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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**

**(APRIL– JUNE 1999)**

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**Water Policy Reform Program**

**International Resources Group**

**Nile Consultants**

**Winrock International**

**QUARTERLY REPORT**  
(APRIL– JUNE 1999)

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## I. SUMMARY

During the 2nd quarter, April to June 1999, the EPIQ TA team worked with USAID, MPWWR, MALR, WPAU and the other APRP TA units to complete the accomplishment of the eight APRP Tranche III water policy benchmarks:

- C.1: Main System Management Program Utilization
- C.2: Free Flowing Groundwater Management
- C.3: Branch Canal Water User Organizations
- C.4: Irrigation Advisory and Support Service
- C.5: Sugarcane Water Use Policies (MPWWR/MALR)
- C.6: Rice Water Use Policies (MPWWR/MALR)
- C.7: Intermediate Drain Water Reuse
- C.8: Water Quality Regulation-Law 48

Two of these benchmarks, C.5: sugar cane and C.6: rice, were joint benchmarks with the Ministry of Agriculture and Land Reclamation (MALR). The APRP MSM TA unit supervised activities for C.1: Main System Management.

Formal reports were prepared and issued by EPIQ/WPAU, which documented the benchmark activities and recommendations.

A workshop was held in Sharm El Sheikh, 11-12 June 1999, to present proposed strategies and policy recommendations for the Tranche III water benchmark activities to the MPWWR Steering Committee. The EPIQ, WPAU and MSM TA teams gave formal presentations to the participants. The workshop was attended by the Minister of MPWWR, members of the MPWWR Steering Committee, USAID, WPAU staff, representatives from the APRP TA teams and the EPIQ TA team.

The recommendations adopted at the Sharm El Sheik workshop by the MPWWR Steering Committee on the eight Tranche III benchmark topics were compiled in a document that was presented and approved by the Minister.

The APRP Monitoring, Verification and Evaluation Unit and USAID classified all of the eight Tranche III water policy benchmarks as met or exceeded.

### Specific Accomplishments:

C2. The MPWWR approved a policy package for reducing water loss and land degradation due to improper operation and management of free-flowing groundwater in the reclaimed areas of the Western Desert. A program for developing groundwater water user unions at Farafra Oasis was completed, with the formal organization of three groundwater water user unions (the first in Egypt). A final report that detailed the policy recommendations was submitted to the MPWWR

Steering Committee in June, and the recommendations approved by H.E. Minister MPWWR. The benchmark was evaluated as fully accomplished by MVE.

C.3. The MPWWR successfully introduced a policy for forming water user organizations above the mesqa level. Three branch canal water user associations (Qemri, Bahr el Dahram and Balaqtar) in the Nile Delta were formally registered with MPWWR. Process documentation reports were prepared on the three branch canals describing the formation of the organizations. O & M cost-sharing plans were prepared for two of the canals. A final report with recommendations for the benchmark was submitted to the MPWWR Steering Committee in June, and the recommendations approved by H.E. Minister MPWWR. The benchmark was evaluated as fully accomplished by MVE.

C.4. The MPWWR approved the institutionalization of the Irrigation Advisory and Support Service. A Ministerial decree was issued establishing the Irrigation Advisory and Support Services Central Directorate under the MPWWR. Necessary documents were submitted to the Central Authority for Organization and Management to establish an Irrigation Advisory and Support Services Central Directorate under the MPWWR. A final report on this process with recommendations was submitted to the MPWWR Steering Committee in June, and the recommendations approved by H.E. Minister MPWWR. The benchmark was evaluated as fully accomplished by MVE.

C.5 As part of the GOE effort to promote improved water management efficiency in Upper Egypt, improved irrigation technologies were installed on over 600 feddans of private commercial sugar cane area, including laser leveling and gated pipe delivery systems. A water-monitoring program was established and training was provided to farmers in the use of improved irrigation methods. The benchmark was evaluated as exceeded by MVE.

C.6. A national plan to extend the introduction of short duration rice varieties to the six rice-growing governorates (approximately 100,000 feddans) in the Delta was approved by MALR and MPWWR. Six specific canals were selected for extending the short duration rice variety pilot activities, one in each rice-growing governorate. Training and orientation of MPWWR irrigation sector staff, village extension staff and farmers continued. A final report describing the national plan with recommendations for the benchmark was submitted to the MPWWR Steering Committee in June, and the plan approved by H.E. Minister MPWWR. The benchmark was evaluated as fully accomplished by MVE.

C.7. The MPWWR established an intermediate drainage water reuse program for the Bahr Bagar Drain in Abou Hammad district as a model for other areas. Engineering, economic, social, and environmental assessments were conducted. An operations plan and tender documents for the pumps were prepared. A final report describing the intermediate reuse program with recommendations for the benchmark was submitted to the MPWWR Steering Committee in June, and the recommendations approved by H.E. Minister MPWWR. The benchmark was evaluated as fully accomplished by MVE.

C.8. A draft revision of Law 48 of 1982 and its by-laws governing water quality management to more effectively control discharge of wastes and wastewater into the Nile and its waterways was prepared by a MPWWR-led interministerial task committee. The task committee included

representatives from Ministries of Agriculture and Land Reclamation, Health and Population, Environment, Housing and New Communities, Industry and Public Works and Water Resources. EPIQ and WPAU provided technical assistance. The draft revision was presented to the Minister MPWWR. A final report with details of the draft revision and recommendations was submitted to the MPWWR Steering Committee in June, and the recommendations approved by H.E. Minister MPWWR. The benchmark was evaluated as fully accomplished by MVE.

### **Other Activities**

Greg Olson replaced Tom Burolla as EPIQ resident project administrator.

Several short term expatriate specialists helped support the EPIQ/WPAU activities during this reporting period: Dr. Larry King (expatriate groundwater management specialist) from 11 May to 21 June, Dr. Ramchand Oad (water measurement specialist) from 29 May – 11 June, Victor Kimm (expatriate environmental specialist) from 17 April – 7 May, Dr. John Wilkins-Wells (cost sharing specialist) from 1 May – 11 June, and Dr. Frank Hanigan (Water Policy Information Specialist) from 18 May – 2 June.

Richard Cobb (VP Winrock), Doug Clark (EPIQ Project Coordinator), and Dr. Assif Shaikh, (IRG President and CEO) made separate visits to the project during the Quarter.

Work continued developing the draft Tranche IV water policy benchmarks. There are five proposed Tranche IV water policy benchmarks covering the following topics:

1. Reducing Mismatch of Irrigation Deliveries
2. Water Quality and Drainage Reuse
3. Water Management at the Directorate Level
4. Irrigation Management Transfer
5. Revision of Law 12/1984 on Irrigation and Drainage

## **II. ACCOMPLISHMENTS DURING THE REPORT PERIOD**

### **Staffing**

The EPIQ resident team has a technical consulting staff of ten persons and an administrative support staff of eight people. Tom Burolla, resident project administrator, resigned in April. He was replaced by Greg Olson.

