

**Ministry of Public Works and Water Resources  
US Agency for International Development  
Agricultural Policy Reform Program  
Environmental Policy and Institutional Strengthening Indefinite Quantity Contract**

**APRP - Water Policy Reform Activity  
Contract PCE-I-00-96-00002-00  
Task Order 807**

**QUARTERLY REPORT  
(JANUARY– MARCH 2000)**

**Report No. 30**

**MAY 2000**

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**Water Policy Reform Program**

**International Resources Group**

**Nile Consultants**

**Winrock International**

**QUARTERLY REPORT**  
(JANUARY-MARCH 2000)

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## I. SUMMARY

The EPIQ Water Policy Reform Program (Contract PCE\_1-00-96-00002-00, Task Order 807) is responsible for advising and providing technical assistance to the Ministry of Water Resources and Irrigation (MWRI) of the Government of Egypt (GOE) with respect to improved policy assessment and planning, improved irrigation system management, and improved private sector participation. EPIQ is part of the USAID Agricultural Policy Reform Program (APRP). EPIQ team members are currently implementing work plan activities related to the Tranche IV Benchmarks.

During the 1st quarter, January to March 2000, the EPIQ TA team worked with USAID, Ministry for Water Resources and Irrigation (MWRI), Ministry of Agriculture and Land Reclamation (MALR), Water Policy Advisory Unit (WPAU) and the other Agriculture Policy Reform Program (APRP) TA units on the implementation of the Tranche IV water policy benchmark activities. The other TA units include the Program Management Unit (PMU), Monitoring, Verification and Evaluation Unit (MVE), and the Reform Design and Implementation Unit (RDI).

The Memorandum of Understanding (MOU) for Tranche IV was signed on 20 September 1999. The MOU includes 20 policy benchmarks to be completed in two phases. Phase 1 is to be completed by 31 December 2000 and Phase 2 is to be completed by 31 December 2001. There are five benchmarks involving water policy reform. These are:

- C.1. Reducing Mismatch of Irrigation Deliveries
- C.2. Urban Wastewater and Drainage Reuse
- C.3. Water Management at the Directorate Level
- C.4. Irrigation Management Transfer
- C.5. Revision of Law 12

The MWRI has sole responsibility for four of these benchmarks (C.2, C.3, C.4, C.5). The remaining benchmark (C.1 Mismatching) is a joint benchmark with the MALR. Four of the benchmarks are multi-year benchmarks, which means they will require partial completion in Phase 1 (December 2000) and final completion in Phase II (December 2001). Two of the benchmarks are being coordinated by WPAU (C.3, C.5), two of the benchmarks are being coordinated by EPIQ (C.2, C.4); and EPIQ/RDI/PMU are jointly coordinating one benchmark (C.1).

The Tranche IV water policy benchmark implementation work plan was reviewed and approved by the Steering Committee at a meeting held on 1 December.

### Specific Accomplishments:

C.1. Reducing Mismatch of Irrigation Deliveries: A joint MALR/MWRI workshop was held in Cairo on 16-17 February 2000. Data collection for the actual winter cropping pattern and the anticipated summer cropping pattern was conducted on a biweekly basis in five selected irrigation districts in four governorates. EPIQ, along with MWRI Central Directorate for Water Distribution and involved irrigation directorates, established a water-monitoring program in five pilot irrigation districts. Data collection began on 1 March 2000. Field

meetings were held in each governorate during the data collection process to follow-up and guide the efforts.

C.2. Urban Wastewater and Drainage Reuse: An interministerial water quality task group which meets bi-weekly has been established with active membership from the five ministries and agencies responsible for water quality issues: National Organization of Potable Water and Sanitary Drainage (NOPWASD) of Ministry of Housing and Reconstruction and Urban Development (MHRUD), Afforestation Department (AFD) and the Soil, Water, and Environmental Institute of Agriculture Research Center of Ministry of Agricultural and Land Reclamation (MALR), Environmental Health Department (EHD) of Ministry of Health and Population (MHP), Compliance Office (CO) of Ministry of Environmental Affairs (MEA), and General Economic Organization for Potable Water and Sanitary Drainage (GEOPWASD) in selected Governorates. Cooperation within MWRI includes: Egyptian Public Authority for Drainage Projects (EPADP), Dakahlia Irrigation Directorate, and Drainage Research Institute (DRI) of the National Water Research Center (NWRC). Several workshops have been held including a training course on wastewater irrigation organized by MOHP and World Health Organization. A water quality measurement program was started in the West Delta El Salaam Canal region by EHD. Draft policy reports by each task member are under preparation.

C.3. Water Management at the Directorate Level: WPAU is taking the lead on this benchmark. Pilot implementation programs continue in Qena Directorate in upper Egypt, and Sharkiya Directorate in lower Egypt. The on-going program includes calibration of water level/flow discharge relationships at 43 sites (19 in Sharkiya and 24 in Qena). Training courses in "Flow-Measurement Techniques" were given to MWRI water-management teams in Sharkiya and Qena. Three new telemetry sites were established in Sharkiya.

C.4. Irrigation Management Transfer: Benchmark implementation activities are on schedule according to the tasks outlined in Phase I (9/99-12/00) of the Tranche IV water policy implementation work plan. A benchmark working group has been established and meets on a frequent basis to plan and execute work plan tasks. An analysis of current Egyptian organizational models for farmer participation, including WUAs, BCWUAs, water boards, federations, etc., was completed. Exploratory and reconnaissance field visits were made to potential IMT pilot areas and four field sites were identified. A study was undertaken on assessing private sector perceptions regarding IMT potential and strategies. Stakeholder focus group sessions were conducted assessing stakeholders' ability to pay for secondary-level irrigation canal operations and maintenance (O&M). A general analysis was conducted to evaluate current irrigation and drainage practices subject to IMT.

