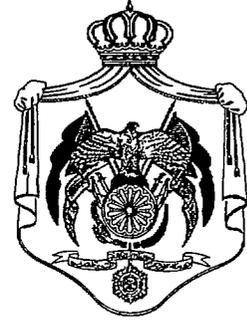


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The Hashemite Kingdom of Jordan



Ministry of Water and Irrigation

Report 3114-96-00-16

Water Quality Improvement and Conservation Project

Review and Planning Workshop

Kathy Alison, TRG



The Technical Assistance Team Includes

Development Alternatives, Inc
Science Applications International Corp
Harza Environmental Services, Inc
Development Associates, Inc



United States Agency for International Development
Contract No 278-0288-00-C-4026-00

October 1996

**JORDAN WATER QUALITY IMPROVEMENT AND
CONSERVATION PROJECT**

PLANNING WORKSHOP

AMMAN, JORDAN
October 21-23, 1996

This report is produced in fulfillment of the subcontract between
Training Resources Group
and
Development Alternatives, Inc

by

Kathy Alison

USAID CONTRACT NUMBER 278-0288-C-00-C-4026-00
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JORDAN WATER QUALITY IMPROVEMENT AND CONSERVATION PROJECT PLANNING WORKSHOP

Hotel Inter-Continental
Amman, Jordan
October 21-23, 1996

1 BACKGROUND

A three day Project Planning Workshop for the USAID/Jordan Water Quality Improvement and Conservation (WQIC) Project was held in Amman, Jordan October 21 -23, 1996 to discuss two major issues - the 1997 Workplan, and Sustainability of the Project Activities following completion of the project. This report covers the results of that workshop.

WQIC's goal is to improve the overall management and conservation of Jordan's water resources. The project purpose is to increase the quality and quantity of water available in the Zarqa River Basin System through water conservation.

The 14 million dollar WQIC project is being implemented with the Government of Jordan and the U S Agency for International Development (USAID) through a contract with a U S consortium headed by Development Alternatives, Inc (DAI). DAI consortium members include Science Applications International Corporation (SAIC), Harza Consulting Engineers and Development Associates, Inc. The project also includes USAID grants to the Jordan Environment Society (JES) and the Royal Society for the Conservation of Nature (RSCN) to support public awareness activities.

The Government of Jordan agencies involved in the implementation of WQIC include the Ministry of Water and Irrigation (MWI), Jordan Valley Authority (JVA), and Water Authority of Jordan (WAJ).

During the last year, USAID began a process of re-engineering within the agency which has included the development strategic objectives, results packages and indicators for various sectors in Jordan. This re-engineering activity has impacted the WQIC project as well. As a result, USAID/Jordan has identified a strategic objective related to water - "Improved Quality of Water and Increased Efficiency of Water Use". Results packages have been developed and key indicators have been identified to help determine the WQIC project's impact and to measure results based on the newly developed results framework. Based on the needs identified during the re-engineering exercise, the scope of the DAI contract and the tasks and responsibilities were modified.

The WQIC project began implementation in January, 1994. A Project Start-up Workshop was held in March, 1994 and a Project Review and Planning Workshop was held in November, 1995. This year's Planning Workshop was designed to support the development of a workplan for 1997, the final year of the project, and to begin planning a strategy for sustaining the project after current funding ends next year. (See Attachment 1 for the workshop agenda.)

The objectives of the 1996 Project Planning workshop were to

- * Discuss the current status of the WQIC Project and Components

- * Develop a better understanding of USAID's Strategic Objectives, Results Packages and Indicators and their relationship to the WQIC components
- * Review and agree on next steps needed to complete the 1997 workplan
- * Discuss sustainability issues (policy, staffing, training, and financial resource needs, and ways to integrate activities into the Ministry framework and organization) and present a strategy for why and how the activities of the project should be sustained in the future

The Workshop focused on the workplan and sustainability strategies of the major components of the WQIC project

- Policy and Strategic Planning Studies
- Integrated National Water Resources Monitoring System
 - Management of Information Systems (MIS)
 - Unified Water Quality / Quantity Monitoring System
 - Water Laboratory Upgrade
- Irrigation Water Management
- Artificial Recharge
- Public Awareness Program
- Industrial Wastewater Discharge Prevention
- Water Management Education

Approximately 57 individuals representing MWI, WAJ, and JVA, the Jordan Chamber of Industry and the Jordan Environment Society (JES), plus the DAI technical assistance team and USAID project staff actively participated in the workshop (See Attachment 2 for a complete list of participants)

The workshop was designed and facilitated by Ms Kathy Alison, Senior Institutional Development Consultant and Trainer from Training Resources Group (TRG) in accordance with the scope of work provided by DAI and in close coordination with the project management team Ms Alison was supported by the local WQIC administrative team

This report provides an overview of the Project Planning workshop design and the results achieved The report attachments include the results of the two major tasks carried out by the working groups as well as the results of the workshop evaluation

2 WORKSHOP DESIGN AND RESULTS

Prior to the workshop, Ms Alison interviewed approximately 18 Ministry officials, project technical assistance team members, and working group members working on all the components of the project, as well as the USAID project management team In addition, Ms Alison participated in a WQIC briefing for the Minister of Water and Irrigation, His Excellency Samir Kawar and H E Koussai Quteishat, Secretary General of MWI and WAJ The interviews and briefing session helped to identify achievements of the last year and issues that needed to be discussed at this year's workshop In addition, Ms Alison reviewed last year's workplan and the FY 1996 quarterly reports, as well as USAID's most recent water related strategic objectives documents The results of this information provided the

backdrop for this year's workshop Ms Alison worked closely with key decision makers from MWI, the DAI technical assistance team and USAID project staff to ensure that the results of the workshop provided input and information to decision makers to help them make critical decisions about the future of the components for the last year of the project and beyond

As in the past, this year's Project Planning workshop was designed to provide an opportunity for the working groups to spend time focusing on their individual components Several blocks of time were provided during the workshop for the working group members to concentrate on understanding next year's workplan as well as to discuss long-term sustainability issues Following the working group sessions, a spokesperson from each component provided an overview of the discussion results in a plenary sessions Members of the other working groups were able to ask clarifying questions and make comments and recommendations about the content of the presentations

Posters, T-shirts and videos produced by the Public Awareness component were displayed during the workshop In addition, Mr Md Zubaidi, president of the El Sheraa Agriculture Company provided samples of micro-irrigation equipment produced in Jordan and 2 videos showing utilization of the micro-irrigation equipment on farms in the Jordan Valley

Follow-up to this year's workshop will include a presentation to the H E Minister Kawar Secretary General Quteishat, and Lew Luck, USAID's Mission Director during the week following the workshop The objective of the working group presentations is to explain how their component will support the management of Jordan's and the region's scarce water resources in the future The presenters will also justify why their component should receive additional resources that will support the sustainability of the activities begun under the project The presentations were developed as part of the workshop The workplan will also be completed, based on discussions and feedback during the workshop