Several short term expatriate specialists supported the EPIQ/WPAU activities during this reporting period. This included Dr. Larry King (expatriate groundwater management specialist) from 11 May to 21 June, Dr. Ramchand Oad (water measurement specialist) from 29 May – 11 June, Victor Kimm (expatriate environmental specialist) from 17 April – 7 May, Dr. John Wilkins-Wells (cost sharing specialist) from 1 May – 11 June, and Dr. Frank Hanigan (Water Policy Information Specialist) from 18 May – 2 June. Margaret Elliott was hired on a short term contract to prepare a series of short one page success stories for the project. Dr. Kristin Kent and L.A. Lake were hired as technical editors to help with editing and formatting the final reports prepared in support of the Tranche III benchmarks.

The team was supported during the period by short term local Egyptian TA that included Eng. Essam Barakat (participatory irrigation management specialist), Eng Hussein Elwan (irrigation management specialist), Eng. Nagati (groundwater management specialist), Dr. Fatma Gory (local environmental specialist), Eng. Raouf Abou El-Nour (local sociologist/water user organization specialist), Dr. Mohamed Rami (computer modeling specialist), Dr. Mohhamed Mohieddin (sociologist), Dr. Fouad Abdulah (facilitator/trainer), a water measurement team for the rice pilot activity at Sidi Gamma, an ag economic survey team for the rice pilot activity, a water measurement team for the free flowing well benchmark, and a drainage measurement team for the intermediate use benchmark. Abdel Rahim El-Mahdy assisted as interpreter/translator for several of the EPIQ sponsored focus/workshop meetings.

Richard Cobb (VP Winrock) visited the EPIQ project during the first week in April. He met with the Minister MPWWR and R. Brown (USAID Mission Director) as well as with USAID Ag Policy staff, the EPIQ and WPAU teams.

Doug Clark (EPIQ Project Coordinator) visited Egypt from 10-18 June. He participated in the final Tranche III water policy workshop held in Sharm El Sheik. He also met with Minister MPWWR and R. Brown (USAID Mission Director) during his visit.

Dr. Assif Shaikh, IRG President and CEO, visited the EPIQ Project on 10 May for discussions and a briefing on the status of the EPIQ project activities.

### **Benchmark Support**

The Memorandum of Understanding (MOU) between USAID and GOE for Tranche III was signed on 27 September 1998. The Tranche III memorandum included 29 policy benchmarks to be completed by 30 June 1999. The MPWWR has sole responsibility for accomplishment of six

of the benchmarks. Two of these benchmarks, rice and sugar cane, are joint benchmarks with the Ministry of Agriculture and Land Reclamation (MALR). The Tranche III water benchmarks were approved by the MPWWR Steering Committee and HE Minister MPWWR.

The water policy benchmarks for Tranche III are:

- C.1: Main System Management Program Utilization
- C.2: Free Flowing Groundwater Management
- C.3: Branch Canal Water User Organizations
- C.4: Irrigation Advisory and Support Service
- C.5: Sugarcane Water Use Policies (MPWWR/MALR)
- C.6: Rice Water Use Policies (MPWWR/MALR)
- C.7: Intermediate Drain Water Reuse
- C.8: Water Quality Regulation-Law 48

The EPIQ team will be working with several of the APRP TA teams to support the accomplishment of the water benchmarks. The MSM TA team is taking the lead on C.1: Main System Management Program Utilization; the WPAU is taking the lead on C.8: Water Quality Regulation-Law 48; and the EPIQ team is taking the lead with support from WPAU and Greencom/WCU on the remaining six water benchmarks. RDI and PMU are working with EPIQ, WPAU and Greencom/WPAU on the rice and sugarcane benchmarks.

## **C.2: Free Flowing Groundwater Management**

Dr. F. Khattab replaced Dr. Tom Ley as task manager. Eng Saleh Nour and Dr. F. Khattab have primary responsibility for this activity for the EPIQ team. Two short term specialists have been assigned to assist with the activity, Dr. Larry King, expatriate groundwater management specialist, and Eng. Raouf Abou El-Nour, local sociologist/water user organization specialist.

The major accomplishments during this period were:

- A field trip was conducted by Eng. Saleh Nour and Dr. Larry King, expatriate water resources management specialist, and Dr. Taher Hassan, RIGW senior hydrogeologist, on 4-7 April, 1999 to the New Valley Oases of El-Kharga, El-Dakhla and El-Farafra. Dr. John Keith, water resources economist (EPIQ/WPRP), joined the group in El-Farafra Oasis on 5<sup>th</sup> April 1999. During this trip the following were accomplished:
  - Made visits to some pumped wells in El-Kharga Oasis and El-Zayat reclamation areas, and to a number of flowing wells and drainage lakes in El-Dakhla, West Mawhub and West Qasr El-Farafra areas, as well as Karawein plain in Eastern Farafra. Areas where unofficial irrigation outside the command areas in El-Farafra using drainage water (about 8000 fed.) were also visited.
  - Met with Eng. M. Ibrahim, Under Secretary of MPWWR in the Western Desert, Geologist Nagati, Manager of NVWRDD and engineer Mohamed Toleib, irrigation

engineer, to discuss the current status of the free-flowing well maintenance and management activities in El-Farafra area.

- Met with Dr. M. Raafat, Chief of El-Farafra City Council, Mr. M. Desouky, Chief of PBDAC branch in El-Farafra and Mr. A. Abdel Hafeez, representative of New Valley AG Dept. to discuss the availability of aids, incentives and credits to the farmers in the New Valley reclaimed areas. Discussion indicated that short and medium term credits are available to landholders for cultivation needs provided that they have ownership cards (agriculture Hiaza cards).
- A second field trip was conducted by Eng. Raafat Abu El-Nour, local sociologist and Eng. Saleh Nour, (EPIQ/WPRP) to El-Farafra Oasis via El-Kharga Oasis on 12-14 May, 1999. In El-Farafra Oasis, Dr. J. Fredericks (COP/EPIQ/WPRP), Dr. Morsi (MVE Unit) and WCU film team, joined the group. During the field trip, the followings were carried out:
  - Met with Geologist Nagati, manager of NVWRDD, and completed the certification of the Water User Unions (WUUs) established at well #7,16 and 18 in West Qasr El-Farafra.
  - Met with Dr. Raafat, chief of El-Farafra City Council, to discuss arrangements for the ceremony for handing over the certificates of WUUs.
  - Met with members of boards of the WUUs at well sites of 7,16 and 18.
  - Attended the certification handing over ceremony held at El-Farafra City Council building on 13<sup>th</sup> May 1999.
- Completed data collection of West Qasr El-Farafra area regarding irrigation and drainage network, well discharges and pressures, location and area of cultivated lands in and outside the command areas, cost of well head rehabilitation and water measurement structures.
- Alternative strategies, including new well control technologies, evaluated.
- Drainage practice and drainage reuse evaluated.
- Prepared, together with WCU, a plan for a public awareness campaign regarding both the problems of groundwater scarcity and free-flowing condition.
- Evaluated economic incentives, credits, cost sharing for structural improvements, which can reduce water wastage.
- A program for developing groundwater water user unions at Farafra Oasis was completed, with the formal organization of three groundwater water user unions (the first in Egypt).
- A report was prepared describing the recommended policy package and procedures for management of the free-flowing groundwater.
- The GW group attended the EPIQ/WPRP workshop held in Sharm El-Shiekh on June 11-12, 1999, and presented proposed policy recommendations on the Tranche III C.2 Benchmark on “Free-Flowing Groundwater Management in the Western Desert”.
- The MPWWR approved a policy package for reducing water loss and land degradation due to improper operation and management of free-flowing groundwater