C.5. Revision of Law 12: WPAU is taking the lead on this benchmark. A Law 12 review committee was established to review and make initial recommendations for modifying Law 12. Several working meetings were held. The EPIQ/WPAU TA team prepared a draft background document, describing Law 12 and the need for revisions. Various sectors within MWRI have provided their written suggestions for restructuring the existing law to contend with existing and projected situations not envisioned in the original law. New chapters are being added to reflect the changes in the MWRI policies since the issuance of the original law in 1984.

## **Other Activities/Important Events**

Dr. Larry King, senior irrigation engineer, provided short-term expatriate technical assistances in support of the mismatch activities.

Dr. John Keith, senior economist, provided short-term expatriate technical assistance in support of the mismatch benchmark. He also finalized the rice and Ag sector model reports.

Adrian Hutchens, senior water resource economist, provided short-term expatriate technical assistance in support of the benchmark activities on irrigation management transfer, water quality, and Law 12.

IRG signed a project amendment agreement with USAID extending EPIQ WPRP through September 2001 with a one-year option period through September 2002.

An ARD Raise team carried out an APRP mid-term assessment during February and March. A draft report was submitted for review and comment.

## **Reports During the Quarter**

- EPIQ Final Report No. 26: “Rice Water Use Policy Phase1: Water Monitoring and Evaluation Program” with appendices.
- EPIQ Final Report No. 27 “Review of the Agricultural Sector Model of Egypt (ASME97): 1999 Version”
- EPIQ Report No. 28: “Quarterly Report (October- December 1999)”
- EPIQ Report No. 29: “Annual Report (January – December 1999)”

## II. ACCOMPLISHMENTS DURING THE REPORT PERIOD

### Staffing

The EPIQ resident team has a technical consulting staff of eight people and an administrative support staff of seven people.

Dr. Larry King, senior irrigation engineer, provided short-term expatriate technical assistances from 4 February to 16 March. Dr. John Keith, senior economist, provided short-term expatriate technical assistance from 5 February to 20 February. Adrian Hutchens, senior water resource economist, provided short-term expatriate technical assistance from 15 February to 24 March.

The team was supported during the report period by short-term local Egyptian TA that included Hussein Elwan (Irrigation Management Specialist), Sanaa Abdel Rashid (Water Data Analysis Specialist), Hussein El Atfy (Senior Water Policy Specialist), Dr. Hesham Kandil (Senior Water Quality Specialist), Yehia Abdel Aziz (Senior Water Quality Specialist), Dr. Siham Hendy (Senior Public Health Specialist), Dr. Mamdouh Riad (Senior Forestry Specialist), Magda Gaballa (Senior Wastewater Treatment Specialist), Mohsen Mamdouh (Senior Wastewater Treatment Specialist), Dr. Ahmed Gamal Eldin (Senior Environmental Specialist), Amr Hafez (Telemetry Specialist), Alaa Hassan (Computer Software Specialist), Soliman Abu Zeid (Senior Water Management Specialist), Abdel Rahman Shalaby (Senior Institutional Policy Specialist), Essam Barakat (Senior Participatory Irrigation Management Specialist), Ahmed Maher Ghydan (Senior Irrigation Specialist), Dr. Mohamed Badran (Legal Specialist), and Dr. Mohamed Rami Mahmoud (Water Policy Information Specialist).

Ken Ames (IRG/EPIQ project administrator) was in Egypt from 18 January to 3 February to finalize the extension of the EPIQ WPRP contract. He met with MWRI, USAID, and EPIQ staff during his visit.

### Benchmark Support

The MOU for Tranche IV was signed on 20 September 1999. The work plan was approved by the steering committee on 1 December 1999. Phase 1 is to be completed by 31 December 2000 and Phase 2 is to be completed by 31 December 2001. The water policy benchmarks for Tranche IV are:

- C.1. Reducing Mismatch of Irrigation Deliveries
- C.2. Urban Wastewater and Drainage Reuse
- C.3. Water Management at the Directorate Level
- C.4. Irrigation Management Transfer
- C.5. Revision of Law 12

#### **C.1. Reducing Mismatching of Irrigation Deliveries (MWRI/MALR)**

Dr. Ragab Abdel Azim and Dr. El-Sayed Mahdy have primary responsible for this activity for the EPIQ team. Dr. Larry King, Dr. John Keith, and Eng. Hussein Elwan provided short-term TA support during the quarter. WPAU has assigned Eng. Tarek Nada, Eng. Mohamed

Hamed, and Eng. Mohamed Al Margoushy to help with the benchmark. Eng. Sanaa Rashid is assisting MWRI with data analysis. The joint working group has representatives from MWRI, MALR, EPIQ, RDI and PMU, WPAU, as well as the Under Secretaries, General Directors, Inspectors, and District Engineers for the five pilot districts from the four governorates of Sharkaya, Beheira, Beni Seuf and Qena/Luxor.

