft report is completed and will be discussed by the representatives from the involved departments.

3. Replacement of Idfina Barrage Slab

Idfina Barrage is located at the tail of Rossetta branch. The slab of the barrage and its lock is designed for 20 ton capacity, which is not sufficient for the heavy traffic that crosses over the bridge at the present time. As a result, the slab have been cracked. A feasibility study was carried out for constructing a bridge with a 70 tons capacity.

4. Improvement of irrigation water availability conditions at the tail of El Atf Canal (Stage I)

El Atf Canal is a main canal in the Middle Delta. Due to its big length, the tail reach of the canal is suffering from a severe shortage of irrigation water. The study that has been achieved recommended water management consideration, without changing any of the present structures on the canal.

As for Saidya project areas 4 & 5 with a command area of 20,000 feddans each, they were shelved because these two projects are RIIP projects. RIIP has signed a contract with a consultant company (Morrison - Knudsen Engineers, Inc. & Louis Berger International, Inc.) to conduct a feasibility study for the whole Saidya area, therefore, the PPD has no role in the study.

B) On Going Feasibility Studies

Four other project studies have been initiated during the fiscal year 91/92 and are expected to be completed during 92/93. These projects are :

1. Improvement of irrigation water availability conditions at the tail of El Atf Canal (Stage II)

The PPD had completed the study for El Atf Canal and recommended irrigation management consideration. The PPD was asked to conduct a feasibility study for El Atf Canal by feeding the tail of the canal from El Abassi Rayah and from Bahr Shershaba canal.

The study started in 1991/1992, and it is planned to be completed by 1992/1993.

2. Groundwater wells for irrigation and drainage
West Samalut (Minya Governorate)

The Ministry of Public Works and Water Resources started the construction of the 74 wells in West Samalut area, where a seepage problem has appeared in the old lands from the high level reclaimed lands. The function of these wells are :

- a. control water logging in the traditionally cultivated area adjacent to the reclaimed desert area;
- b. use the vertical drainage wells in irrigation;
- c. water saving.

The PPD was assigned to make a feasibility study for this project. It is expected that the study will be completed by the end of June 1992.

3. Economic analysis of agricultural benefit
from Nile water storage in Lake Burullus

This is a Dutch project and a Dutch mission is doing a feasibility study about storage of Nile water in Lake Burullus. The PPD was nominated as a coordinator to this mission.

The mission made two field trips, one was in February the other in May / June, and the last will be in August 1992. During the first trip, the mission chose some Egyptian consultant companies to make the different types of studies needed for the project. The PPD was also nominated to conduct the economic analysis for the agricultural production.

This analysis will be completed by the end of June 1992. The final report for the whole project will be completed by September 1992.

4. Reclamation of 200,000 feddans in
El Ser Valley in Sinai

The Ministry assigned the PPD to make reconnaissance studies about the possibilities of adding 200,000 feddan to the command area of El Salaam Canal in Sinai. This area will be irrigated during winter season only. No changes would be needed in the design and capacity of the structure of the project (i.e. pump stations, syphons, main canal, etc). Pump stations will run with full capacity all over the year instead of summer season only. The difference in the discharge in winter would be enough to irrigate 200,000 feddan in El Ser Valley in the far middle of Sinai. The study is expected to be completed by the end of June 1992.

1992 / 1993 Work Plan

The first priority in 1992 / 1993 work plan will be to complete the above mentioned four feasibility studies initiated in 91 / 92 and to perform the feasibility study of the West Nubaria Agricultural Intensification Project and the remainder works from the previous year 1991 / 1992.

The second priority will be to perform any project the Ministry will assign to the PPD from the five year Work Plan. This project has not yet been known.

1. West Nubaria Agricultural Intensification World Bank Project

The project is located in the Western Delta region approximately 160 km north Cairo, and is part of West Nubaria region where the earliest land reclamation projects were carried out in the late 1950's and early 1960's.

The project area comprises of the designated areas of the region known as Mariut, N. Tahrir, El Nahda, Gianklis and Nubaseed, which together cover a total geographical area of approximately 200,000 feddan.