in the reclaimed areas of the Western Desert. A final report that detailed the policy recommendations was submitted to the MPWWR Steering Committee in June, and the recommendations approved by H.E. Minister MPWWR.

- The benchmark was evaluated as fully accomplished by MVE.

### **C.3: Branch Canal Water User Organizations**

Dr. Robert Cardinalli (task manager) with local TA support from Eng. Essam Barakat is responsible for this activity for the EPIQ team. STTA consultant Dr. John Wilkins-Wells completed preparation of cost-sharing plans with two BCWUAs.

The major accomplishments during the reporting period included:

- Ministerial decrees issued at the governorate level formally establishing the legitimacy of the BCWUAs organized at Qemri, Bahr el Dahram and Balaqtar branch canals.
- Organizing process on three BCWUAs in Nile Delta completed, including election of BCWUA Executive Councils.
- Detailed Process Documentation on 3 BCWUAs completed by IAS BCWUA organizing field teams and submitted to Steering Committee.
- BCWUA O&M Cost-Sharing Plans were successfully prepared for Qemri and Bahr el Dahram branch canals.
- MPWWR Action Team on Participatory Irrigation Management continued to meet on monthly basis, and planned for training of water users and field agents.
- Benchmark final report prepared and submitted to EPIQ Steering Committee, endorsed to MPWWR minister, and forwarded to USAID for verification.
- The benchmark was evaluated as fully accomplished by MVE.

### **C.4: Irrigation Advisory and Support Service**

Dr. Robert Cardinalli (task manager) with local TA support from Eng. Essam Barakat is responsible for this activity for the EPIQ team.

The major accomplishments during the reporting period included:

- Completion of analysis of current IAS organizational structure, and recommendations for new structure as IAS Central Directorate under Irrigation Department.
- Completed IAS organizational restructure process for all levels of internal management (central directorate, directorate and field offices) and staffing plan with relevant job descriptions.
- Prepared all necessary documents required by the Central Authority for Organization and Management to establish an Irrigation Advisory Service Unit in the MPWWR. Documents were formally submitted by the Minister of MPWWR to the Central Authority in June.
- The benchmark was evaluated as fully accomplished by MVE.

### **C.5. Sugarcane Water Use Policies (MPWWR/MALR)**

Dr. John Keith (task manager) and Dr. El-Sayed Mahdy have primary responsible for this activity for the EPIQ team with short-term TA support from Eng. Hussein Elwan. Dr. T. Ley assisted prior to his departure. A joint working group with representatives from MPWWR, MALR, EPIQ, RDI and PMU was formed to study strategies on water management alternatives for sugar cane for Tranche II. For Tranche III activities this group has been expanded to include representatives from WPAU, GreenCom, and WCU. Dr. John Keith, EPIQ economist, chairs the working group. Members of the sugarcane working group include: Dr. J Keith (EPIQ), Dr. S. Mahdy (EPIQ), Dr. T. Ley (EPIQ), Dr. J Gleason (RDI), Dr. S. Hussein (RDI), Dr. A. Allam (MALR-SCRI), Eng. H. Elwan (MPWWR), Mr. M. Nour (PMU), Dr. A. El-Berry (MALR-AEnRI), Dr. A. Behery (MALR-AenRI), Dr. T. Rizk (National Consulting Firm), Dr. C. Anderson (USAID – observer), Eng. M. Mabrouk (USAID) and Eng T. Nada (WPAU).

Dr. Ramshand Oad, the short term technical support and water measurement specialist, Colorado State University, reviewed and discussed the installation of measurement devices and monitoring programs with members of the MPWWR and their representatives on the SCWG.

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

- Completion of the installation of gated pipe irrigation systems, including laser leveling, on 497 feddans of sugarcane on four canals in the Luxor and Qena Directorates.
- Completion of training workshops for farmers under the direction of Dr. A. Behery. APRP/RDI/EPIQ members attended these workshops.
- Installation of totalizing meters on each pump on the pilot areas.
- Complete installation of weirs on two canals, and partial installation of weirs on two other canals (allowing for first irrigation of sugarcane fields). Completion of the latter two weirs is expected in August, together with installation of telemetry devices.
- Farmer contracts for repayment were signed
- A draft report, to be published by RDI, was prepared, describing all the activity associated with the pilot program. This report was presented at the EPIQ Tranche 3 Benchmark Workshop.
- A video introducing the gated pipe system to farmers was developed by GreenCom and the WCU and presented at the EPIQ Tranche 3 Benchmark Workshop.
- Two MVE inspection tours were held.
- The benchmark was evaluated as exceeded by MVE.

### **C.6: Rice Water Use Policies (MPWWR/MALR)**

Dr. John Keith (task manager) and Dr. El-Sayed Mahdy have primary responsible for this activity for the EPIQ team with short-term TA support from Eng. Hussein Elwan. A joint working group with representatives from MPWWR, MALR, EPIQ, RDI and PMU was formed to study strategies on water management alternatives for rice for Tranche II. For Tranche III activities, this group has been expanded to include representatives from WPAU, GreenCom, and WCU. Dr. John Keith, EPIQ economist, chairs the working group. Members of the rice working

group include: Dr. J. Keith (EPIQ), Dr. S. Mahdy (EPIQ), Dr. J. Gleason (RDI), Dr. S. Hussein (RDI), Dr. A. Tantawi (MALR-RRI), Eng. H. Elwan (MPWWR), Mr. M. Nour (PMU), Dr. C. Anderson (USAID – observer), and Eng. M. El-Margoushy (WPAU).

Dr. Ramshand Oad, water measurement specialist, Colorado State University, made field visits with members of the Working Group to observe the installation of water measurement and monitoring devices on the twelve canals (six demonstration canals and six control canals).