Activities carried out by the EPIQ team during the report period were:

- A working document for the benchmark activities was finalized.
- A workshop was held on 16-17 February in Cairo to present the joint MWRI/MALR governorate-level work plans, to begin implementing the program, and to identify immediate next steps to move the program forward. Participants included MWRI and MALR representatives from the four pilot governorates.
- Meetings were held in each governorate with governorate and district level personnel to establish a water monitoring program (Beheira-23 February, Sharkaya- 24 February, Beni Seuf-26 February and Qena- 6 March)
- Meetings were held in each governorate with governorate and district level personnel to follow-up and guide pilot data collection efforts (Beheira- 23 February and 21 March, Beni Seuf-27 March and Sharkaya- 28 March)

## **C.2: Water Quality and Drainage Reuse**

The EPIQ water quality task group members, Dr. Zhongping Zhu (task manager), Dr. Ibrahim Ellassiouty, and Dr. Ahmed Fakhry Khatib; with the participation of WPAU engineers Tarek Nada and Mouhamed Hamed; assisted by the short-term expatriate economist consultant, Mr. Adrian Hutchens; and supported by local specialists Eng. Hussein El Atfy (MWRI), Dr. Hesham Kandil (MWRI), Eng. Yehia Abdel Aziz (MWRI consultant), Dr. Siham Hendy (MOHP), Dr. Mamdouh Riad (MALR), Eng. Magda Gaballa (NOPWASD), Eng. Mohsen Mamdouh (NOPWASD), and Dr. Ahmed Gamal Eldin (MEA), are responsible for this activity.

The following activities were carried out during the report period:

- Active cooperation with nine ministry representatives of MWRI, NOPWASD, MOHP, and MEA was firmly established.
- Report content tables for each ministry representative were designed.
- Bi-weekly discussion meetings with each ministry representative were conducted.
- MWRI priority proposals of wastewater treatment plant construction in MWRI's were drafted.
- Pilot sites of in-situ drainage treatment conducted by Harza Engineering Company in Fayoum were visited.
- Visits were made to Mansoura to investigate financial sustainability of the region's GEOPWASD and to prepare wastewater effluent monitoring program.
- A coordination visit was made to the USAID wastewater department to report on benchmark progress.
- A draft proposal for a benchmark study tour to USA was prepared.
- The benchmark summary report was started.
- Two monthly-newsletters were prepared to enhance communication among work group members.

### **C.3: Water Management at the Directorate Level**

The lead for this activity is with WPAU and MSM. EPIQ is providing short term TA support for this activity through the EPIQ task order.

The major accomplishments by MWRI during the reporting period included:

- Conducting 49 flow measurements at Sharkiya.
- Conducting 194 flow measurements at Qena.
- Reviewing results of the flow measurement program.
- Surveying and site preparation civil work at three new telemetry sites in Sharkiya Directorate.
- Preparing syllabus documents for a training course in flow measurement techniques.

### **C.4: Irrigation Management Transfer**

Dr. Robert Cardinalli (task manager) with support from Eng. Mohamed Nasser Ezzat (WPAU) is responsible for this activity. Two additional WPAU engineers joined the IMT group (Eng. Amira Hady and Eng. Moemen El Sharkawy). Adrian Hutchens, water resource economist, provided short-term expatriate assistance. Short term local TA was provided by Eng. Abdel Rahman Shalaby (Senior Institutional Policy Specialist) and Eng. Essam Barakat (Senior Participatory Irrigation Management Specialist).

The major accomplishments during the reporting period included:

- Scopes of work for local consultancy LOEs for 1) PIM Specialist and 2) Institutional Development Specialist were finalized, and consultants are now actively carrying out SOW tasks.
- Short-listing for pilot IMT canals was completed, and field investigations to proposed pilot canals Beheira, Nubereia, Sharkiya, and Dakhaliya governorates were carried out by members of the IMT working group. There was also an investigative visit made to Toushka to determine the IMT potential.
- A benchmark working group has been formally activated and is comprised of the EPIQ Senior Sociologist (task manager), representatives from the WPAU (Eng. Nasser Ezzat, Eng. Amira el Hady, Eng. Moamen el Sharkawy), representatives from MED (Eng. Ali Khalil Mohammed), representatives from Irrigation Sector (Eng. Hussein Khalid el Khoteiby), representatives from IAS (Eng. Essam Barakat), representatives from EPADP (Dr. Mahmoud Moustafa), and representatives from Horizontal Expansion sector (Dr. Tarek Abdallah Ahmed). The working group meets every 2 to 3 weeks to plan and review the progress of activities related to the benchmark.
- A review of the current organizational models for farmer participation in Egypt was completed as one of tasks of the benchmark work plan.
- An assessment of “farmers’ ability to pay” was carried out by short-term consultant economist Adrian Hutchens during March. The assessment made a preliminary conclusion that farmers are willing and able to take on responsibility for a large number of tasks for secondary-level canal O&M presently being paid for by the MWRI. Some of these tasks farmers can carry out without training, supervision or

expectation of recompense. Some activities of a more sophisticated nature will necessitate some orientation and technical training as well as supervision.

- Two stakeholder focus group workshops were held during March, involving farmers and ministry officials from Sharkiya, Beheira and Kafr el Sheikh governorates. The results of these focus group meetings have been issued and circulated, and are very encouraging in terms of the objectives of the benchmark.
- Three separate assessment exercises were initiated during this period and will be completed during the early part of the next quarter. These are 1) a MWRI staff training needs assessment for the IMT program, 2) an analysis of gaps and overlaps in irrigation and drainage performance that IMT could help to overcome, and 3) an assessment of institutional changes needed within MWRI once IMT is implemented.

### **C.5: Revision of Law 12**

The lead for this activity is with WPAU (Eng. Sarwat Fahmy and Eng. Nasser Ezzat). Dr. Ibrahim Ellassiouty (EPIQ Coordinator) is assisting. EPIQ has provided short-term TA for this activity through the EPIQ task order: Eng. Ahmed Maher (local irrigation engineer), Dr. Mohamed Badran (legal advisor), and Mr. Adrian Hutchens (expatriate water resource economist). Three WPAU engineers joined the law 12 group (Ghada Khalil, Amira Abdel Hady, and Moemen El Sharkawy).