The following section contains a more detailed description of the workshop sessions

Day 1 - October 21, 1996

The workshop began on Monday morning, October 21, 1996 with an official opening by His Excellency, Koussai Quteishat, Secretary General of MWI and WAJ During his opening remarks the secretary general highlighted the scarcity of resources available to continue the support of all the components of the project and also highlighted the need for the integrated national water resources monitoring system and the need for new irrigation management techniques

Following the Secretary General's opening remarks, Ms Alison reviewed the objectives of the workshop and provided an overview of the agenda

Participants agreed to work according to the following norms

- Actively participate in all sessions
- Listen to each other - only 1 person speak at a time - no side conversations
- Ask short, focused questions
- Share discussion time with others - keep comments short
- Start on time

- Casual Dress
- Work hard but have fun
- No smoking in the meeting room

Each participant also introduced him/herself by giving their name, title organization, working group they belong to, and the name they would prefer to be called during the workshop

A panel presentation on the Current Status of the Project and Expectations for the Next Year followed the overview of the workshop Khalid Hendawi, WQIC Project Coordinator, Abdullah Ahmad, USAID Project Officer, and Ed Stains, WQIC Chief of Party each discussed the project from their perspective Mr Stains also provided an update on the status of the short term technical assistance (STTA) and commodity budget remaining in the project

Following the opening session and a short break, Tim Miller and Abdullah Ahmad from USAID presented a short session on USAID strategic objectives, results packages and indicators related to the WQIC project components Another panel session by Peter Ohlmeyer and Dieter Bohnet on the Water Sector Planning Support activities being implemented by GTZ highlighted the close connection between the two projects, especially to the WQIC Integrated National Water Resources Monitoring System components

After lunch, the working groups were given their first task which was *to discuss their 1997 workplans and to prepare a 15-20 minute presentation that would explain their component's tasks in detail and tell the group how the component's activities will have a positive impact on and will help sustain water resources in Jordan and the region The groups were asked to briefly mention the USAID indicators that could be used to measure the impact of the activity*

The working groups met all afternoon, reconvening at 4 15 to review the day and prepare for day two The working groups continued their discussions on the morning of day 2

Day 2 - October 22, 1996

Day two consisted of 20 minute reports followed by 10 minutes of discussions on each of the nine WQIC components (See attachment 3 for the complete task and results by component) The reports enhanced the understanding of all those present about the specific activities that were being conducted by each component and also began to identify specific benefits and impacts that the activities were having to help sustain Jordan's scarce water resources

Following the reports and discussions, the workshop was adjourned at 4pm

Day 3 - October 23, 1996

On day three, the working groups were asked to discuss how to ensure that the components could be sustained after the project funding ended in January 1998 The specific task was to *prepare for and present a 10 minute overview of each component that includes a justification for why the Jordanian government donors and/or other funding sources should continue to support the component after the existing funding ends The justification should include specific reasons for continued investment in the activities including why each component is a critical priority for sustaining water resources in*

Jordan and the region This was each group's opportunity to "Market" or "Sell" the need for the component in the future

The groups prepared their ideas and presented their 'Sales Pitch' starting late Wednesday morning (See Attachment 4 for complete task and the first draft of the presentations)

Originally, the Minister and USAID Mission Director were scheduled to participate in a session on day four to hear the 'Sales Pitches' for each component, but scheduling problems forced the sessions to be rescheduled for the following week. Therefore the workshop ended late on day three following the dry run of the presentations, identification of next steps, completion of an evaluation form and closing remarks.

Ed Stains presented next steps which included

Oct 24 -26	Prepare for presentation to Minister and USAID & Develop Budget Matrix
Oct 27?	Presentation
Nov 4	Component's final draft workplan to be submitted
Nov 8	First full draft - summary - budgets completed
Nov 10	MWI and USAID receive draft to review
Dec 1-31	Prepare final workplan for funding

Evaluation results showed that participants thought the workshop had accomplished its objectives. Specific comments to the questions of what had been the primary benefit of the workshop included the following:

"The activities required to support the WQIC project's long-term success and sustainability have become more focused overall."

"Getting more ideas on how to 'sell' the component's activities"

"Developing a more realistic 1997 workplan"

3 CONCLUSIONS AND RECOMMENDATIONS

This year's workshop provided an opportunity for the working groups to discuss their component's activities and really assess how important those activities are to sustaining Jordan's water resources. Over the last year, many members of the working groups had attained a much higher level of understanding of their component, due to the work of the entire teams. In the interviews, many who had participated in the study tours commented on how useful they had been in crystallizing their understanding of the work they were doing. There also seemed to be a sense of achievement since last year, with things really starting to happen. Many of those interviewed seemed excited and motivated to continue the work they had been doing over the last year and thought that their efforts were important to the Ministry and the country.

The major downside is that the project is coming to an end in the next 13 -14 months, just as those who are participating are getting geared up to do the work. The ministry still has not identified critical staff required for long-term sustainability. Resources are becoming more scarce and some of the components may have to end when funding is finished, rather than receive additional resources. There were also several questions from Ministry senior management about the impact of the project.

It will be critical for the components to effectively explain their importance to the Ministry in order to continue the work

It is recommended that there be another workshop next year to prepare for the close-out and to make an action plan for sustainability of the project

ATTACHMENT 1
WORKSHOP OBJECTIVES AND AGENDA

**JORDAN WATER QUALITY IMPROVEMENT AND CONSERVATION PROJECT
PLANNING WORKSHOP**

**October 21-23, 1996
Hotel Inter-Continental
Amman, Jordan**

Objectives

- * Discuss the current status of the WQIC Project and components
- * Develop a better understanding of USAID's Strategic Objectives, Results Packages and Indicators and their relationship to the WQIC components
- * Review and agree on next steps needed to complete the 1997 workplan
- * Discuss sustainability issues (policy, staffing, training, and financial resource needs, and ways to integrate activities into the Ministry framework and organization) and present a strategy for why and how the activities of the project should be sustained in the future

Agenda

Day 1 - Monday October 21 1996

- 8 30 Official Welcome
 Koussai Quteishat, Secretary General MWI and WAJ
- Introductions Overview of Workshop Objectives and Agenda, Expectations for Working Together
 Kathy Alison Workshop Facilitator
- 9 45 Current Status of the Project and Expectations for the Next Year
 Khalid Hendawi WQIC Project Coordinator
 Abdullah Ahmad USAID Project Officer
 Ed Stains, WQIC Chief of Party
 Questions / comments
- 10 30 Coffee Break
- 10 45 Overview of USAID's Strategic Objectives and Results Packages related to WQIC Project Components
 Tim Miller, Abdullah Ahmad, Marjorie Shovlin, USAID
 Questions / Discussion
- 11 45 Updates on Related Donor Projects - Panel Session
 Peter Ohlmeyer, GTZ - Water Master Plan
 Dieter Bohnet, GTZ - Water Sector Planning Support Project
 Questions / discussions