Work Programme

Secondary Canal Inspection

The PPD shall carry out a field inspection of two typical secondary canals in each of the five areas during periods of normal canal closures or enforced closures which shall be agreed upon between the Irrigation Engineer and the beneficiaries. The inventory shall include :

- * size and condition of steel gates, gate guides and lifting equipment;
- * size of concrete pipes and offtakes to tertiary canal;
- * overall dimensions of canal structures, type of construction, materials employed, and conditions of structures;
- * details of flow and water level measuring installations;
- * canal cross-sections at 500 m spacing with description of the condition of side slopes at each cross-section;
- * establish Bench Mark levels on the upstream and downstream head wall of each structure.

The total length of secondary canals surveyed shall be as shown in Table (1). A drawing shall be prepared showing the location of each structure which shall be referred to the inspection report together with a plan showing the location of the canals surveyed in each of the company areas.

Type designs for the rehabilitation works to existing structures and new structures required shall be prepared showing details of the major items of work including :

- * details of replacement of gate guides and minor structural remodelling;
- * outline details of gates and lifting equipment;
- * major structural remodelling in plain or reinforced concrete if this is required;
- * outline designs for new structures where appropriate.

Quantities of work required and the approximate weight of gates, guides and embedded steel work shall be calculated.

An estimate shall be prepared of the quantity and cost of the earthworks required to restore the secondary canals inspected to the original design cross-section.

Tertiary Canal Inspection

The PPD shall carry out a field inspection during the period of canal closure and prepare inventories for a representative sample of tertiary (hosha) canals in each of the five company areas. The inventory shall include :

- * size and condition of inlet structure and gates to the tertiary canal and the size of associated pipes and culverts;
- * dimensions, locations and condition of cross-regulators and gates together with associated culverts or bridges;
- * dimensions and condition of tail escape structures and gates together with outlet channel and revetment works;

- * the type of construction and materials employed;
- * dimensions and condition of field off-take structures and gates;
- * dimensions and condition of concrete lining;
- * typical canal cross-sections extending 5 to 10 m on each side from the toe of the berm and including tertiary drains.
- * Extent of gravity command of the irrigation area by the tertiary canal.

The total length of tertiary canals surveyed shall be as shown in Tabel (1). The tertiary canals surveyed shall be evenly spaced throughout each company area. A drawing shall be prepared showing the location of each structure which shall be referred to the inspection report, together with a plan showing the location of the canals surveyed in the company area.

Type designs for new structures shall be prepared as it is envisaged that the majority of tertiary canal structures will be replaced. Type designs for new inlet structures to tertiary canals incorporating weirs or flumes for flow measurement shall be prepared.

Table (1)

PRE-APPRAISAL STUDIES
(IRRIGATION COMPONENT)

INVENTORY OF IRRIGATION CANALS

Company	Length of Canals to be surveyed by type of canal (km)	
	Secondary 1/	Tertiary 2/
Mariut	10	10
N. Tahrir	10	10
El Nahda	5	10
Gianklis	5	10
Nubaseed	5	10

1/ Secondary canals originating from main canals, and serving several tertiary canals.

2/ Tertiary or Hosha Canals serving 100-200 feddan.

Tests to Determine Seepage Losses

from

Unlined Canals

Measurements of losses due to seepage from main, branch and tertiary canals shall be made in each company area. The PPD shall specify the method to be used in each type of canal at the time of submitting his proposal. These may include flow measurement by current meter, flume or weir, or tank testing as appropriate to each situation. The expected level of accuracy of the results to be obtained shall be stated. Two representatives reaches of each canal type shall be selected in each area.

Representative reaches of main and branch canals shall be not less than 1,000m and not less than 500m for tertiary canals. Care must be taken to ensure that leakage of gates in the reach is stopped during the tests. If flow metering equipment is used it must be previously calibrated by an approved laboratory and water level measurements shall be taken continuously at each flow gauging station. The flow measurements shall be repeated if there is variation in water levels during a test.

SCHEDULE

The schedule which follow in Figure 1, show the main tasks and time spans planned for executing the West Nubaria Agricultural Agricultural Intensification World Bank Project during the fiscal year 1992 - 1993.