The major accomplishments during the reporting period included:

- Reviewing all articles of law 12, law 213 and their executive regulations.
- Providing assistance to the task committee in the review of law 12 and coordinating between all the involved parties.
- Preparing a “background report” entitled, “Revision of Law 12 of 1984 on Irrigation and Drainage”
- Conducting a work group meeting to present the proposed preliminary modifications of law 12 to the MWRI key officials.

### **Studies/Implementation Activities**

The terms of reference for the EPIQ task order is structured around a results package, jointly designed by USAID and MWRI, consisting of integrated water policy and institutional reforms. To support this results package, the EPIQ team is able to carry out studies that support policy reform or have the potential of leading to future policy benchmarks. The EPIQ team is also involved in supporting select activities that relate directly to implementation of previous water policy benchmarks.

### **Sugarcane Water Use Policies (MWRI/MALR)**

A proposal for a sugarcane water measurement and monitoring activity was prepared for discussion by EPIQ and Central Directorate for Water Distribution of MWRI.

### **Media Watch**

PARC completed their monitoring of the television and radio media add campaign prepared by the MWRI Water Communications Unit and GreenCom. The add campaign was launched in November 1999.

## **GIS Survey**

A study to assist MWRI in establishing a policy on GIS standards and data has been requested by MWRI. The study is expected to provide a baseline survey on hardware and software being used by MWRI for GIS activities.

## **Workshops**

EPIQ water quality task group held a workshop in Ismailiya on 14 February. The purpose of the workshop was to develop agreement with each local consultant on his or her work program. Participants included representatives from MWRI, MALR, NOPWASD, MOHP, and MEA. A field trip organized by Dr. Riad (MALR) was made to the Ismailiya wastewater afforestation project (500 f).

EPIQ/RDI sponsored a third workshop for the development of the benchmark on reducing mismatching in Cairo for approximately 40 persons from the MWRI and MALR. The workshop was held on 16-17 February at the Agriculture Club in Cairo. The workshop was attended by Eng. Elwan (MWRI); Mr. Nour (PMU); under secretaries and general directors from MALR and MWRI for Sharkaya, Beheira, Beni Seuf and Qena/Luxor governorates; representatives from USAID; and representatives from APRP EPIQ, RDI, PMU, and MVE TA teams.

Two stakeholder focus group workshops were held on 13-14 March in Tanta involving farmers and ministry officials from Sharkiya, Beheira and Kafr el Sheikh governorates. The purpose of the meetings was to assess the viability of farmer organizational models in Egypt to take on water management O&M responsibilities. In both of the open-discussion sessions, the farmers expressed a willingness to take on the O&M activities on the branch canals.

## **APRP/EPIQ Coordination**

Close coordination between the EPIQ team and other units of APRP, USAID and MWRI continued.

Members of the EPIQ WPRP team participated in the weekly APRP coordination meetings and the PPC meetings.

Regular water group coordination meetings were held at MWRI. USAID Ag policy water staff, WPAU, and EPIQ WPRP participated.

Periodic meetings of the mismatch working group were held throughout the quarter, as well as meetings with governorate and district level personnel.

An MWRI Steering Committee meeting was held on 1 March. The purpose of the meeting was to present a status report on Tranche IV water policy benchmarks. The MWRI Steering Committee members are: Eng. Gamil (Chairman), Dr. Mona El-Kady (MWRI), Dr. Bayoumi Attia (MWRI), Eng. Ramsis Bakhoum (MWRI), Eng. Hussein El-Atfy (MWRI), Dr. Craig Anderson (USAID) and Dr. J. Fredericks (EPIQ). Eng. Abdel Rahman Shalaby (MWRI) retired in January 2000. Dr. Bayoumi Attia has replaced him on the steering committee.

An ARD Raise team carried out an APRP mid-term assessment during February to March. A draft report was submitted for review and comment. The team leader was Tom Cusack. Seth Schick (resource economist) had primary responsibility for assessing the water activities.

### **Reports**

The following reports were issued:

- EPIQ Final Report No. 26: “Rice Water Use Policy Phase1: Water Monitoring and Evaluation Program” with appendices.
- EPIQ Final Report No. 27 “Review of the Agricultural Sector Model of Egypt (ASME97): 1999 Version”
- EPIQ Report No. 28: “Quarterly Report (October- December 1999)”
- EPIQ Report No. 29: “Annual Report (January – December 1999)”

### **Administrative Issues**

There were no major administrative issues during the reporting period.

### **III. ACTIVITIES PLANNED FOR NEXT QUARTER**

#### **Staffing**

Dr. Larry King will be starting his resident assignment as senior irrigation engineer in May. Adrian Hutchens will be starting his assignment as resident water resource economist in June.

#### **Benchmark Support**

##### **C.1: Reducing Mismatch of Irrigation Deliveries**

The following activities are planned for next quarter:

- Identify training needs for participants in the pilots including process documentation training.
- Finalize study tour proposal
- Follow-up agriculture and water data collection and analysis.
- Conduct MWRI workshop.

##### **C.2: Water Quality and Drainage Reuse**

The following activities are designed for the next quarter period:

- Conduct wastewater effluent quality monitoring in Mansoura region and along Salaam Canal.
- Organize field trips to verify the findings from the treatment plant priority study.
- Collect, modify, and edit reports prepared by each ministry representative.
- Organize a work discussion workshop in April to finalize each ministry representative's report.
- Continue preparing the benchmark study tour to USA.
- Look forward to and prepare candidate environmental benchmarks for Tranche V period.
- Continue developing benchmark summary policy document.

##### **C.3: Water Management at the Directorate Level**

WPAU is taking the lead on this benchmark. EPIQ will assist as necessary.