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

- The final draft of the Sidi Gamee Pilot report was completed.
- The final draft of the national plan for short duration rice varieties, incorporating MPWWR and MALR comments, was completed and approved, satisfying the verification indicator for this Benchmark.
- 24 automatic water level recording devices were installed on the demonstration and control canals in six Governorates.
- All water level recorders was completed were calibrated.
- Water flow and water level data collection programs were initiated, including on-the-job training for local data collection teams.
- Short duration variety seeds were distributed to the demonstration canals.
- Farmer information/advisory workshops were held for the seedling establishment and transplanting of short duration varieties in each village on the six demonstration canals, at which APRP/RDI/EPIQ TA were present.
- A final report describing the national plan with recommendations for the benchmark was submitted to the MPWWR Steering Committee at the Sharm El Sheik workshop in June, and the plan approved by H.E. Minister MPWWR.
- The benchmark was evaluated as fully accomplished by MVE.

### **C.7: Intermediate Drain Water Reuse**

The EPIQ drainage reuse task group members, Dr. Zhongping Zhu (task manager), Dr. Ahmed Fakhry Khattab, Dr. Ibrahim Elassiouti, and Eng. Ragab Azim, all participated in the activities conducted under this benchmark during the report period. Dr. Elsayed Mahdy, Dr. John Keith, and Dr. Robert Cardinalli of EPIQ also contributed to the production of the benchmark report.

Eng. Hussin Elwan (water management expert), Dr. Samia Galal (environmentalist), and Dr. Mohhamed Mohieddin (sociologist) were the local short-term consultants assisting with the benchmark ctivities during this period.

Conducted activities during the report period included:

- Investigating drainage generation and reuse potential in Fakous and other three neighboring districts in the middle Bahr Bagar drain basin.
- Organizing a training course of intermediate reuse pumping operations in Abou Hammad Irrigation District.
- Organizing a pump test at Elazzazi reuse pump station in Abou Hammad.

- Drafting, editing, and submitting the Benchmark C7 implementation report. Preparing draft chapters of the benchmark final report, including introduction, Bahr Bagar drain basin overview, Abou Hammad reuse potential, Abou Hammad reuse operations plan, intermediate reuse benefit-cost analysis, and intermediate reuse environmental assessment.
- Presenting the Benchmark C7 implementation report and recommendations to the MPWWR Steering Committee at the final Tranche III workshop in June held at Sharm El Sheik.
- Recommendations were approved by H.E. Minister MPWWR.
- The benchmark was evaluated as fully accomplished by MVE.

### **C.8: Water Quality Regulation-Law 48**

Eng. Nasser Ezzat, WPAU task manager, and Dr. Ibrahim Elassiouty, EIPQ coordinator, are responsible for this activity. Short-term TA support is being provided by Dr. Fatma El-Gohary, local environmental specialist, and Mr. Victor Kimm, expatriate environmental specialist.

Activities carried out by the WPAU/EIPQ team during the report period were:

- A workshop sponsored by EIPQ/WPAU was held in Cairo at the Conrad International, on May 3, 1999 to discuss the proposed amendments and review of Law 48 and its by laws. Representatives from USAID, Ministries of Agriculture and Land Reclamation, Health and Population, Environment, Housing and New Communities, Industry and Public Works and Water Resources attended.
- A draft revision of Law 48 of 1982 and its by-laws governing water quality management to more effectively control discharge of wastes and wastewater into the Nile and its waterways was prepared.
- The draft revision was presented to the Minister MPWWR.
- A final report with details of the draft revision and recommendations was submitted to the MPWWR Steering Committee in June, and the recommendations approved by H.E. Minister MPWWR.
- The benchmark was evaluated as fully accomplished by MVE.

### **Studies**

The terms of reference for the EIPQ task order is structured around a results package jointly designed by USAID and MPWWR consisting of integrated water policy and institutional reforms. To support this results package, the EIPQ team will carry out a number of studies. The primary focus of the studies is to develop future policy benchmarks. An agriculture water demand study is ongoing.

### **Agricultural Water Demand**

A working group was formed that will examine the structure of and the data used in the Agricultural Sector Model for Egypt (ASME) with respect to: (1) estimation of agricultural water demand and the shadow value of water in irrigated agriculture, (2) projected or expected impacts

of alternative policy changes, and (3) cropping pattern changes due to both policy and external perturbations. The working group is composed of Drs. Mansour, Siyam, Shaed (MALR), Bayoumi (MPWWR), Ms. Awatef and Evette (MALR Stat Center), Drs. Enders and Morsy (MVE), Gleason, Hussein (RDI), Keith (EPIQ). Keith chairs this working group. The technical subcommittee, composed of Keith, Gleason, Awatef, Evette, Bayoumi, and Morsy continued to review technical aspects of the model. Mr. Alexander Meuller of the Dutch Planning Project joined both the full Working Group and the technical subcommittee.

Activities carried out by the EPIQ Team were:

- Relevant publications concerning the ASME and other models of the Egyptian agricultural economy were collected and distributed to member of the technical subcommittee.
- Verification of the data base for 1995. Some errors were found which substantially affected the model solutions and permitted relaxing previously identified limiting constraints.
- Consistent input data for demand functions in the model were identified.
- Some data regarding new crops (sugar beets and alfalfa in particular) were identified as probably inaccurate and more accurate data will be found.
- Import and export constraints were identified as significant and will be examined for their effects on model solutions.

### **TA Support**

USAID and MPWWR have agreed to a third category of support under the EPIQ Task Order, which will use the EPIQ funds to help bring in expatriate TA to assist MPWWR in a few potential policy related areas not directly addressed in the EPIQ task order and the initial implementation work plan. These include short term TA to support preparation of MPWWR GIS Standards.

### **MPWWR GIS Study**

A study to assist MPWWR in establishing a policy on GIS standards and data has been requested by Egypt's National Survey Authority (ESA). The purpose of the study would be to recommend standards and specifications (hardware and software) for future GIS activities to ensure that its current investment in GIS technology is being wisely and efficiently utilized. The study is expected to serve as a baseline for preparation of a policy document within MPWWR on the introduction and use of GIS technology.

EPIQ provided Dr. Frank Hanigan (Water Policy Information Specialist) from 18 May – 2 June to assist MPWWR in preparing the framework for the study.

### **Tranche IV Benchmarks**

Work continued on developing the Tranche IV water policy benchmarks. Five benchmarks have been proposed and are under review:

- Reducing Mismatch of Irrigation Deliveries
- Water Quality and Drainage Reuse
- Water Management at the Directorate Level
- Irrigation Management Transfer
- Revision of Law 12

One of these benchmarks, mismatching, is being proposed as a joint benchmark with the Ministry of Agriculture and Land Reclamation (MALR). Several of the benchmarks are being proposed as multi-year benchmarks: mismatching, water quality, secondary canal system, and irrigation management transfer.