Figure (1)

PLANNING TASKS

West Nubaria Intensification Project

		1992 -----					1993 -----			
		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
1)	Collecting Data									
2)	Site Investigation									
3)	Analysing the data collected									
4)	Prepare the Cash Flow Tables									
5)	Financial and Economic Evaluation									
6)	Preparation of the draft report									
7)	Final report									

Figure (2)

PLANNING TASKS

Economic Analysis of Agricultural Benefit
from Nile Water Storage in Lake Burullus

		F/Y 1992								
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1)	Collecting Data									
2)	Site Investigation									
3)	Analysing the data collected									
4)	Prepare the Cash Flow Tables									
5)	Financial and Economic Evaluation									
6)	Preparation of the draft report									
7)	Final report									

Figure (3)

PLANNING TASKS

Improvement of Irrigation Water Availability
Conditions at the tail of El Atf Canal
Stage II

	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
1) Collecting Data								
2) Site Investigation								
3) Analysing the data collected								
4) Prepare the Cash Flow Tables								
5) Financial and Economic Evaluation								
6) Preparation of the draft report								
7) Final report								

ORGANIZATION & STAFFING

The professional staff of the PPD consists of thirteen engineers (two are on maternity leave and one has got a grant to get Master degree in Irrigation and Hydraulics), four agronomists some of whom have some economic background, four accountants and two economists. The staff have been divided into three teams comprising of engineers, agronomists and economists with teams led by a senior engineer. Team lists are shown in Appendix 2. Out of the necessity for particular individuals with particular skills in a small organization that is not large enough to evenly distribute all skills to all groups there will be some "borrowing" of personnel between teams. These arrangements will be made on an informal basis among the team leaders as the need arises.

With effective allocation of personnel, good leadership, efficient and dedicated hard work by all PPD staff the Department expects to attain its goals.

TECHNICAL ASSISTANCE

As recognized in March 1989 Evaluation Report there will be an ongoing need for outside consultant support to the PPD for the foreseeable future. Five person-months of short term TDY is planned to support the PPD in its work in 1992 / 1993. It is intended that TA in each of irrigation engineering and economics will be obtained for periods of at least two months so that the TAs will have sufficient length of time with the Department to significantly contribute to the development of each of the studies as well as conducting applied in-house training sessions that will focus on the Department's needs in relation to the studies being undertaken. The TAs will be scheduled to coincide with the stages of the studies which will benefit most from their presence, they are shown in Figure 4.

Figure 4

DEVELOPMENT TASKS
TA visits

- TDY in Project Evaluation
- Economist (Cairo Resident,
part time).

1991-----						-----1992-----					
J	A	S	O	N	D	J	F	M	A	M	J
-	-	-	-	-	-	-	-	-	-	-	-

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COMMODITIES

All of the procurement planned for the project will be completed with the local purchase of two or three PC-compatible equipment in order to be able to access and use data base on the existing hardware.

TRAINING

According to the project's objective of establishing a unit within the Ministry capable of doing feasibility studies to international lending agency standards, training of the staff has been central to the Project from the beginning. In the past this has consisted of one-on-one on-the-job experience with a team of expatriate TAs together with a training cycle of local and off-shore courses in which nearly all of the staff participated annually. Appendix 3 shows the previous off-shore training courses that have been attended by the PPD staff from the beginning of the project uptill now. With the discontinuance of the resident expatriate TAs the annual cycle of courses has taken on even greater importance. It will be continued in the coming year and will consist of local short-term technical courses, selected for their appropriateness to current needs and given under the auspices of the Professional Development Project, continuing attendance of local English language courses, and short-term courses in the USA. Master's degree training in economics has begun last year for two of the Department's agronomists, four engineers are studying for a Masters degree in the Irrigation Engineering, one engineer is studying computer statistics, and one economist is studying a diploma in planning and feasibility studies; (they are permitted two days a week for their studies). One civil engineer has got a grant to get Master degree in Irrigation and Hydraulics.

1. Economics Training

Both evaluations, in March 1989 and June 1990, identified a continuing need in the Department for professional staff with the training and experience to do economic analysis of projects and make sound judgments about their execution and outcomes.