The following activities are planned for the next quarter:

- Perform 228 flow measurements at Sharkiya Directorate.
- Perform 288 flow measurements at Qena Directorate.
- Continue review of the results of the flow measurement program.
- Train Sharkiya Directorate staff on flow measurement techniques.
- Train Qena Directorate staff on flow measurement techniques.
- Complete installation of the three new telemetry sites in Sharkiya directorate.

#### **C.4: Irrigation Management Transfer**

The following activities are planned for the next quarter:

- The benchmark working group, under the leadership of the EPIQ IMT task manager will continue to meet every 2 to 3 weeks and report to the IMT Task Force.
- Final selection of initial pilot IMT project areas is expected by decision from the IMT Task Force (part of the Steering Committee).
- Multiple stakeholder focus group meetings will be held in the selected pilot program areas.
- An IMT benchmark Visioning Workshop will be held in June to develop consensus on future direction and various institutional roles regarding the IMT work plan. Participants will include private sector companies, representatives from water user organizations, senior officials from MWRI, and leaders from governorates, in addition to members of the benchmark working group.
- Study on criteria and assessment of land classifications and tenureship patterns (a benchmark requirement) will be undertaken, in terms of IMT potential and constraints.
- Study on secondary-level irrigation technical rehabilitation requirements (a benchmark requirement) will be undertaken for the canals finally selected as pilot program areas.
- Final arrangements for an international study tour during the third quarter of 2000 will be made, including itinerary, participants, and budgeting.
- IMT Working Group to assist the Law 12 Working Group through recommendations regarding present and possible future constraints to IMT, methods and strategies to overcome the identified constraints, and concrete legal amendment recommendations.
- The Working Group will prepare a mid-term benchmark status report by June.

#### **C.5: Revision of Law 12**

The following activities are planned for the next quarter:

- Review water laws in other countries having conditions similar to Egypt.
- Determine areas of changes and amendments to law 12 after consultation with all concerned parties in MWRI.
- Conduct a MWRI Work Group Feedback meeting.
- WPAU-EPIQ work group will consolidate Sector input into a proposed water law revision report to be submitted to the MWRI Task Committee.

#### **Studies and Other Activities**

##### **Sugarcane Water Use Policy Implementation (MWRI/MALR)**

The following activities are planned for next quarter:

- Follow-up water data collection program.

##### **GIS Study**

This study is being carried out by MWRI. EPIQ will assist as required.

### **TA Support**

As part of the work plan development program, the EPIQ team will continue to identify possible TA to support the Tranche IV activities.

### **Other Activities**

Assist USAID, DT2, WPAU, and MWRI in evaluation of training needs to support the policy reform program.

### **Administration**

Mobilization of Larry King and Adrian Hutchens.

#### **IV. PROBLEMS AND ISSUES**

No problems at this time.

USAID signed a MAARD agreement with IRG extending the EPIQ WPRP through September 2001 with a one-year option period through September 2002.

## V. IMPORTANT TRIPS, VISITS AND MEETINGS

DATE	LOCATION	PURPOSE	PARTICIPANTS
Weekly	APRP Dokki/ MWRI	APRP Coordination Meeting	USAID; APRP TA Teams
Weekly	MWRI	Law 12 work group coordination meeting	WPAU/EPIQ law 12 Working Group
Bi-weekly	MWRI / EPIQ	Waste water reuse task group meeting	Z. Zhu, Dr. Elassiouty, Dr. Khattab (EPIQ) Dr. Seham (MOHP), Dr. Riad (MALR), Dr. Gamal (MEA), Eng. Magda, Eng. Mohsen (NOPWASD), Eng. Atfy, Dr. H. Kandil and Eng. Y. Abdel Aziz (MWRI)
Jan 19	MWRI / Cairo	Discuss World Bank/KfW IIP Project Training Program	Dr. R. Cardinalli (EPIQ) Eng. Terry Spencer (IIP) Eng. Hassan Shoumann (IIP)
Jan 23	MWRI/EPADP	Discuss IMT drainage component	Dr. R. Cardinalli (EPIQ) Eng. Nasser Ezzat (WPAU) Dr. Md. Fathy (EPADP) Dr. Samir Ahmed (EPADP)
Jan 24	MWRI / Cairo	IMT discussion with Mechanical & Electrical Dept. chairman	Dr. R. Cardinalli (EPIQ) Eng. Nasser Ezzat (WPAU) Eng. Md. Askar (MED)
Jan 24	PMU office	MISD work group meeting	J. Fredericks, Dr. Mahdy, Dr. Ragab (EPIQ) Eng. Elwan (MWRI) Mr. Nour (PMU) J. Gleason and S. Joyce (RDI)
Jan 26	MWRI / Cairo	IMT work group meeting	Dr. R. Cardinalli (EPIQ) Eng. Nasser Ezzat (WPAU) Eng. Essam Barakat (IAS) Eng. A.R. Shalaby (Min. Office) Dr. Tarek Abdallah (Horiz. Expansion) Dr. Mahmoud Moustafa (EPADP) Eng. Ali Khalil (MED)