- 1 00 Buffet Lunch
- 2 00 Working Group Task 1 - Discussion of Workplans
- 2 30 Working Group Meetings
- 4 15 Plenary Session - Review results of Day / Overview of Day 2
- 4 30 Adjourn

Day 2 - Tuesday October 22 1996

- 8 30 Overview of Day
- 8 45 Working Groups finalize and practice workplan presentations
- 10 00 Working Group Workplan Presentations (15-20 minutes) + clarification questions / recommendations
 - 10 00 Irrigation Water Management
 - 10 30 Artificial Recharge
- 11 00 Coffee / Tea Break
 - 11 15 Integrated National Water Resources Monitoring System
 - * Establishment of a Unified Management of Information System (MIS)
 - * Establishment of a Unified Water Quality / Quantity Monitoring System
 - * Upgrade of Ministry Water Quality Laboratory Capabilities
 - 12 45 Industrial Wastewater Discharge Prevention
- 1 15 Buffet Lunch
 - 2 15 Public Awareness
 - 2 45 Water Management Education
 - 3 15 Policy and Strategic Planning Studies
- 3 30 Summary of Day, Overview of Day 3 / Adjourn

Day 3 - Wednesday October 23 1996

- 8 30 Overview of Day
- 8 45 Working Group Meetings - Strategy and Justification for Sustaining WQIC Activities
- 11 30 Working Group Reports - Strategy and justification for why and how to sustain the component

		11 40	Irrigation Water Management
		12 10	Artificial Recharge
		12 30	Laboratory Upgrade
1 00			Buffet Lunch
2 15			Working Group Reports (cont)
		2 15	MIS
		2 40	QA/QC Monitoring system
		3 10	Industrial Wastewater Discharge Prevention
3 30			Coffee Break
		3 45	Public Awareness
		4 10	Water Management Education
4 30			Next Steps to finalize presentation and workplan
4 45			Evaluation
5 00			Closing / Adjourn

ATTACHMENT 2
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Attachment 3

**Working Group Task 1
Workplan Task and Flipcharts from Presentations**

Attachment 3

Working Group Task 1 Workplan Task and Flipcharts from Presentations

TASK

Review of WQIC 1997 Workplan

- 1 Review and discuss the activities (including TA and commodity needs) being proposed in the workplan for the next year
- 2 Discuss the relationship of the activities to USAID's strategic objectives and results packages and recommend any needed modifications **Identify which Indicator(s) your activities support or suggest other indicators that might be more appropriate**
- 3 Address any issues raised by the Minister that need to be considered in finalizing the workplan
- 4 Identify next steps and assign responsibilities for completion of the workplan
- 5 Be prepared to make a 15 - 20 minute presentation on Tuesday that **explains your component and how the activities will have a positive impact on and will help sustain water resources in Jordan and the region** Briefly mention the Indicators you identified (new or current) that are supported by your activity

*Use overheads, flipcharts, graphs, posters, models, and photos of pilot areas to illustrate your presentation

Process

- 1 Select a leader who will
 - facilitate the discussion,
 - ensure that all group members have an equal opportunity to participate
 - make sure that the above issues are addressed
 - review the decisions and recommendations to make sure group members agree
 - manage the time
- 2 Select a recorder who will take notes of the decisions and recommendations that are made during the discussion
- 3 Discuss the topics above
- 4 Identify who will report on the group's major activities and how they will help sustain Jordan's water resources in the future and which Indicator(s) are supported by your activities
- 5 Prepare for the presentation, using visual aids to illustrate your upcoming activities Use the time Tuesday morning (8 30 -10 00) to continue discussion, finalize and practice your presentations

NOTE You will have no more than 20 minutes for your presentation - to allow for questions and discussions

Results of Task 1 by Working Group

IRRIGATION WATER MANAGEMENT

USAID Indicator Addressed by this component

I R 2 2 Increased conservation and efficient use of water resources

2 2 1 Increase in the efficiency in Irrigation water use in the Jordan Valley

Workplan Tasks

- 1 Rehabilitation of Tal-Al thahab diversion weir (out of sow)

Benefits Provide more accurate measurement of water diverted into carrier pipelines (better management), reduction in sediment carried in carriers, reduction in damage to water meters and other pipeline components, and reduction in damage to farmers Irrigation systems (reduced costs of operation)

- 2 Conduct a limited-rate on-demand Irrigation water delivery scheduling pilot study

Benefits Eliminates the need for pools and pumps (cost saving, better schedule for watering plants under micro irrigation - higher efficiencies, and sharing of responsibility with the JVA - customer participation)

- 3 Train IAS Unit Personnel

Benefits Trained personnel will be able to train and assist farmers in better water use (higher efficiencies), will be a linkage between JVA & farmers in management of water delivery system (customer participation)

- 4 Implement pilot/demonstration initiatives in the central Jordan Valley

Benefits Demonstration of proper use of fitters, decrease in emitter clogging (longer life for laterals, higher efficiencies), demonstration of proper quantities of water to use in greenhouses (water savings)

- 5 Train farmers in trickle irrigation system operation and maintenance

Benefits Trained farmers will have the knowledge to better schedule water applications and use proper quantities (higher water use efficiencies, they will be more informed and better able to discuss with JVA (customer participation)

- 6 Develop extension material on irrigation water use

Benefits Provide information on crop production activities that will allow farmers to better use water and other inputs (increased efficiency, reduced costs)

7 Special Studies
Northern Ghors Conversion project (Customer participation)

8 Upgrade of JVA laboratory (out of sow)

Benefits Provide more accurate measurements of crop production parameters related to best use of water, water quality, soil salinity, nutrients carried in water and available in the soil, will allow more accurate applications of water (increase in efficiency of water use)

ARTIFICIAL RECHARGE

Working group for AR Dan Vasiliu (SAIC), Daoud Hijazi (MWI), Eyas Innab (MWI), Ahmad Elimat (WAJ), K Haddidi (WAJ), M Momani (WAJ), A Assaf (WAJ), Moh'd Al-Atrash (JVA)

Objectives of Component

Identify practical techniques for AR
Apply suitable techniques in the country
Transfer AR experience to Jordanian specialist
Based on results of pilot, transfer methodology to other sites

Activities

In scope

Finalize the engineering design of the pilot project
a- Draft (copy)
b- Final (copy)

Out of scope

Financing and construction of pilot project
Develop national plan for AR in the country
Rehabilitation of existing (10) Dams to be active for AR

Action Plan

Activity 2

Task 2 1- Financing AR
Task 2 2- Implementation of AR demonstration project

Activity 3

Task 3 1- Develop technical Requirement and AR options
Task 3 2- Establish AR unit
Task 3 3- Develop AR testing program
Task 3 4- Human resources development
Task 3 5- Environmental impact analysis
Task 3 6- Stakeholders workshop for AR
Task 3 7- Experience Exchange (study tour) with countries in the Middle East and North Africa

Activity 4 (Rehab)

Task 4 1- Review and testing plan for the sites
Task 4 2- Site visits and data collection
Task 4 3- Design testing for each selected site
Task 4 4- Prepare terms of references for the sites testing

Proposed USAID Indicators

- 1 Funding for AR demonstration project
- 2 Number of exiting dam sites to be tested for rehabilitation and AR
- 3 National plan for AR
- 4 Number of Jordanians trained in AR program development
- 5 Increase ground water resources
- 6 Number of studies completed to international standards samples
 - Geophysical studies
 - Siltation process
 - Water level measurements
 - Water quality samplings

MIS - MANAGEMENT OF INFORMATION SYSTEM

Where are we NOW?