A preliminary mismatch working group, which included Eng. Hussein Elwan (MPWWR), Dr. A. Tantawi (FCRI), Dr. A. Allam (SCRI), Eng. M. Nour (PMU), Dr. Jane Gleason (RDI), and Drs. John Keith and Elsayed Mahdy (EPIQ) met to discuss possible approaches to systematically reducing mismatches between irrigation demands and water deliveries.

### **Workshops**

APRP/EPIQ sponsored workshops for farmers ready to establish seedlings and transplant those seedlings were held on the six demonstration canals for short duration rice varieties.

APRP/EPIQ sponsored workshops for farmers involved in the improved irrigation on sugarcane were held in Luxor and Qena.

EPIQ, with participation by IIE/DT-2, sponsored a one-week training course on Monitoring and Evaluation and Participatory Rural Appraisal for IAS and IIP field agents (25 participants) to carry out the Branch Canal Water User Association benchmark. The training was held in Tanta on May 8 - 13. Dr. Fouad Abdalla, EPIQ STTA consultant was engaged as the facilitator.

A workshop sponsored by EPIQ/WPAU was held in Cairo at the Conrad International, on May 3, 1999 to discuss the proposed amendments and review of Law 48 and its by laws. Representatives from USAID, Ministries of Agriculture and Land Reclamation, Health and Population, Environment, Housing and New Communities, Industry and Public Works and Water Resources attended.

A workshop was held in Sharm El Sheikh, 11-12 June 1999, to present proposed strategies and policy recommendations for the Tranche III water benchmark activities to the MPWWR Steering Committee. The EPIQ, WPAU and MSM TA teams gave formal presentations to the participants. The workshop was attended by the Minister of MPWWR, members of the MPWWR Steering Committee, USAID, WPAU staff, representatives from the APRP TA teams and the EPIQ TA team.

## **APRP/EPIQ Co-ordination**

Close co-ordination between the EPIQ team and other units of APRP, USAID and MPWWR continued.

WPAU, Greencom/WCU, and USAID staff routinely accompanied EPIQ TA staff on field trips.

Members of the EPIQ WPRP team participated in the weekly APRP co-ordination meetings and the monthly PPC meetings.

Regular (weekly) water group co-ordination meetings were held at MPWWR. Participation included members from WPAU, EPIQ WPRP, MSM, and Greencom/WCU. These meetings focused on development of Tranche IV benchmarks.

Regular Sugarcane and Rice Work Group meetings were held at APRP and MPWWR.

As part of its public awareness program, GreenCom/WCU worked with EPIQ/WPAU in preparing video documentation of a number of Tranche III benchmark focus group meetings and pilot activities

## **Reports**

The following reports were issued:

- **EPIQ Report No.16** “ Policies and Procedures for Free-Flowing Groundwater Management in Egypt’s Western Desert”
- **EPIQ Report No. 17** “ Establishment of Branch Canal Water User Associations in the Egyptian Irrigation System”
- **EPIQ Report No. 18** “ Institutionalization of the Irrigation Advisory Service in the Ministry of Public Works and Water Resources”
- **EPIQ Report No. 19** “ Water Saving Through Utilization of Short Duration Rice Varieties: National Policy Package, 1999-2000”
- **EPIQ Report No. 20** “ Intermediate Drainage Reuse in Bahr Bagar Drain Basin”
- **EPIQ Report No. 21** “ Revision of Law 48 of 1982 for the Protection of the Nile River and its Waterways from Pollution”

## **Administrative Issues**

The EPIQ Team was concerned with the following administrative issues during the reporting period:

- Tom Burolla, EPIQ resident expatriate administrator, resigned. He was replaced by Greg Olson.

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

#### **Staffing**

Short term expatriate and local TA to support Tranche IV benchmark activities and studies will be identified, approved and mobilized.

#### **Benchmark Support**

All activities in support of Tranche III water policy benchmarks have been successfully completed. Some assistance to MPWWR may be required in implementation of the benchmark policies and recommendations.

During the next quarter it is expected that the Tranche IV water policy benchmarks will be finalized and a MOU signed by USAID and GOE.

The five proposed Tranche IV water policy benchmarks include:

- Reducing Mismatch of Irrigation Deliveries
- Water Quality and Drainage Reuse
- Water Management at the Directorate Level
- Irrigation Management Transfer
- Revision of Law 12/1984 on Irrigation and Drainage

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

The following activities are planned for next quarter:

- Establish a formal Mismatch Working Group, composed of members from MPWWR, MALR, APRP, and EPIQ.
- Make an initial determination of the constraints which prevent or hinder the transfer of real-time information flow between farmers, MALR local personnel and MPWWR local personnel.
- Identify the appropriate levels at which to develop the information transfer system.
- Identify, if possible, one or more pilot areas in which to implement the transfer system.
- Finalize workplan.
- Prepare for Tranche IV benchmark startup workshop.

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

The following activities are anticipated for the next quarter:

- Develop the workplan for the Water Quality and Reuse benchmark.

- Review the literature of wastewater irrigation and related topics.
- Conduct field investigations to identify the main issues in the Water Quality and Reuse benchmark.
- Prepare for Tranche IV benchmark startup workshop.

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

WPAU is expected to take the lead on this benchmark. EPIQ will assist as necessary.

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

The following activities are planned for the next quarter:

- Initiate literature review on ITM.
- Conduct discussions with MPWWR staff to determine potential role of ITM
- Develop the workplan.
- Prepare for Tranche IV benchmark startup workshop.

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

WPAU is expected to take the lead on this benchmark. EPIQ will assist as necessary.

The following activities are planned for the next quarter:

- Develop the workplan.
- Prepare for Tranche IV benchmark startup workshop.

### **Studies and Other Activities**

On-going studies will be continued and new studies will be identified. On-going studies include the Agriculture water demand study and the GIS study. EPIQ will assist MPWWR in the implementation of the Tranche III benchmark activities involving rice and sugarcane.

### **Agricultural Water Demand**

The following activities are planned for next quarter:

- Technical subcommittee will make a final recommendation to the working group regarding the use of the ASME.
- A draft report providing a description of the model, its structure, and its data will be prepared.

### **GIS Study**

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

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

The following activities are planned for next quarter:

- Review water data and water data collection program
- Complete final report on the pilot program
- Continue coordinated oversight of extension of gated pipe systems to additional areas

### **Rice Water Use Policy Implementation (MPWWR/MALR)**

The following activities are planned for next quarter:

- Complete the Sidi Gamee Pilot report.
- Continue coordinated oversight of the short duration rice variety demonstration areas.
- Continue coordinated oversight and review of water data and water data collection program.