<b>DATE</b>	<b>LOCATION</b>	<b>PURPOSE</b>	<b>PARTICIPANTS</b>
			Eng. Hussein el Hoteiby (ID) Eng. Amira el Hady (WPAU) Eng. Moamen el Sharkawy (WPAU)
Jan 27	MWRI/ Cairo	EPIQ Admin Coordination	K. Ames, EPIQ Home Office Administrator EPIQ Staff Eng. Gamil (WPAU)
Jan 31	MWRI/Cairo	Briefing with EPIQ Environmental Transboundary Opportunity and Constraints Analysis Team	EPIQ Team Dr. Hescham El Badry Dr. G. Baecher Dr. R. Anderson
Feb 1	PMU office	MISD work group meeting.	J. Fredericks, Dr. Mahdy, Dr. Ragab (EPIQ) Eng. Elwan (MWRI) Mr. Nour (PMU) J. Gleason and S. Joyce (RDI) Eng. T. Nada and Eng. M. Hamed (WPAU)
Feb 2	MWRI/Cairo	APRP Mid-term Assessment Team Orientation	Eng. Gamil (WPAU) J. Fredericks (EPIQ) Assessment Team
Feb 7	Luxor	RDI workshop on sugar cane on-farm improved irrigation system	Dr. Mahdy (EPIQ), MALR participants
Feb 7	MWRI / Cairo	Meeting with IFAD Preparatory Mission for IIP Project	Dr. R. Cardinalli (EPIQ) Dr. Selam Gafsi (IFAD) Dr. Parvis Hekmat, (IFAD)
Feb 8	MWRI / Cairo	Meeting with Fayoum Project on Ideal District pilot concept	Dr. R. Cardinalli (EPIQ) Eng. Bart Pastor (EuroConsult)
Feb 8	MWRI / Cairo	IMT Working Group Meeting	Dr. R. Cardinalli (EPIQ) Eng. Nasser Ezzat (WPAU) Eng. Essam Barakat (IAS) Eng. A.R. Shalaby (Min. Office) Dr. Tarek Abdallah (Horiz. Expansion) Dr. Mahmoud Moustafa (EPADP) Eng. Ali Khalil (MED) Eng. Amira el Hady

<b>DATE</b>	<b>LOCATION</b>	<b>PURPOSE</b>	<b>PARTICIPANTS</b>
			(WPAU) Eng. Moamen el Sharkawy (WPAU)
Feb 14	Ismalia	Water quality workshop and visit to wastewater afforestation project.	J. Fredericks, Z. Zhu, Dr. Ellassiouty, Dr. Khattab, and Dr. L. King (EPIQ) Eng. N. Ezzat, Eng. M. Hamed, Eng. T. Nada (WPAU) Eng. Y. Abdel Aziz, Dr. H. Kandil, Eng. H. El-Atfy (MWRI) Dr. M. Riad, Eng. M. El Barkly (MALR) Eng. M. Mohsen (NOPWASD) Dr. S. Hendy (MOHP) Dr. A. Gamal (MEA) Dr. F. El-Gohary (NRC)
Feb 14	Sharkaiya Gov.	Field Trip Qemri BCWUA as possible IMT pilot area. Meetings with Governorate staff.	Eng. Essam Barakat (IAS) Eng. A.R. Shalaby (Min. Office) Dr. Tarek Abdallah (Horiz. Expansion) Dr. Mahmoud Moustafa (EPADP) Eng. Ali Khalil (MED) Eng. Amira el Hady (WPAU) Eng. Moamen el Sharkawy (WPAU)
Feb 14	MWRI / Cairo	Discussion on IMT Benchmark institutional development	Dr. R. Cardinalli (EPIQ) Eng. A. R. Shalaby (MWRI)
Feb 14	MWRI / Cairo	Discussion regarding APRP Mid term Assessment Mission and water policy benchmarks	Dr. R. Cardinalli (EPIQ) Eng. Seth Shick, (Consultant), Eng. M.H. Kamal (Consultant)
Feb 14-16	Qena	Water Management Flow Measurement Program	Eng. Sarawat Fahmy (WPAU) Eng. S. Abu Zeid , Eng. A. Hafez (MSM) Eng. M. Abu Krisha (Undersecretary)& staff
Feb 15-16	Aswan / Abu Simbel / Toushka	IMT field trip to Toushka	Dr. R. Cardinalli (EPIQ) Eng. Nasser Ezzat (WPAU) Eng. A.R. Shalaby

<b>DATE</b>	<b>LOCATION</b>	<b>PURPOSE</b>	<b>PARTICIPANTS</b>
			(MWRI) Eng. Essam Barakat (IAS) Toushka officials
Feb 16-17	Agricultural Club (MALR)- Dokki	MISD workshop	MISD Working Group
Feb 17	MWRI / Cairo	Meeting with IIE/DT-2 regarding international study tour for IMT	Dr. R. Cardinalli (EPIQ)
Feb. 18	MWRI	Meeting with Dr. Dia El Quosy concerning New Land Laws	Dr. Ellassiouty (EPIQ) Dr. El Qousy (MWRI)
Feb 21	Fayoum	Waste water reuse team visit to two pilot sites of in-situ (in-drain) drainage treatment conducted by Harza Team	Z. Zhu, Dr. Khattab (EPIQ) J. Hendrich jr., P. Saunders (Harza)
Feb 22	Salaam Canal	APRP MID term assessment team to visit Salaam Canal	Z. Zhu, Dr. Khattab (EPIQ) S. Schick, T. Cusuck (Consultants) R. Parks (APRP) C. Anderson (USAID)
Feb 23	Beheira	MISD coordination field trip	Dr. L. King, Dr. Mahdy, Dr. Ragab (EPIQ) J. Gleason (RDI), Eng. M. Hamed, Elmargooshi (WPAU) K. Ghoneim (Under Secretary MWRI) & staff, Abouelfetoyh Elkhamisis (Gen'l Dir. Ag. ext.)
Feb 23	Sharkaiya Gov.	IMT field trip to Shebab canal	Dr. R. Cardinalli (EPIQ) Eng. Nasser Ezzat (WPAU) Eng. Essam Barakat (IAS) Eng. A.R. Shalaby (Min. Office) Dr. Tarek Abdallah (Horiz. Expansion) Dr. Mahmoud Moustafa (EPADP) Eng. Ali Khalil (MED) Eng. Amira el Hady (WPAU) Eng. Moamen el Sharkawy (WPAU)
Feb 23-24	Mansoura region	Waste water reuse field trip to prepare wastewater effluent quality inspections and investigate the financial	Z. Zhu, Dr. Ellassiouty, A. Hutchens (EPIQ) S. Hindy, R. Yossef Gouda, Mr. M. Abdel