- 1- Information system survey user needs analysis (94)
- 2- Conceptual design (94)
- 3- Detailed engineering Design (95)
- 4- Procured Oracle and trained 15 MWI personnel
- 5- U S study tour (2 persons)
- 6- CONOP plan
- 7- MIS steering committee

Activities (Note Not all tasks were discussed because of time constraints (12 Tasks in Draft Work Plan - only five/six discussed)

Activity 1 3 Establishment of nified MIS

1 3 1 MIS Administration

- * Establish MIS function
- * Staffing - Implement Ministry MIS structure
- * Review and approve Action Memos for MIS procurement

1 3 2 Install & test unified network infrastructure for MWI MIS

L O E = 1370 hrs
Cost = \$275,000

1 3 11 Conduct MIS workshop for managerial staff

L O E = 336 hrs

1 3 4 Provide On-Site MIS expertise

L O E 2080 hrs

1 3 5 MIS Training

1 3 12 L O E = 312
= \$50K

1 3 7 Procurement of Data Base Software packages

How MIS Contributes to USAID strategic objectives

S O 2 Improved quality of water and increased efficiency of water use

USAID Indicators

Indicator IR 2.2 Increased Conservation efficient use of water resources

Two more Indicators to IR 2.2 proposed

- 1- Achieve a ratio in MWI of 2 persons to 1 operational Workstation
- 2- Achieve 90% connectivity between workstation

MONITORING

Work Plan 1997

Establish a unified water quality and quantity monitoring system

Objectives

- 1 a Design of both water resources and water quality programs focused on ground water and sewage water
- 1 b Development of detailed procedures and protocols for water measurement data and water quality samples
- 1 c Procurement and installation of water monitoring equipment
- 1 d Technology transfer/ planning, design and management
- 1 e Training of personnel for monitoring functions

How the activities meet USAID's Strategic Objectives

- 1 Provide data for long term planning
- 2 Provide data for day to day operation
- 3 Improve data reliability and integrity
- 4 Training in procedures and equipment
- 5 Water quality and quantity/ data interpretation
- 6 Promote unification of monitoring program
- 7 Promote establishment of centralized water resources data base

Tasks

- Task 1 (2 a) Monitoring system administration and program development
 - 1 Establish Ministry Water Monitoring System Program Structure
 - 2 Establish water resources data base steering committee
 - 3 Develop operation plans for management of the water monitoring system program function
 - 4 Institute operational water monitoring system program organization
 - 5 Review/ approve action memos for USAID sponsored water monitoring system

- Task 2 (1) Develop detailed water monitoring plan
 - a Waste water
 - b Drinking water
 - c Spring water
 - d Meteorological (Monitoring Plans)
 - e Surface Water

- Task 3 Upgrade Water Monitoring System Networks
 - 1 Install monitoring stations and equipment of Zarqa River Basin
 - 2 Install ground water monitoring wells for B2-A7 and B4 aquifers
 - 3 Procure/ install/ review additional water monitoring stations
 - 4 Prepare O&M manuals for monitoring equipment

- Task 4 Establish a central water data base Management System
 - 1 Develop unified water data base structural and organizational plan

4 Prepare O&M manuals for monitoring equipment

Task 4 Establish a central water data base Management System

- 1 Develop unified water data base structural and organizational plan
- 2 Identify procure install required hard and soft-ware
- 3 Validate and unify existing data base for water monitoring data
- 4 Develop specific data base for the upgraded monitoring program
- 5 Develop data base management and admin protocols for operation of the water monitoring system data base

Task 5 Provide advisory support to the Integrated National Monitoring System (LTTA/STTA)

Task 6

- 1 Conduct detailed water quality studies
- 2 Effect of ALSAMRA Treatment Plant on ground water and surface water

Task 7 Training of Monitoring Staff

Task 8 Privatization ???

USAID Indicators

- 1 Equipment procured and installation (monitoring stations)
- 2 Annual increase in the number of chemistry analyses requested for water quality samples

Responses to Issues raised by the Minister

- 1 Implementing Q A will improve quality of data
- 2 Appointing qualified people

LABORATORY UPGRADING

Objectives

- Increase Lab analytical capabilities
 - Number of samples
 - Results accuracy
 - Integrity of results

Actions (towards the strategic objectives)

- Provision of new instruments
- Technical training on site & abroad
- Improve procedures and methodologies (QA & QC, Health & Safety, service & maintenance)
- Sustainability

Impact

- Producing and providing accurate and sufficient analytical results will have a positive impact to all water sector functions
- Drinking water quality will be improved
- Irrigation water
- Waste water (Reuse & Environment)
- Water monitoring
- Research and water studies
- Private sector services
- Soil and plant studies and analysis
- Health and safety

USAID Indicators of achievements

- Equipment procurement installation and operation
- Annual increase in number of Lab analysis performed to standard
- New analytical methods introduced
- Improvement of Labs operation and procedures
- Increase in the efficiency of the Lab operation

Tasks - 1997

- 1- Complete QA & QC plans and Lab procedures (WAJ & JVA)
- 2- Complete procurement, installation and operation category B instrument (WAJ)
- 3- Plan for upgrading JVA Lab (soil and plant lab)
- 4- Evaluation of the Lab's staff for training purposes
- 5- Complete Lab training for
 - Lab senior management operation
 - In country training in QA
 - In country training for BIC at instrumentation
 - Training in existing (other) Lab instrumentation
- 6- Complete the long term refurbishment plans
- 7- Follow progress in construction of the new Lab building needed for procurement of category B2 equipments

INDUSTRIAL WASTEWATER DISCHARGE PREVENTION

Plans for 1997

- 1 Establishing an Environmental Unit within MWI (out of scope)
- 2 Establishing a Clearinghouse (out of scope) for Industries
- 3 Procure and Install demonstration equipment
- 4 Audits (out of scope)
- 5 Extend Public Awareness program (out of scope) (JES , Chamber)
- 6 Training of Personnel (public & private) related to industrial activities
- 7 Overseas training (out of scope)
- 8 Assistance in financing
- 9 A study on Environmental legislation and enforcement mechanism (out of scope)

USAID Proposed Indicator

2 2 2 Increase in % of industries meeting GOJ industrial discharge standards in Zarqa Basin