Therefore, two qualified economists have joined the department by March 1991. In addition, two agronomists who have practical experience with the Department are being sent for Masters degrees in economics at Ain-Shams University. This will give the Department two agronomists with a combination of experience and training in their own technical area and economics and two professional economists - for a total of four staff persons with strong background in economics.

2. Computer Training

Computer training of PPD staff will continue in 1992/1993. Staff will continue to be sent on the introductory and advanced computer courses offered by the IMS Professional Development Project. In-house training on the Department's upgraded VAX computer will be given by the staff of the PPD computer center. See Table (1).

3. Technical Short Courses

In order to increase the knowledge and skills of PPD staff in technical areas related to projects on which the Department will be working in 1992, ten local courses have been selected in different areas as shown in table 1.

Table (1)

LOCAL TRAINING COURSES

1992 / 1993

Course Title	Candidate	Place	Date
Development of Ground Water Resources in the Delta & Nile Valley	Eng. Bahaa Ghonaim Agr. Abdalla Mohamed	TMD	11/21 ~ 12/10
Lotus 1 2 3	Acc. Fawzy Khalil Eng. Mona Morcos Agr. Samir A. Mohamed	TMD	10/11 ~ 10/22
AUTOCAD (Computer)	Eng. Moahmed A. Sami	TMD	11/15 ~ 11/26
QUATTRO (Computer)	Agr. Gamal M. Aly	TMD	5/03 ~ 5/07
C. Language	Eng. Manal A. Badii	TMD	12/06 ~ 12/17
Aquatic Weeds : The Problem and Methods of Control	Agr. Hamdy A. Aziz	TMD	11/28 ~ 12/10
Introduction to Computer	Eco. Hussein Mohamed	TMD	6/21 ~ 6/25
Feasibility Studies	Eco. Mervat Sallam	TMD	10/31 ~ 11/12
Project Management	Eng. Fathy El Shaer Eng. Lucy H. Boulos	TMD	To be determined
Principles of Management	Eng. Rizk Menshawi	TMD	To be determined

4. Off-shore Training

In accordance with the IMS evaluation team's recommendations, training will concentrate on courses teaching skills in the economic, data gathering and manipulation aspects of project preparation. To help fill the need for training in project analysis and preparation for agricultural projects, eleven staff members will be sent on courses in these areas given by the USDA Office of International Cooperation & Development in Washington D.C. in conjunction with USAID. The off-shore training schedule is shown in Table 2.

5. In-House Lectures

As part of their TDY tours it is intended that technical specialists will give lectures to the PPD staff in their respective areas of projects that the PPD will be working on.

6. Training Costs

The majority of the local trainings are given under the auspices of the IMS Professional Development Project or other institutions which used to be at no cost to the Department, but recently cost is being applied on all IMS candidates. Exceptions are the long-term courses in economics for which L.E. 6000 has been ear-marked in 1992 / 1993 budget.

Costs for the off-shore training are based on prior years experience and published fees and maintenance allowances for the courses selected. They are expected to total \$ 70,000. Eleven round trip excursion fares to the U.S. are expected to cost L.E. 35,000. This has been budgeted in the PPD's Egyptian Pounds support costs.

Table (2)
Off-Shore Training Courses
1992 - 1993

Course	Location	Date	Participant	Lang. Prof.
1. Project Implemetation for Agri-cultural & Rural Development (USDA TC 140 - 16)	D.C.	July 13 - Aug 21	Eng. Mohamed A. Hassan Eng. Ahmed M. El Hawary Eng. Gamal M. Aly	507 517 467
2. Agricultural Policy Seminar USDA TC 140 - 01	D.C.	Sept 7 - Oct 2	Eng. Ghada K. Barakat Eng. Manal A. Mohamed	520 490
3. Designing & Managing Integrated Agricultural & Rural Development Programs (USDA TC 140 - 25)	D.C.	Sept 14 - Oct 23	Eng. Fathy H. El Shaer Eng. Bahaa A. Ghonaim Eng. Ahmad M. Gamal El Din	500
4. Project Analysis with Micro Computer Application	Clorado	Jan 4 - Jan 22	Eco. Hussien M. Mosa Acc. Moenes M. El Orabi Eng. Mona M. Gobrial	460 490 533

FINANCIAL REQUIREMENTS

The financial inputs by USAID and the GOE necessary to support this plan are shown by quarter in dollars for hard-currency inputs and in Egyptian Pounds for local currency inputs in Table 3. The scheduling of quarterly expenditures reflects the basic on-going functions of the Project as well as special requirements such as TDY specialists and their support while in Egypt.