<b>DATE</b>	<b>LOCATION</b>	<b>PURPOSE</b>	<b>PARTICIPANTS</b>
		mechanism and sustainability of GEOPWASD	Nabi (MOHP)
Feb 24	MWRI / Cairo	Meeting IIP consultant regarding Mid-Term review preparation and participatory irrigation management	Dr. R. Cardinalli (EPIQ) Ms. Elvira Ganter (KfW consultant)
Feb 24	Sharkia	MISD field coordination meeting.	Dr. L. King, Dr. Ragab (EPIQ) Eng. T. Nada, Eng. M. Hamed and Elmargooshi (WPAU) Eng. Mohamed Foad (Abou Kebir Irrig. Dist.)
Feb 26	Beni-Suef	MISD field coordination meeting.	Dr. L. King, Dr. Ragab (EPIQ) Eng. T. Nada, Eng. M. Hamed and Elmargooshi (WPAU) Irrigation local staff
Feb 27	MWRI / Cairo	Meeting with IIP consultant regarding staff training requirements in IIP	Dr. R. Cardinalli (EPIQ) Eng. Terry Spencer (IIP)
Mar 1	MWRI/Cairo	Steering Committee Meeting	Steering Committee Members Eng. Gamil (Chairman) C. Anderson (USAID) Dr. Wadie Fahim (USAID) J. Fredericks (EPIQ)
Mar 1	MWRI	Law 12 meeting to identify legislation necessary for establishing farmers' organizations and Private Sector involvement in irrigation and drainage	Eng. Sarwat, Eng. Nasser (WPAU) Dr. Ellassiouty, Eng. Maher, Dr. Badran and Mr. A. Hutchens (EPIQ). Eng. Yehia Abdel Aziz (MWRI consultant)
Mar 6	Beheira / Alexandria	Field trip to South Tahrir and Beheira for IMT benchmark	Dr. R. Cardinalli (EPIQ) Eng. Nasser Ezzat (WPAU) Eng. Essam Barakat (IAS) Eng. A.R. Shalaby (Min. Office) Dr. Tarek Abdallah (Horiz. Expansion) Dr. Mahmoud Moustafa (EPADP) Eng. Ali Khalil (MED) Eng. Amira el Hady

<b>DATE</b>	<b>LOCATION</b>	<b>PURPOSE</b>	<b>PARTICIPANTS</b>
			(WPAU) Eng. Moamen el Sharkawy (WPAU)
Mar 6-7	Qena	MISD field coordination	W. Fahim (USAID) L. King, Dr. Ragab (EPIQ) J. Gleason (RDI) Eng. T. Nada, Eng. M. Hamed and Elmargoushi (WPAU) MWRI/MALR local staff
Mar 7	MWRI	Work Group meeting to present proposed modifications of law 12	WPAU, EPIQ, MWRI key officials (16 persons)
Mar 7	Sharkiya	Water Management Flow Measurement Program	Eng. S. Abu Zeid , Eng. A. Hafez (MSM) Eng. M. El Warraky (Undersecretary) & staff
Mar 12	Central Directorate for Water Distribution (MPWRI)	MISD work group meeting	L. King, Dr. Mahdy, Dr. Ragab (EPIQ) Eng. Elwan (MWRI) J. Gleason and S. Hussein (RDI) Eng. T. Nada, Eng. M. Hamed and Elmargoushi (WPAU)
Mar 13-14	Tanta	IMT Focus Group Meeting on farmers ability to pay for O&M	Dr. R. Cardinalli (EPIQ) A. Hutchens (EPIQ) Eng. Essam Barakat (IAS) 26 farmer leaders from Kafr el Sheikh, Qemri and South Tahrir 20 field levels officials from Irrigation Department and Drainage Authority
Mar 20	USAID/Cairo Wastewater Dept	Waste water reuse USAID coordination meeting	Z. Zhu, Hutchens (EPIQ) M. Ruslan (USAID)
Mar 21	Beheira	MISD Field Coordination Meeting	Dr. Mahdy, Dr. Ragab (EPIQ) J. Gleason (RDI), Elmargoushi (WPAU) , Kamal Ghoneim (Undersecretary MWRI) & staff M. Meneisi (Undersecretary MALR) & staff.

<b>DATE</b>	<b>LOCATION</b>	<b>PURPOSE</b>	<b>PARTICIPANTS</b>
Mar 26	MWRI / Cairo	Meeting to discuss status and strategy of IMT benchmark	Dr. R. Cardinalli (EPIQ) Eng. Essam Barakat (IAS) Eng. A.R. Shalaby (Min. Office)
Mar 27	Beni-Suef	MISD Field Coordination Meeting	Dr. Mahdy, Dr. Ragab (EPIQ), S. Joyce (RDI), W. Gamil (Undersecretary MWRI) & staff, S. Fayed (General Director MALR)& staff
Mar 28	Sharkia	MISD Field Coordination Meeting	Dr. Mahdy, Dr. Ragab (EPIQ), J. Gleason (RDI), Eng. T. Nada (WPAU), Eng. M. Elwarraki (Undersecretary MWRI) & staff, M. Elgamal (Undersecretary MALR) & staff.