### **TA Support**

As part of the workplan development program, the EPIQ team will be identifying possible TA to support the Tranche IV activities.

### **Other Activities**

It is expected that a Water Policy group retreat will be held to present draft Tranche IV benchmark workplans and discuss potential studies and implementation activities.

### **Reports**

The following reports are expected to be completed during the next report period:

- Sidi Gamee Pilot report

### **Administration**

The following activities are planned for the next quarter:

- Begin search for replacement expatriate candidates for the senior irrigation engineer and economist position.
- EPIQ will assist USAID in preparing a project MAARD

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

Tranche III was successfully completed as scheduled on 30 June 1999.

The Tranche IV benchmark MOU should be signed in September 1999.

It is expected that APRP will be extended an additional 27 months from 30 June 2000 until 30 September 2002.

Tom Olson, Ag Policy Division Chief, is on medical leave in the US. Craig Anderson is acting division chief during his absence.

There are no other major problems or issues at this time.

## V. IMPORTANT TRIPS, VISITS AND MEETINGS

DATE	LOCATION	PURPOSE	PARTICIPANTS
Weekly	APRP Dokki/ MPWWR	APRP Coordination Meeting	USAID; APRP TA Teams
Apr 14	Abou Hammad	1. Arranging the intermediate reuse pump test, and 2. Investigating the reuse potential in Fakous and other three neighboring irrigation districts in the middle Bahr Bagar basin.	Dr. Khattab and Eng. Ragab of EPIQ.
May 25-27	Abou Hammad	1. Training local engineers on intermediate reuse operation schedules, and 2. Conducting pump test at Elazzazi Drain Pump Station.	Dr. Zhu, Eng. Ragab, and Dr. Fredericks of EPIQ, Eng. Mohamed of WPAU, and Eng. Elwan of Irrigation Sector.  Abou Hammad engineers and technicians including: Mohamed Abdalla, Reda Mahdi, Sayed Mansour, Foad Elzwahri, Elsayed Khalil, Mohamed Anwar Hemdan, Nabil Soielman, Abdel-Monem Osman, Torki Elsayed Farah, and Gamal Helmi.
5-8 Apr	Farafra Oasis	Review free flowing groundwater area and determine socioeconomic support availability	Keith, King, Khattab, Nour
8 Apr	FCRI	Discuss problems in funding and review the national rice plan	Mahdy, Keith, Elwan, Tantawi, Gleason
13 Apr	MPWWR	Review livestock sector of ASME	Keith, Ali (MALR)
13-15 Apr	Luxor, Qena	Review progress on the implementation of gated pipe; attend farmer meetings	Sugar Cane Working Group (SCWG) + Abou Krishna (MPWWR), Eng. Mourad (Sugar Factory)
28-29 Apr	Gharbia Kafr Elsheikh Beheira	Installing Automatic Recorders	Sanaa, Amr Hafez, Adel and directorates' Engineers
4-5 May	East Dakahlia Damietta Sharkia	Installing Automatic Recorders	Sanaa Adel and directorates' Engineers
12-14 May	Gharbia	To check the status of the	Eng. Elwan

DATE	LOCATION	PURPOSE	PARTICIPANTS
	Kafr Elsheikh Beheira East Dakahlia Damietta Sharkia	installed Automatic Recorders and to establish the flow measurement program	
31 May – 1 June	Luxor, Qena	Review progress on implementation of gated pipe and water monitoring	SCWG+ Abou Krisha (MPWWR), Eng. Mourad (Sugar Factory)
1-3 June	Gharbia Kafr Elsheikh Beheira	To review the flow measurements and calibration works	Dr. Ramchand Oad, Eng. Elwan, Eng. Ali Morsi
6-7 June	East Dakahlia Damietta Sharkia	To review the flow measurements and calibration works	Dr. Ramchand Oad, Eng. Sanna
7 June	Kafr EL-Sheikh & Behaira Governorates	Attending farmer's extension meetings concerning transplanting and ongoing farm operations	<u>KafrEl-Sheikh:</u> RWG, Dr. Rizk and his staff (RRTC), Director of El-Riad Ag. Admin., plus 50 <sup>+</sup> farmers. <u>Behaira:</u> RWG, Dr. Rizk and his staff (RRTC), Director of El-Mahmodia Ag. Admin., MAyor, Director of Police Dept., Director of Ag. Extension, plus 35 <sup>+</sup> farmers.
10-13 June	Sharm El Shiekh	Tranche III Workshop	EPIQ...
16-17 June	Luxor, Qena	Travel with MVE personnel to evaluate Tranche III accomplishments	SCWG + Abou Krisha (MPWWR), Eng. Mourad (Sugar Factory), Dr. Morsy (MVE)
15 June	Dakahlia Governorates and Damietta	Attending farmer's extension meetings concerning transplanting and ongoing farm operations	<u>Dakahlia:</u> Mahdy (EPIQ), Rashid Co-ordinator of Rice Work in Dahkahlia, El-Sheety & El-Shazly (RRTC), El-Isawy & Alaa (Minyet El-Nasr Ag. Adm.), Salem (Chair of Meet Tahir Ag. Co-op) plus 35 <sup>+</sup> farmers <u>Damietta:</u> Mahdy (EPIQ), Dr. Saad and Dr. Esa (National Rice

DATE	LOCATION	PURPOSE	PARTICIPANTS
			Campaign), El-Noni (RRTC), El-Rayyes (Co-ordinator of Rice Wor), Abou-ElNaga (Director of Faraskour Ag. Admin.) and his staff, plus 40 <sup>+</sup> farmers.
16 June	Sharkia Governorate	Attending farmer's extension meetings concerning transplanting and ongoing farm operations	Mahdy (EPIQ), Abou El-Fetouh (head of Agri. Extension in Sharkia), Salem (Co-ordinator of Rice Work), Dr. El-Kady, Dr. Alaa and El-Noni (RRTC), Hassan (Director of KAfr Sakr Ag. Adm.), Omar (Director of Abou-KAbir Ad. Adm.), 7-10 involved staff from both administrations, and 35-40 farmers.
30 June	MPWWR	Review findings to date and assign tasks	ASME Subcommittee (ASMESC)*
April 1	MPWWR / Cairo	Farafra Water User Union Coordination Meeting	Dr. R. Cardinalli, STTA Aboul el Nour, Eng. Saleh Nour
April 5	MPWWR / Cairo	Meeting of MPWWR Action Team on Participatory Irrigation Management	Dr. R. Cardinalli, Eng. Ramsis Bakhoum, Eng. Essam Barakat, Eng. Hussein el Atfy, et.al.
April 10	Movenpick Hotel / Cairo	Participation on MPWWR/Dutch APP Project Conference on Farmer Participation in Irrigation Management (Paper presented by EPIQ Sr. Sociologist)	MPWWR Minister & Senior Officials, Dr. R. Cardinalli, Eng. Essam Barakat, et.al.
April 11	Abou Hammad	Drainage Reuse Gender Survey	Dr. Samia Galal