PUBLIC AWARENESS COMPONENT

Objectives

- Strengthen capacity of MWI, JES, and others to implement activities to encourage people to adopt practices which will maximize use of water
- To develop, coordinate, implement and monitor public awareness campaigns

Implementation Concepts to promote

- * Information and education
 - * Public involvement of people in programs encourages them to take responsibility to maximize water use
- Shared responsibility between government and individuals
 - Acceptance of new technology by users
 - Participation in identifying issues and decision making in water sector
 - Interaction with policy issues
 - Overcome distrust between public and government

Example Water Saving Devices The device promotes water savings but people must be educated to accept new technology and be able to maintain the devices

1997 Workplan - methods and activities

- * Mass communication materials
TV spots, films, posters, etc Behavioral study showed that they are effective in creating general awareness, but that only 5% of the people would change their behavior because of them (Training in production techniques will be completed in 1997)
 - * Interpersonal communications
Benefits- Programs are tailored to meet specific needs and interests
 - * Workshops (train leaders)
 - NGO's branches in local communities
 - Women - Students
- Benefit Involvement in identifying problems - thereby develops responsibility for actions
Develops ripple effect - for example Aqaba - In Aqaba 40 teachers from 20 schools were trained They in effect will then train 2000- 5000 others
- * Seminars and lectures
 - Address a specific issue of interest to a certain sector on request

- ex army, Civil Defense, Local Communities
 - ex Issues - effect of oil pressures on water resources
- Role of different sectors on water resources and conservation
- * Special events, exhibits and camps
 - Gain of large groups of people attention
 - Involvement of certain group in setting up the event leads to developing capabilities & commitment (students)
 - ex Walks, festivals, Anjara activity
- * Demonstration Models
 - The advantage to demonstrations is that people will see the device work, hear about the advantages and be able to experiment with it
 - Water Saving Devices demonstration sites
 - Demonstration models in the community will display efficient rain harvesting methods, efficient irrigation techniques, etc
 - Mobile WSD exhibit will be developed for Schools and other organizations
- * Development of resource library
 - People check out necessary materials for lectures, slides, films (extension concept)
- * Coordination with other components
 - PP
 - Irrigation
- * Measurement
 - * We have been able to measure impact quantitatively as required by USAID indicators for this component including age, gender, location etc
 - * Qualitative Impact
 - Train people to conduct focus group sessions to detect change of behavior

USAID Strategic Objective 2.2.3

Increased conservation and efficient use of water resources

Indicators

The percent increase in number of people in specific target group (women, industry, youth, farmers) with increased knowledge of water issues

WATER MANAGEMENT EDUCATION

Water Management Education Objectives

- 1 Support establishment of HRD directorate
- 2 Develop the skills and capabilities

Activities

4-1-1 Water management education administration

4-1-2 Overseas Training Program

- * Cooperation to identify training needs with other component
- * Conduct training demonstrations after participants return from training & coordinate with components
- * Trained staff should not be transferred from their position following training investment

4-1-3 Support establishment of HRD in the water sector

- * Conduct human resources planning (WAJ, JVA)
- * Develop job descriptions
- * Recommend key staff
- * Organize workshop (introducing change)
- * Develop three-year training plan
- * Initiate training
- * Train HRDS Director
- * Finalize "Development of Human Resources Services in the water sector (STTA)

4-1-4 Develop and up-grade in service training

- * Conduct training needs assessment for English courses, technical report writing, specific technical training required
- * Continue Courses from 1996 (CD)
- * Train trainers (STTA)
- * Train training coordinators
- * Develop training plan
- * Develop new curricula (from WPA plan)
- * Upgrade computer courses

4-1-5 Develop MWI training center capabilities

- * Develop equipment specification procure center equipment
- * Finalize "Training Center Management Plan"
- * Train Training Center Director
- * Develop audio/ visual aids (subcontract STTA)

4-1-6 Establish a HRD information system (out of scope)

4-1-7 Develop Phase II HRD plan

POLICY GROUP

- 1 The Policy Working Group will carry out in-depth studies as requested by MWI. By the end of the 1996 the policy document will be completed and submitted to MWI in final form. The MWI will then develop their "policy framework" using the WQIC policy report and documents developed by other project, donors and ministry advisors.
- 2 The Policy Component addresses the USAID Sub Result 1.2 - an improved policy framework "Policies for sustainable water use developed" (note title has been modified to better reflect reality).
- 3 The WQIC project components should identify any policy constraints affecting their components. The identified policy that require adjustment or creation will then be taken to the Minister with the recommendation that WQIC use available resources to carry out needed in-depth studies.
- 4 If the MWI "policy framework" is approved and implemented, it will have significant impact on the sustainability of Jordan's water resources. All of the 22 policy issues addressed focus on the improved utilization of scarce water resources in Jordan.

Attachment 4

**Working Group Task 2
Task and Results**

TASK

Working Group Task 2 Ensure Sustainability of WQIC Project Activities

Objective of this session Each Working Group will develop a strategy to justify the need for additional activities and resources for your component (if you require additional resources to make your activities sustainable)

Your Task Prepare for and present a 10 minute overview of your component that includes a justification for why the Jordanian government, donors, and/or other funding sources should continue to support your component after the existing funding ends. The justification should include specific reasons for continued investment in the activities, including why this component is a critical priority for sustaining water resources in Jordan and the region. This is your opportunity to "Market" or "Sell" the need for your activity.

This will be your opportunity to 'Sell' your component to the special invited guests on Thursday morning.

DISCUSSION Session

In preparation for your presentation, please discuss the following issues

- 1 Review the *out of scope* activities currently proposed in your 1997 workplan - will they add to the sustainability of the project? Are they realistic and achievable?
- 2 What other WQIC components could support your efforts and help make your component more sustainable? For example

* Policy Constraints

Are there any policy changes needed to support your activity in the future? What are they?

* Ministry Staff Development

What are the in-country technical training programs that you need to provide to Ministry staff who will be taking over activities of this component after the project ends? (Focus on technical training needs, not language, basic computer or report writing courses which will be on-going)

* Public Awareness / Training of Water Users (domestic, industrial, agricultural users)

What public awareness / extension information / training workshops / seminars would your component like to design that would support the component's objectives and increase the knowledge and skills of water users

* MIS

What data exchange is needed to support your component? What kinds of hardware/software is needed?

*** Other Components**

Which other components do you need support from to continue your efforts?

3 Additional Resources

How do you justify the need for additional resources - how will the out of scope work and additional resources impact Jordan's and the region's water resources issues

Preparation of your 10 minute strategy presentation - "Sales Pitch"

Issues to address in your presentation

- 1 What are the "in scope" activities you will be completing this year (Brief overview)
- 2 What additional (out of scope) activities and resources (policy initiatives, staffing, training and public awareness, MIS, and financial resources) are needed to sustain the component in the future
- 3 Why should the Jordanian Government and/or any donor be interested in providing these additional resources and sustaining the component

Focus on the Uniqueness of your activities

How will the additional activities and resources improve Jordan's ability to manage its scarce water resources

What makes the activities unique or how do they support or enhance other programs and activities already underway within the Ministry

What will happen if policy changes, staffing, training, MIS, and financial support are not available to support your work

*Be creative, but realistic!!