The expenditures are in agreement with the line-item budgets of the contract between the Ministry and Harza Engineering Company and Amendment No. 16 to PIL No. 3 for the PPD's USAID local currency budget and are summarized in Attachment (B) as shown in table 3.

TABLE (3)

FINANCIAL REQUIREMENTS FY 1993
JULY 1992 - JUNE 1993

DOLLAR FUNDING

	----- \$ 1000's -----				
	1st QTR.	2nd QTR.	3rd QTR.	4th QTR	Total
- Resident TA*	39	--	--	--	39
- TA, Short Term - PPD	5	35	5	35	80
- IDSC	--	--	--	--	--
- Training, Off-Shore	50	--	--	20	70
- Commodities,	--	--	--	--	--
- Other (Tptn, Intl Travel, HO Backup & Fee)	25	20	3	20	68
- Totals	119	55	8	75	257

EGYPTIAN POUND FUNDING

	----- LE 1000's -----				
	1st QTR	2nd QTR.	3rd QTR.	4th QTR	Total
A - AID Contribution					
- Resident Staff*	7	-	-	-	7
(Hsg, Tvl & PD)	--	--	--	--	--
- TA, Short Term, - PPD	--	15	--	15	30
(Loc Trav & PD) - IDSC	--	--	--	--	--
Sub Total A	7	15	--	15	37
B - PPD Support :					
- Personnel	12	13	12	13	50
- Local Consults & Trg	6	6	8	7	77
- Local Commodities	20	20	20	21	81
- Other Support Costs	10	11	10	10.44	41.44
(- Vehicle Op. & Fuel)					
(- Equip. Maint.)					
(- Miscellenous)					
- Workshop & Workplan	50	--	--	--	--
Sub Total B	98	50	50	51.44	249.44
C - GOE Contribution:					
- Local Training	--	1	--	1	2
- Other Support Costs	32	32	32	34.96	130.96
Sub Total C	32	33	32	35.96	132.96

* These figures are for E.M. Krith, resident advisor to the Structural Replacement Project, who is a Harza employee administered through the PPD.

Appendix 1

Studies Completed by PPD and Actions Taken on Them

<u>Name of Study</u>	<u>Resulting Action</u>
1. Drainage Project 5	Financed by the World Bank and under construction
2. Pump Rehabilitation Project	Financed by World Bank
3. Channel Maintenance Project	Financed by World Bank and USAID
4. New Esna Barrage	Contractor financed with interim grant funds; under construction
5. Ibrahimia Head Regulator	Status unknown
6. Conservation of Nile Outflow to the Mediteranean	Under further investigation
7. New Naga Hammadi Lock	Under construction with Ministry funds
8. El Salam Canal Project	W.German Government investigating
9. Bahr El Gharag Project	Completed in June 89 for IIP
10. North Zifta Irrigation	Not economically attractive, excluded.
11. Widening of Ismailia Canal	Project Construction
12. El-Safsafa Canal Project	Construction under consideration
13. Fayoum Projects	
14. Reclaiming 400,000 feddans in Sinai	Under construction
15. Replacement of Santa Regulator	Under construction
16. Replacement of Abu El Shekouk Regulator	Under construction

<u>Name of the study</u>	<u>Resulting action</u>
17. Replacement of Shoubra bas Regulator	Under construction
18. Reclamation of 40,000 feddans East of Suez Canal	Construction under Consideration
19. Evaluation of Irrigation Wells	
20. Replacement of Idfina Barrage Slab	Under construction
21. Improvement of Irrigation at the tail end of Atf Canal (stage I)	
22. Second stage of Atf Canal	Under studying
23. Production Wells for Irrigation & Drainage in West Samalut	Under studying
24. Economic Analysis of Agricultural Benefits from water storage in Lake Burullus	Under studying
25. Reclamation of 200,000 feddans in El Ser Valley in Sinai	Under studying