## VI. STAFF LEVEL OF EFFORT

### Resident Staff

Name	Position
<b>Expatriate</b>	
Dr. Jeff Fredericks	Chief of Party
Greg Olson	Administrative Officer
Dr. Zhongping Zhu	Senior Water Resources Engineer
TBA	Senior Irrigation Engineer
TBA	Senior Water Economist
Dr. Robert Cardinalli	Senior Sociologist
<b>Local Egyptian</b>	
Dr. Ahmed Fakhry Khattab	Co-Team Leader
Dr. Ibrahim Elassiouti	Senior Water Resources Mgmt. Specialist
Dr. El-Sayed Mahdy	Economist
Eng. Ragab Abdel Azim	Drainage Engineer

### Short Term Staff

Name	Position
<b>Expatriate</b>	
Dr. John Keith	Water Resource Economist
Dr. Larry King	Senior Irrigation Engineer
Adrian Hutchens	Water Resource Economist
Margaret Elliot	Technical Writer
Jeremy Salucka	Technical Editor
Kristin Kent	Technical Editor
LA Frank	Technical Editor
<b>Local Egyptian</b>	
Abdel Rahim El-Mahdy	Interpreter/Translator
Hussein Elwan	Irrigation Management Specialist
Sanaa Abdel Rashid	Water Data Analysis Specialist
Yehia Abdel Aziz	Senior Water Quality Specialist
Hussein El Atfy	Senior Water Policy Specialist
Dr. Hesham Kandil	Senior Water Quality Specialist
Siham Hendy	Senior Public Health Specialist

Name	Position
Dr. Mamdouh Riad	Senior Forestry Specialist
Magda Gaballa	Senior Wastewater Treatment Specialist
Mohsen Mamdouh	Senior Wastewater Treatment Specialist
Ahmed Gamal Eldin	Senior Environmental Specialist
Amr Hafez	Telemetry Specialist
Alaa Hassan	Computer Software Specialist
Soliman Abu Zeid	Senior Water Management Specialist
Abdel Rahman Shalaby	Senior Institutional Policy Specialist
Essam Barakat	Senior Participatory Irrigation Management Specialist
Ahmed Maher Ghydan	Senior Irrigation Specialist
Dr. Mohamed Badran	Legal Specialist
Dr. Mohamed Rami Mahmoud	Water Policy Information Specialist

## VII. STATUS OF FINANCES AND EXPENDITURES

### Financial summary for 1st quarter 2000 (January- March 2000)

	<b>Itemized Budget</b>	<b>Prior Claimed</b>	<b>Current Claim</b>	<b>Claims to Date</b>	<b>Remaining Balance</b>	<b>Budget Claimed</b>
Direct Labor	\$5,269,975	\$3,351,568	\$235,728	\$3,587,295	\$1,682,680	68%
Travel and Transportation	\$448,658	\$193,807	\$2,912	\$196,719	\$251,939	44%
Per Diem	\$221,277	\$158,399	\$4,854	\$163,253	\$58,024	74%
Allowances	\$881,375	\$687,853	\$40,811	\$728,663	\$152,712	83%
Other Direct Costs	\$1,177,769	\$880,122	\$52,871	\$932,993	\$244,776	79%
<b>Total</b>	<b>\$7,999,054</b>	<b>\$5,271,749</b>	<b>\$337,175</b>	<b>\$5,608,924</b>	<b>\$2,390,130</b>	<b>70%</b>

Source: IRG Invoice #34

## VIII. LIST OF REPORTS

No.	NAME	DATE
1	APRP Tranche II Policy Benchmark Background Documentation	August 1997
2	Project Implementation Plan	October 1997
3	Annual Technical Progress Report (7 May-31 Dec 1997)	January 1998
4	Annual Work Plan (Jan.-Dec 1998)	April 1998
5	Quarterly Report (Jan.-March 1998)	April 1998
6	Assessment of Egypt's Rice Policy and Strategy for Water Management	June 1998
7	Egypt's Irrigation Improvement Program I. Performance Assessment II. Proposed National Strategy	June 1998
8	National Policy for Drainage Water Reuse	June 1998
9	Water User Association Formation Outside the Irrigation Improvement Program Area	June 1998
10	Hydrogeology of Deep Aquifers in the Western Desert and Sinai	August 1998
11	Quarterly Report (April-June 1998)	August 1998
12	WRRP Tranche III Benchmark Work Plan	November 1998
13	Quarterly Report (July-September 1998)	December 1998
14	Quarterly Report (October-December 1998)	January 1999
15	Quarterly Report (January-March 1999)	May 1999
16	Policies and Procedures for Free-Flowing Groundwater Management in Egypt's Western Desert	June 1999
17	Establishment of Branch Canal Water User Associations in the Egyptian Irrigation System	June 1999
18	Institutionalization of the Irrigation Advisory Service in the Ministry of Public Works and Water Resources	June 1999
19	Water Saving Through Utilization of Short Duration Rice Varieties: National Policy Package, 1999-2000	June 1999
20	Intermediate Drainage Reuse in Bahr Bagar Drain Basin	June 1999
21	Revision of Law 48 of 1982 for the Protection of the Nile River and its Waterways from Pollution	June 1999
22	Short Duration Rice Variety Pilot Program Results	July 1999
23	Quarterly Report (April- June 1999)	August 1999
24	Tranche IV Water Policy Benchmark Implementation Plan (FY 99/00)	November 1999
25	Quarterly Report (July - September 1999)	November 1999
26	Rice Water Use Policy Phase1: Water Monitoring and Evaluation Program with Appendices	December 1999
27	Review of the Agricultural Sector Model of Egypt (ASME97): 1999 Version	December 1999
28	Quarterly Report (October-December 1999)	January 2000
29	Annual Report (January - December 1999)	February 2000