*Use overheads, flipcharts, graphics, posters, models, and photos to illustrate your presentation

Process

- 1 Select a discussion leader
- 2 Select a recorder who will take notes of the decisions and recommendations that are made during the discussion
- 3 Discuss the topics above
- 4 Identify who will "sell" your product to the special guests
- 5 Prepare for the presentation, using visual aids to illustrate your presentation

NOTE You will have no more than 10 minutes for your presentation

Results of Task 2 by Working Group

IRRIGATION WATER MANAGEMENT Paint A Picture

IN SCOPE

- 1 - Pilot Irrigation Advisory Service (IAS) (Integrate with P A)
- 2 - Pilot delivery Scheduling
- 3 - Extension literature preparation

IAS

- Train and assist farmers in improving on-farm water management
- No other organization assisting farmers with management of irrigation water
- Without IAS, current practices will be slow to change

Delivery Scheduling

- Irrigation water delivery schedule better suited to trickle irrigation
- It gives the farmers more flexibility in using and managing irrigation water
- If delivery scheduling is not changed, improvement will be slower

Add

Resources - How much is left, How much more is needed

Policy - Establishment of IAS division in JVA

HRD - Training of JVA staff in Irrigation and soils management, Preparation of training videos for farmers

OUT OF SCOPE

1 - Activities

Tal Al-Thahab Diversion weir rehabilitation (How much money will be saved)

- 1 Rehabilitation of weir allows better management of water resources
- 2 Supports monitoring component activities
- 3 Weir controls 1/3 of the surface water used in the valley
- 3 Without rehabilitation inefficiency and damage to facilities will continue

JVA Laboratory Upgrade

- 1 Provides farmers and JVA information required to manage water and soil resources
- 2 Support laboratory upgrade program
- 3 If the lab is not upgraded, accurate information will not be available

Add - Additional resource needs

Artificial Recharge

In scope

- 1- Engineering design

Out of scope

- 1 Construction of pilot project million 1 5 J D approximately
- 2 Evaluation and testing for the proposed rehabilitated sites (10 sites) (3 Months STTA)
- 3 Proposed and terms of reference to rehabilitated the existing sites
(3 months STTA)
1 0 MJD Approximately
- 4 Action plan for national ground water AR
(2 years STTA)
0 5 MJD Approximately

Resources Allocated

- 1- Staffing 4 Jun + 2 Senior hydrologist
- 2- Training (Workshop etc)
- 3- MIS (data bases)
- 4- Financial resources (3 0 MJD) for the all activities

Why ??

We proposed that?

- 1- Water resources in Jordan are limited AR is one of the way to develop and management this resource
It is important to start as soon as possible, delay will cause water severe shortages and deterioration of water quality
- 2- Previous AR efforts has failed due to inappropriate techniques used, and lack of understanding to this process
- 3- If rehabilitation does not take place now, cost of rehabilitation will increase drastically in the future
- 4- AR component has gained the support of decision makers for this techniques in water resources management
- 5- We want to apply the active and cheap techniques all over the country
(ponds + channel videos, etc)

Talk about why first, then the cost (per unit volume of water recharged)

How much run off can be captured

Laboratory Upgrading

WAJ-Lab

WAJ Central Lab is the main tool for providing all analytical services required for water sector exploration and development (Drinking Water, Ground Water, Service, Waste & Treated Water, etc)

In Scope

- Complete procurement, installation and operation of list B1 equipment
- Complete development of upgraded QA/QC and operation plans (8pm of STTA remains)
- Complete technical training for list B1 - equipment
- Complete the long-term refurbishment plan for the laboratory
- Evaluation of laboratory staff to determine the technical skills and training needed

Out of Scope activities

- Provision of List B2 equipment (lab construction expected to be completed in 1998 Procurement of B2 list should be started early 1998)
- Provide technical training for list B2 equipment
 - Further (additional) support for QA/QC and operational procedures and programs, including provision of computer server, software for LIMS , hardware (computers) and data base (MIS)
- Upgrading the lab equipment service and maintenance, including staff technical training for maintenance and repair of the existing lab equipment

JVA Lab

Provide analytical services for the Ministry's activities in the water sector Irrigation water quality, soil and plant studies

In Scope Activities

There are no "in-scope" activities

Out of Scope Activities

- Evaluation of the existing soil and plant laboratory and prepare a plan for upgrading the lab
- Procurement, provision and installation of the equipment required according to the determination
- Technical training and upgrading the lab staff including training on the new provided technique
- Set up QA/QC and lab operation procedures for JVA Lab

Industrial Wastewater Discharge Prevention

In Scope

- 1 Procure and Install Demonstration Equipment's
 - a Yeast (Land application)
 - b Refinery (water conservation)
- 2 Train Personnel (Public & Private) related to industries activities
 - a Workshops (technology transfer)
 - b Training Program of demo (On Site)

Out Scope

- Establish an " Environment Unit
- Establish a " Clearing House " (data environmental bank) to compile information on management, technical and operational approaches to PP in a computerized database format
- Training (Local - Overseas)
- More Audits (1997)

Resources

- Policy (not clear)
Policy should support WQIC (PP)
- Cooperation with public awareness , MIS, Laboratories
- STTA for Audits
- Financial Resources

This component will help Jordan improve WATER QUALITY by preventing industrial discharge It also trains industrialists on better water use and water conservation

This component has provided industries with technical support and has introduced new concepts (PP/WM)

Without support, these efforts will come to an end as a quality and technical development program

Monitoring Group

Unified Water Monitoring System

- 1- Contribution to strategic objectives
- 2- In scope tasks
- 3- Out-of -scope tasks
- 4- Importance to WQIC Components & Ministry

How the activities meet the strategic objectives and Ministry needs

- 1- Provide data for long term planning
- 2- Provide data for day to day operation
- 3- Improve data reliability & integrity
- 4- Training in procedures and equipment Water quality & quantity/data interpretation
- 5- Promote unification of monitoring program
- 6- Promote establishment of centralized water resources database

Long-term Plan (Sustainability) (Completed in 1995)

- 1- Development & Organization of Program
- 2- Develop monitoring plans
- 3- Upgrade networks
- 4- Develop central water database
- 5- Training of staff
- 6- Equipment Management

In-Scope Tasks

- 1- Develop monitoring plans only wastewater & drinking water
- 2- Upgrade networks
 - procurement of limited equipment
 - installation of limited stations
- 3- Central Database
 - adequate for groundwater and surface water and water quality
- 4- Program Development
 - limited support (1 pm LTTA)

Out-of-scope

- 1- Monitoring program development
- 2- Monitoring plans
 - springs
 - meteorological
- 3- Upgrade networks
 - procurement & installation for most of monitoring networks (need 1 5-2 0 million JD)
- 4- Central Databases
 - need support for springs and meteorology
- 5- Long-term management advisory support
- 6- Detailed water quality study model
- 7- Training (many courses & programs needed)