<b>DATE</b>	<b>LOCATION</b>	<b>PURPOSE</b>	<b>PARTICIPANTS</b>
April 13-16	Farafra Oasis	Organizing of Groundwater Water User Unions	STTA Eng. Abou El Nour, STTA Eng. Negati
April 13-15	Luxor	Meetings for organizing BCWUA at Qemri Canal	Dr. R. Cardinalli, STTA Eng. Essam Barakat, Eng. Abdallah Doma, Qena Undersecretary of Irrigation, District Engineer
April 18	MPWWR / Cairo	Review of Farafra Groundwater WUU formation process	Dr. R. Cardinalli, Eng. Saleh Nour, STTA Abou el Nour
April 19	MPWWR / Cairo	MPWWR Action Team on Participatory Irrigation Management, meeting	Dr. R. Cardinali, and Action Team members from MPWWR and MALR
April 26-30	Farafra Oasis	Organizing of Groundwater Water User Unions	STTA Eng. Abou el Nour and Eng. Negati
May 4 - 5	Zagazig & Mansoura	Meetings Regarding BCWUA O&M Cost-sharing planning process	Dr. R. Cardinalli, STTA Dr. J. Wilkins-Wells, STTA Eng. Essam Barakat, Eng. Abdallah Doma, Under-Secretaries Irrigation Department (Dakhalaiya and Sharkaiya Governorates) and staff.
May 8-13	Tanta	EPIQ / IIE-DT-2 sponsored training workshop on Participatory Irrigation Managemet, and monitoring and evaluation process.	Dr. R. Cardinalli (EPIQ) Dr. H. El Atfi (MPWWR) Eng. Ramsis Bakhoum (MPWWR) Eng. Essam Barakat STTA Dr. Fouad Abdallah, Eng. Abdallah Doma, 25 IAS and IIP field agents
May 12-14	Farafra Oasis	Groundwater Water User Union offiical registration and ceremony	Dr. J. Fredericks, STTA Eng. Abou el Nour, Eng. Negati, WUU members of Wells No. 7, 16 & 18
May 26-27	Mansoura / Zagazig	BCWUA Cost-sharing Planning Focus Group Workshops	Dr. R. Cardinalli, STTA Dr. J. Wlkins-Wells, Eng. Essam Barakat, IAS Staff, Under-Secretaries of Irrigation Department for Dakhalaiya and Sharkaiya Governorates, District staff of Irrigation Department

<b>DATE</b>	<b>LOCATION</b>	<b>PURPOSE</b>	<b>PARTICIPANTS</b>
May 31	MPWWR / Cairo	Meeting with Dr. Lotfi Nasr, NWRC	Dr. R. Cardinalli, STTA Dr. J. Wilkins-Wells, Eng. Essam Barakat
June 3	MPWWR / Cairo	Meeting of WUA Working Group on O&M Cost-Sharing	Dr. R. Cardinalli, Dr. J. Fredericks, Eng. Nassar Ezzat, Eng. Essam Barakat, Dr. Lotfi Nasr, Eng. Abdalla Doma, Eng. Mahmoud Mabrouk (USAID)
June 28	MPWWR / Cairo	Meeting with Dutch Water Boards Project team	Dr. R. Cardinalli, Eng. Jan Bron (CTA), Eng. Samir Osman Khereba, & Mr. William Oliemars (Farmer Organization Advisor)
<b>4-7 April</b>	El-Kharga, El-Dakhla, El-Farafra Oases	Visiting several well sites (pumped and flowing wells) and following-up Tranche III C.2 B.M activities (well discharge measurements, irrigation-drainage practices, economic aids, ---)	M. Ibrahim (MPWWR undersecretary for Western Desert) A. Nagati, (NVWRRD) L. King (EPIQ) S. Nour (EPIQ) J. Keith (EPIQ) M. Raafat (NV Governorate) M. Desouky (NV PBDAC) A. Abdel Hafeez (NV AG Dept.)
<b>12-14 May</b>	El-Kharga, El-Farafra Oases	Complete the certification of the WUUs at wells West Qasr El-Farafra #7,16 and 18 and attended the ceremony for certificates handing over.	J. Fredericks (EPIQ) L. King (EPIQ) S. Nour (EPIQ) Morsi Fawzy (MVE) R. Abu El-Nour (EPIQ) M. Raafat (NV Governorate) N. El-Shazly (NV MPWWR) WCU Film Team + 15 members of WUUs
<b>11-12 June</b>	Sharm El Shiekh	Tranche III BM Workshop	HE Minister Abu Zeid (MPWWR); EPIQ TA team; Steering Committee; WPAU; USAID; APRP COP's
6 April	MPWWR/ Cairo	Meeting with Minister, MPWWR	Dr. Abou Zeid, Minister (MPWWR) R. Cobb (Winrock)

<b>DATE</b>	<b>LOCATION</b>	<b>PURPOSE</b>	<b>PARTICIPANTS</b>
			C. Anderson (USAID) Eng. Gamil (WPAU) J. Fredericks (EPIQ)
22 April	USAID/ Cairo	Antiquities and Ground Water	M. Silverman (USAID) C. Anderson (USAID) Dr. Wadie (USAID) J. Fredericks (EPIQ)
6 May	USAID/ Cairo	V. Kimm Briefing on Env. Compliance Plans	V. Kimm (EPIQ) A. Davis and Env. Staff (USAID) C. Anderson (USAID) Dr. Wadie (USAID) Eng. Mabrouk (USAID) J. Fredericks (EPIQ)
10 May	MPWWR/ Cairo	Visit by Asif Sheihk	A. Sheikh (Pres IRG) Eng. Gamil (WPAU) EPIQ Team
16 May	APRP/ Cairo	PPC Meeting	PPC USAID Ag Policy Team APRP TA COPs
2 June	USAID/ Cairo	SO1 Quarterly Meeting	R. Brown (Mission Director) T. Christiansen-Wagner (Dep. Director) D. Delgado (A. SO1) C.Anderson (A. Ag. Policy) SO1 COPs