APPENDIX 2

PROJECT TEAMS

Team (A)

Eng. Rizk Hassan Mishawy
Eng. Mona Morcos Gobrail
Eng. Ghada Khalil Barakat
Eng. Ahmed Mohmaed Gamal El Din
Agr. Samir Ahmed Mohamed
Agr. Abd Allah Mohamed Hussein
Eco. Hussein Mohamed Mousa
Acc. Fawzi Khalil

Team (B)

Eng. Lucy Helmy Boulos
Eng. Manal Abdel Badie
Eng. Ahmed Mohamed Ahmed
Agr. Gamal Mohamed Aly
Eco. Mervat Sallam Saad
Eco. Moenas Moustaf El Oraby

Team (C)

Eng. Bahaa El Din Ibrahim
Eng. Hoda Salah
Eng. Mohamed Abdel Sami Hassan
Agr. Hamdy Abd El Aziz
Acc. Youssef Aly Youssef
Eco. Hussein Mohamed Mousa

Appendix 3

Training Completed through PPD

<u>Name</u>	<u>Course</u>	<u>Time</u>	<u>Place</u>
Eng. Gamil Mahmoud (Not present)	- A Study Tour in USA - US Training Survey - Executive Mgmt. Program	07/21/1980 - 08/08/1980 10/01/1983 - 10/17/1983 06/01/1984 - 06/17/1984	Phoenix - Canada USA Salt River Proj. Phoenix, AZ, USA
Eng. Mohamed Naser Ezzat (Not present), Former director left after Sept/88	- Mangement Training Salt River	06/10/1986 - 06/30/1986	Salt River Proj., Phoenix, AZ, USA
Eng. Essam El Sheikh (Not Present), Former director left Mar/92	- Agricultural Project Planning - Water Systems Mngement Techniques - On-Farm Irrigation Design - Organisational & Management Development	04/27/1981 - 05/29/1981 05/07/1984 - 05/25/1984 05/03/1987 - 06/20/1987 05/29/1989 - 06/30/1989	Washington, D.C. USA Bureau of Reclamation, Utah State, Logan
Eng. Rezk Hassan Manshawi (Deputy Director)	- Organizational & Mangement Development - Project Planning for Agri. & Rural Development - Project Analysis for Agri- cultural & Rural Development	05/25/1988 - 07/02/1988 05/01/1989 - 06/02/1989 06/03/1991 - 07/12/1991	Washington, DC, USA Washington Washington, DC, USA
Eng. Loucy Helmi Boulos (Section Head Egnineering)	- Engineering Mangement and Economics - Project Analysis for Agri. And Rural Development - Agricultural Policy Workshop Introductory - Project Implementation for Agri. & Rural Development	08/11/1986 - 09/04/1986 06/01/1988 - 07/17/1988 07/03/1989 - 07/28/1989 07/16/1991 - 08/23/1991	Fort Collins, CO, USA Washington, DC California Washington, DC, USA
Eng. Abu Bakr Sekkina (Not present)	- Analysis of Agricultural Capital Projects - Water Systems Management Techniques - Finalization of the Channel Maintenance Report - Computer Mangement - Integrated Computer Systems - Project Implementation for Agri & Rural Development	06/01/1981 - 07/17/1981 05/07/1984 - 05/25/1984 06/01/1985 - 06/14/1985 04/03/1986 - 06/08/1986 07/16/1988 - 08/26/1988 07/16/1990 - 08/24/1990	Washington DC, USA Bureau of Reclamation, USA FAO Headquarters, Rome, Italy, (OST) Washington, DC., Chicago Washington, DC., USA Washington
Eng. Adel Mouselhi (Not present)	- Analysis of Agricultural Capital Projects - Channel Maintenance Project	06/01/1981 - 07/17/1981 08/21/1984 - 09/02/1984	Washington, DC., USA FAO, Rome Italy