Importance of Component to Ministry & Project

- 1- Lab upgrade
 - conduct analyses of monitoring samples
 - good samples require good analyses for meaningful data
- 2- MIS
 - required to promote efficient and timely storage, retrieval, dissemination, and analyses of monitoring data
- 3- Pollution Prevention
 - monitoring data required to support these activities
- 4- Policy & Planning
 - cannot function without reliable monitoring data
- 5- Irrigation
 - require reliable water monitoring data
- 6- Public Awareness
 - to help maintain equipment from vandalism
- 7- HRD
 - coordinate for staff resources & training

Resources Required

Task	LTTA	STTA	JD/\$
1 4 1 (Program Development)	2 pm	----	----
1 4 2 (Plans)		832 hr	
1 4 3 (network Install)	2 pm	384 hrs	1 5-2 0 m JD
1 4 4 (Data base)	1 pm	208	GTZ ??
1 4 5 (Advising Support)	5 pm	624 hrs	
1 4 6 (WQIC model study)	2 pm	416 hrs	??
1 4 7 (Tran)	1 pm	408 hrs	??
1 4 8 (Pri	?	?	?

In Absence of unified Integrated Monitoring Program

- 1- No reliable data for long-term strategic planning and water resources management and policy
- 2- Continued fragmentation of existing monitoring programs - save money and time No duplication of effort
- 3- Continued degradation of existing water monitoring network
- 4- Without monitoring upgrade is it meaningful to carry out the lab upgrade, MIS, pollution prevention or other WQIC components ?? 11??

Project Components Support

- HRD - support in technical training needs
- MIS - provision with computer network (server, LIMS software, computers, databases)

The mission of this component is to upgrade the Ministry's labs to be ensure sustainability of water functions in Jordan

This component as determined at the beginning of this project includes the in-scope and the out of scope components Component's goal will not be achieved without satisfactory completion of all mentioned tasks

- Explain Refurbishment Plan
- Coordinate with MIS, Lab & Irrigation Component - Mention only 1 time
- Evaluation of need to upgrade Lab- Do you need more ?
(yes for Soils)
- Decentralization of Labs - Is it feasible ? - very costly
- Discuss role of Private Sector
- LIMS- Lab WP JVA Lab ?
- MIS Hardware

Management of Information Systems

- 1 In Scope Activities Task 1 3 1 MIS Administration
- 2 In Scope Activities Task 1 3 3 Install and Test Network for WQIC Project (Little Ministry)

Out of Scope

- 1 Top Priority
Task 1 3 2 Install and Test unified MIS Network/Databases
 - a Impact Each organization remains independent Information remains separate - duplication - triplicated
 - b If complete reduce time, reduce costs, become efficient Join efforts of all components and organizations
- 2 Priority 2
Task 1 3 5 Training / staffing
 - a Impact Running in-place or worse
 - b Positive MIS moves forward Staff skills improve Better support to all organizations
- 3 Priority 3
Task 1 3 11 Conduct MIS workshop for executive level
 - a Impact MIS concepts and scope unclear
 - b Positive Better coordination and improved ability to work together
- 4 Priority 4
Task 1 3 4 Provide on-site MIS expertise
 - a Impact Without expertise implementation of MIS slowed - results higher cost, replanning
 - b Positive - Better guidance, planning and efficient use of time and MIS resources
- 5 Priority 5
Task 1 3 7 Design/ Procurement of database packages
 - a Impact Key capabilities will not be available
 - b Positive Fulfill existing requirements

Resource Requirements

Task	STTA (person months)	Commodities (\$)
1 3 1	φ	φ
1 3 2	6 5	\$300K
1 3 5	7	\$50K
1 3 11	0	\$1 5K
1 3 4	12	φ
1 3 7	3	\$50K

Importance of Component to Ministry & Project

HRD - Planning / Scheduling
On - going Technical Training

Policy - Authorize and Staff Ministry MIS Unit

UNIQUE Support all components and organizations benefits all

Sustainability Provides needed infrastructure for future (2000 and beyond) water resources management

Responsibilities of the Ministry

Human Resources Development

It is the process by which individuals increase their understanding and knowledge, and/or improve their skills and abilities, to perform better in their current positions to prepare them for a position which they can realistically aspire in the near future facing the new challenges in the work place

A- Human Resources Development

1- Human Resources Planning Study

- Develop job description (two people assigned)
- Recommended staff (decision is needed)
- Develop training Plan (1998) , Resources, Coordination with WAJ and JVA

2- Finalize “ Human Resources Development “ Report

*** Human Resources Directorate should be established (a policy is needed) and a director assigned and trained

3- Establish Human Resources Information System

- Work with WAJ and JVA personnel to determine needs
- Work with MIS Component to integrate system
- Develop Phase II HRD Plan

B- Training

1- Training Needs Assessment

- Working with WQICP components (overseas & Local)
- Working with WAJ & JVA Counter parts

2- Development of training

- Overseas Policy , Approvals

- Local

a- Curriculum Development More courses, Approval

b- Audio Visual Working with WQIC Component

3- Implementation

b- Audio Visual Working with WQIC Component ,

3- Implementation

- Approval of trainees (WAG, JVA)
- Training Schedule by the working group
- Trainers Approved by all entities
- Training of Trainers (Future MWI trainers)
- Training of Training Coordinators

4- Evaluation and Follow Up (Training Coordinators)

- Overseas (demonstrations)
- Local (Evaluation Forms)

C- MWI Training Center

- Train training Center director (director assigned)
- Develop equipment specification
- Procure equipment (space)
- Finalize " Training Center Management Plan"

Attachment 5

Workshop Evaluation Results

**Jordan Water Quality Improvement and Conservation Project
Planning Workshop**

**October 21-23, 1996
Hotel Inter-Continental
Amman, Jordan**

Workshop Evaluation

A Workshop Objectives

Forty-one workshop participants completed an evaluation form ranking the accomplishments of the workshop objectives on a scale of 1 (low, not achieved) to 5 (high, well achieved) The results follow

- | | | |
|---|---|----|
| 1 | Discuss the current status of the WQIC Project and components | 39 |
| 2 | Develop a better understanding of USAID's Strategic Objectives and Results Packages and their relationship to the WQIC components | 37 |
| 3 | Review and agree on next steps needed to complete the 1997 workplan | 41 |
| 4 | Discuss sustainability issues (policy, staffing, training and financial resource needs, and ways to integrate activities into the Ministry framework and organization) and present a strategy for why and how the activities of the project should be sustained in the future | 39 |

B Opinions and Feedback

Please answer the following questions as thoughtfully as you can within the time Your answers will help us plan follow-up activities