## VI. STAFF LEVEL OF EFFORT

Name	Position	Arrival	Departure	Reporting Period (pm)	Cumulative (pm)
<b>Expatriate Long Term TA</b>					
Dr. Jeff Fredericks	Chief of Party	25 Jan 98	30 Sep 99	3	17.1
Thomas Burola	Administrative Officer	12 Jun 97	30 Sep 99	3	21.60
Dr. Thomas Ley	Senior Irrigation Engineer Acting Team Leader	20 Jun 97	4 Feb 99	1	19.33
Dr. Zhongping Zhu	Senior Water Resources Engineer	13 Jun 97	30 Sep 99	3	24.60
Dr. John Keith	Senior Water Economist	1 Feb 98	30 Sep 99	3	17
Dr. Robert Cardinali	Senior Sociologist	20 Mar 98	30 Sep 99	3	15.9
<b>Egyptian Long Term TA</b>					
Dr. Ahmed Fakhry Khattab	Co-Team Leader	1 Aug 97	31 Jul 99	3	23
Dr. Ibrahim Elassiouti	Senior Water Resources Mgmt. Specialist	1 Aug 97	31 Jul 99	3	23
Eng. Saleh Nour	Senior Hydrogeologist	1 Sep 97	31 Aug 99	3	21
Dr. El-Sayed Mahdy	Economist	1 Mar 98	28 Feb 99	3	16
Eng. Ragab Abdel Azim	Drainage Engineer	1 Feb 98	31 Jan 99	3	17
<b>Expatriate Short Term TA</b>					
Dr. Larry King	Groundwater Management Specialist	22 Mar 99 11 May 99	16 Apr 99 21 Jun		
Dr. Ramchand Oad	Water Measurement Specialist	6 Mar 99 29 May 99	19 Mar 99 11 Jun 99		
Dr. John Wikins-Wells	Cost Sharing Specialist	1 May 99	11 Jun 99		
Vic Kimm	Environmental Specialist	24 Feb 99 17 Apr 99	5 Mar 99 7 May 99		
Dr. Frank Hanigan	Water Policy Information Specialist	18 May 99	2 Jun 99		
Dr. Mike Rock	Technical Coordinator	31 Jan 98 3 May 98	6 Feb 98 15 May 98		0.75

Name	Position	Arrival	Departure	Reporting Period (pm)	Cumulative (pm)
Margaret Elliot	Technical Writer				
Kristine Kent	Technical Editor				
LA Lake	Technical editor				
Dr. Jack Keller	Senior Irrigation Engineer	31 Jan 98 2 Mar 98 29 Apr 98	6 Feb 98 14 Mar 98 11 May 98		1.25
Dr. Robert Young	Senior Economist	31 Jan 98 3 May 98	6 Feb 98 15 May 98		0.50
Dr. Max Lowdermilk	Senior Participation Specialist	6 Feb 98	5 May 98		3
<b>Local Egyptian Short Term TA</b>					
Eng. Essam Barakat	Senior Irrigation Participation Specialist	1 Feb 98	30 Jun 99		6.7
Eng. Hussein Elwan	Irrigation Management Specialist	1 May 98	30 Jun 99		5.4
Eng. Nagati	Groundwater management Specialist	1 Nov 98	31 May 99		2.7
Dr. Fatma Gory	Environmental Specialist	1 Nov 98	30 April 99		2.7
Eng. Abdel Abu Elnor	Sociologist/Organizational Specialist	1 Mar 99	30 Jun 99		2.7
Dr. Mohamed Mohieddin	Sociologist	1 April 99	1 May 99		1.0
Dr. Samia Galal	Environmental Specialist	1 Dec 98	1 June 99		2.0
Dr. Mohamed Rami	Computer Modeling Specialist	1 Jan. 99	30 Jan. 99		2.4
Dr. Fouad Abdalla Kheiralla	Trainer/Facilitator	1 Jan 99	30 Jan 99		0.5
Abdel Rahim El-Mahdy	Interpreter/Translator				
1. Eng. Adel Kader 2. Eng. Fawzy El Bishbishy 3. Eng. Mahmo	Rice Water Measurement Team	1 May 98	30 Oct 98		5.8

Name	Position	Arrival	Departure	Reporting Period (pm)	Cumulative (pm)
ud Rashad Nasef 4. Eng. Fawzy Ibrahim El Sobary 5. Eng. Sanaa Abdel Rashed 6. Mr. Abdel El Sayed Abdel Hamid 7. Mr. Fekry Ahmed Ibrahim					
1. Maher El- Khodar y 2. Abdel Mageed Esamil 3. Nahed Mahmo ud Hanafy 4. Magdy Metry 5. Hany Hassan Refaat 6. Taghree d Rodwan Elleithy	Drainage Monitoring Team	1 Aug 98	1 May 99		7.2

Name	Position	Arrival	Departure	Reporting Period (pm)	Cumulative (pm)
7. Nahla Mohammed Assem					
1. Nasr Shazly Hafez 2. Mohamed Abdel Safar Mohammed 3. Mohamed Omar Toleib 4. Mohamed Raafat Omar 5. Mansour Ibrahim Sayed 6. Saad Youssef Abdou Bakr	Groundwater Measurement Team	15 Nov 98	1 Mar 99		10.8

#### **Egyptian Admin Staff**

Foaz El Mona Fouad	Executive secretary	15 Sep 97	30 Sep 99	3	18.5
Jacqueline Rizk	Accountant	3 Aug 97	2 Aug 99	3	20
Amira Serry	Secretary	14 Dec 97	30 Sep 99	3	15.5
Mona Zakhary	Secretary	2 Jun 98	1 Jun 99	3	10
Kalid Mokhtar	Messenger	1 Oct 97	30 Sep 99	3	18
Akmed Mahmoud	Messenger	20 Nov 97	30 Sep 99	3	16.2
Saeed Maebed	Driver	12 Feb 98	30 Sep 99	3	13.8
Adel Moustafa	Driver	17 Feb 98	30 Sep 99	3	13.5
Ahmed Saeed	Driver	10 Aug 98	9 Aug 99	3	7.66

<b>Name</b>	<b>Position</b>	<b>Arrival</b>	<b>Departure</b>	<b>Reporting Period (pm)</b>	<b>Cumulative (pm)</b>

## VII. STATUS OF FINANCES AND EXPENDITURES

### Financial summary for 2nd quarter 1999 (April- June 1999)

	<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	\$2,232,574	\$178,520	\$2,411,094	\$2,858,881	46%
Travel and Transportation	\$448,658	\$164,875	\$13,298	\$178,173	\$270,485	40%
Per Diem	\$221,277	\$90,993	\$9,294	\$100,287	\$120,990	45%
Allowances	\$881,375	\$500,889	\$41,721	\$542,611	\$338,764	62%
Other Direct Costs	\$1,177,769	\$656,926	\$48,079	\$705,005	\$472,764	60%
<b>Total</b>	<b>\$7,999,054</b>	<b>\$3,646,257</b>	<b>\$290,913</b>	<b>\$3,937,170</b>	<b>\$4,061,884</b>	49%

Source: IRG Invoice #25

## 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 Workplan	November 1998
13	Quarterly Report (July-September 1998)	Decemeber 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