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Eng. Hend Abdel Kerim (Not Present)	- Agricultural Project Planning	04/27/1981 - 05/29/1981	Washington DC., USA
Mona Morcos Megali	- Water Control & Measurement - Project Analysis for Agri. & Rural Development	07/20/1987 - 08/14/1987 06/04/1990 - 07/13/1990	Fort Collins, CO Washington
Manal Abdel Badie	- Water Control & Measurement	07/20/1987 - 08/14/1987	Fort Collins, CO
Eng.Essam El Samanoudy (Not present)	- Engineering Management - Micro Computer Statistics and Methods - Project Planning for Agri. & Rural Development - Establishing data basis & Analytical systems for decision making	08/11/1986 - 09/04/1986 06/19/1988 - 08/05/1988 05/01/1989 - 06/02/1989 05/27/1991 - 07/19/1991	Fort Collins, CO Washington New Mexico
Eng.Hoda Mohammed Selim	- Irrigation Problems and Practices - Agricultural Policy Workshop Introductory - Project Implementation for Agri. & Rural Development	06/15/1987 - 08/07/1987 07/03/1989 - 07/28/1989 07/16/1991 - 08/23/1991	Fort Collins, CO California Washington, DC, USA
Eng.Amira Abd El Hady (Maternity leave)	- Irrigation Problems and Practices - Project Analysis for Agri & Rural Development	06/15/1987 - 08/07/1987 06/05/1989 - 07/14/1989	Fort Collins, Co Washington
Eng.Ghada Barakat	- Engineering Management and Economics	08/11/1986 - 09/04/1986	USA
Agr.Hamza Abd El Moaty (Not present)	- Study Tour - Basic Agricultural Survey Statistics & Methods	08/24/1986 - 09/15/1986 09/11/1989 - 10/20/1989	USA Washington
Agr.Gamal Mohammed Ali	- Study Tour - Basic Agricultural Survey Statistics & Methods	08/24/1986 - 09/15/1986 09/11/1989 - 10/20/1989	USA Washington
Agr.Samir Ahmed	- Study Tour	07/31/1988 - 08/22/1988	Colorado

Agr. Hamdi Abd El Aziz	- Study Tour	07/31/1988 - 08/22/1988	California
	- Basic Agri Survey Statistics & Methods	09/10/1990 - 10/19/1990	Washington
Agr. Abdallah Mohammed	- Project Planning for Agriculture & Rural Devlpmt.	05/04/1987 - 06/05/1987	Washington, DC
	- Economic Study (under the Water Research Institute France)	08/22/1988 - for 9 months	Greece
	- Basic Agri. Survey statistics & methods	09/09/1991 - 10/18/1991	Washington, DC, USA
Mr. Mohammed Ragy Darwish (Not present)	- Fellowship Programme	01/01/1983 - 12/31/1983	The World Bank, Robert S, McNamara Fellowship, USA
Mr. Tarek Tawfik (Not Present)	- Academic Training Soils	08/16/1984 - 12/25/1984	CSU
Acc. Fawzi Khalil Head of Economic Section	- Project Planning for Agriculture & Rural Devlpmt.	04/01/1985 - 05/03/1986	Washington, DC, USA
Mr. Ahmed El Attar (Not present)	- Project Planning for Agriclt. and Rural Developpent	04/01/1985 - 05/03/1985	Washington, DC, USA
Acc. Abdel Fattah Tolba (Not present)	- Project Analysis for Agric. and Rural Development	05/06/1985 - 06/14/1985	Washington, DC, USA
	- Micro Computer Application in Agri. Development	06/26/1989 - 08/04/1989	Oklahoma
	- Establishing data basis & Analytical systems for decision making	05/27/1991 - 07/19/1991	New Mexico
49 Eng. Salah Eldin Zaky (Not present)	- Computer Mangement	04/03/1986 - 06/08/1986	Washington, DC, Chicago, USA
Eng. Ahmed El Dahshan (Not present)	- Project Analysis for Agri & Rural Development	06/03/1991 - /07/12/1991	Washington, DC, USA
Eco. Moenis El Oraby	- Project Analysis for Agri & Rural Development	06/04/1990 - 07/13/1990	Washington, DC, USA