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

- Evaluation of the past activities of different components of WQIC project and evaluation of the workplan of 1997
- Come out with a reasonable workplan for 1997
- The activities required to support the WQIC project's long-term success and sustainability have become more focused overall In general, the activities this year have been decreased and a better attempt to meet the needs of the Ministry was evident
- More ideas about how to "sell" the component activities
- Evaluation of the past activities at different components
- I think the primary benefit of this workshop is to answer the problems of the water resources
- We became aware of what other components are doing and what are the issues
- Realize the relation between all authorities, function of the project is done to follow up the process
- O K
- 1) Communicating with other component members, 2) attendees were faced with real life issues (budgets, current situation at MWI), 3) team spirit was emphasised
- The people became familiar with all project components
- To improve our knowledge
- Make the modification on the different component of the project
- Discussing all components
- Discussing each component and knowing the future plans
- It increases our knowledge of other component plans and what they achieved and their plans
- O K
- The primary benefit defining different new objectives and activities in order to meet the allocated money
- Coordination with each other and better understanding of other components
- To now all the projects is good
- Understand fully all the components of WQIC
- Good coordination, improving planning
- To know the current status of the WQIC project and components
- Preparation for 97 workplan and raising interest about extra funding
- Working groups
- Overview of where WQIC stands now and expected future potential
- Develop awareness of total project!
- Working together and know how we can work as a group cooperation and assistance is another advantage of team work, and finally improve the relationship between group members
- Every component knows what the others are doing
- No comment (2)
- Get better benefit
- 1) Encourage team work, 2) bring together various components which support the water sector, 3) gain a better understanding of activities, focus plans within current resources
- Everything is beneficial
- Component understanding
- Communications
- Participation of all work group members
- Defining where we go next Getting WAJ, JVA and MWI working together

- Developed more understanding of each other component, and we really hit the targeted the main objective of it
- Determination the achievements and future requirements and constraints for each component
- Learning about what progress is achieved in other components

2 What workshop activity could have been done better?

- All the activities are satisfactory
- No comment (8)
- There is much to do in a very limited time particularly with the presentations of so many components The discussion following each presentation cannot continue to be more focused and relevant
- It would have been a disaster if we had to make the "official" sales pitch to the minister and USAID Time to prepare is needed for any high level presentation, unless you wish to end the work
- No workshop activity could have been better
- This workshop could have been much better
- Presentation should be done better
- MWI is worth it and the causes is from the staff expertise and the same for the public awareness
- The MIS (2)
- MIS, Lab
- MIS, lab and monitoring
- MIS and pollution
- Irrigation
- Presentation of components
- Lab upgrade, MIS HRD
- I think all the workshop activities are done in a better way
- I think MIS was the best activity
- Long time to discuss, all ideas and to understand all the teams
- All activities have been done well
- Public awareness, MIS
- Presentation and discussions
- Workshop organization and part of the presentation
- Strategic objectives is helpful but hard to obtain
- All the activities are good and reliable
- The feedback
- Big group sessions, make
- More time to prepare for presentation, 2nd session focus on improvements to presentations not
- Submit the proposed plan in advance (minimum 2 weeks)
- Strategic objectives and results
- Artificial Recharge
- The project policy (USAID policy) and their future plans not clear
- Everything was all right

3 Do you believe there are unresolved issues that should be dealt with in follow-up activities? What are they and what should be done about them

- Budget of 1997 and possibility of extension of workshop
- MWI staffing, counterparts assigned i e MWI responsibilities
- There are unresolved issues On the project level they include the strategic objectives and indicators On the practical level they include resources, monies and the absence of needed ministry programs These should be resolved a month the USAID, expatriate project team and senior ministry officials
- We have unresolved commitment issues but they have been lingering on since project commencement I think we are doing what we can to resolve them

- I don't believe
- Yes, I believe there are unresolved issues
- Pollution prevention and public awareness
- Pollution prevention and clean technology needs help to increase good push from the WAJ and MWI officers
- Yes, Minister dependent activities, the participants should raise to the decision makers what they need and not someone from outside giving the guidelines
- No comment (9)
- Very good
- Policy issue
- I think all the important activities have been touched
- No, I think everything was resolved.
- The sustainability of the activities implemented by WQIC
- No I don't believe that there are unresolved issues
- Yes, funding
- A lot of issues were raised and not resolved, they are in some way controversial But this is not a major constraint because project activities, methodology and procedures are clean.
- The follow-up system still not well designed
- Component related issues may need to be followed up separately by each component in cooperation with project and ministry management.
- Would like to know commitment from Minister and Secretary General
- No I don't (3)
- Yes, I think another workshop should be held during the last months of the project to follow up on the sustainability issue and develop action plans for transfer of activities and functions
- I don't think so
- Yes, funding and combining of activities (HRD, Training, PA etc)
- Final workplan
- Personnel and funding issues
- Time frame of each activity, exact allocated resources, how sure in the extension of WQIC project
- The strains mentioned during this workshop should be integrated and a clear policy should be formulated to know how to proceed further with the project components
- Is there really any budget for out of scope activities

4 What comments do you have about the workshop design and facilitation?

- The workshop design and facilitation is very good
- Good (3)
- Good, the workshop went better this year than the previous year
- I think it was better than last year I think a focus on factors influencing performance, as this year, are more important than the workplan, which is pretty much done by the TA before the workshop begins
- Very Good (5)
- Very good presentation and time is not enough
- Very good arrangements thanks to everybody, specially Ruba
- Good design, but more explanation is needed on tasks
- It's very nice and successful
- No comment (7)
- It was excellent design and facilitation
- O K
- It was really fascinating and fantastic
- First, I'd like to thank the facilitator for all her work She did a great job Thank you Kathy She has a very nice way of communication with others
- It is good design

- The workshop design and facilitation were very good
- No comments, and the workshop is good and the facilitation is very good
- Excellent
- Workshop time is long (8 30 - 4 30), short presentation is better than long presentation, good facilitation
- I think it served the objectives of the workshop very efficiently
- Glad to see that it went on time
- The workshop is designed well and it was very good, and the facilitator was very good and surprised by her efforts
- It is longer than it should be
- Very good organized and facilitator is very responsive
- Time constraints not good, more time to prepare
- Very good design and facilitation
- Great! KA does it again
- Great design, excellent facilitation, keep up the good work
- Great

5 What comments do you have about the workshop arrangements and logistics?

- Very good (7)
- Excellent (2)
- Very satisfactory
- Overall O K , I know it is not possible, but a one day break in the middle or appropriate place in the process would allow everyone (primarily ex-pats) to put thoughts on the computer and think about questions for upcoming sessions I for one think better when I see something in front of me, be it written or pictorial
- No comments (11)
- Another workshop
- Good (6)
- Your effort and work is really appreciated
- Really it was good arrangements and logistics
- O K
- Fantastic
- Need figures, and more information about other projects
- It's applicable
- Very good - good food and rooms
- The repeated presentation in the same workshop, bored of the people a little bit
- It was long
- Good arrangements and very beneficial
- Arrangements very good Constant problem with flip charts
- Great - things went quite well three cheers for Ruba