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# Water Quality Improvement and Conservation Project

## Review and Planning Workshop

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*The Hashemite Kingdom of Jordan*



*Ministry of Water and Irrigation*



The Technical Assistance Team Includes:

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



PN-ABY-064

**REVIEW AND PLANNING WORKSHOP  
FOR THE JORDAN WATER QUALITY IMPROVEMENT AND  
CONSERVATION PROJECT**

AMMAN, JORDAN  
November 11-16, 1995

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## **TABLE OF CONTENTS**

<b>INTRODUCTION</b>	<b>1</b>
<b>WORKSHOP DESIGN AND RESULTS</b>	<b>3</b>
<b>CONCLUSIONS and RECOMMENDATIONS</b>	<b>7</b>
<b>ATTACHMENTS:</b>	
<b>1. WORKSHOP OBJECTIVES and AGENDA</b>	<b>8</b>
<b>2. LIST OF WORKSHOP PARTICIPANTS</b>	<b>14</b>
<b>3. RESULTS OF WORKING GROUP MEETING # 1 Roles/Responsibilities of Working Groups</b>	<b>23</b>
<b>4. RESULTS OF WORKING GROUP MEETING # 2 Major WQIC Accomplishments</b>	<b>42</b>
<b>5. RESULTS OF WORKING GROUP MEETING # 3 Project Issues and Recommended Solutions</b>	<b>48</b>
<b>6. RESULTS OF PROJECT MANAGEMENT DISCUSSION</b>	<b>58</b>
<b>7. RESULTS OF WORKING GROUP MEETING # 4 Component Workplans</b>	<b>62</b>
<b>8. EVALUATION RESULTS</b>	<b>72</b>

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FOR THE JORDAN WATER QUALITY IMPROVEMENT AND CONSERVATION PROJECT**

Amra Hotel  
Amman, Jordan  
November 11, 12, 13, 15, 16, 1995

**1. BACKGROUND**

A five day Project Review and Planning Workshop for the USAID/Jordan Water Quality Improvement and Conservation (WQIC) Project was held in Jordan November 11 - 16, 1995. 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 multi-million dollar WQIC project is being implemented for 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).

The WQIC/DAI project began implementation in January, 1994 and a Project Start-up Workshop was held in March, 1994. This report covers the results of the follow-up Project Review and Planning Workshop for the WQIC/DAI project team that was held in November, 1995. See Attachment 1 for the workshop agenda.

The objectives of the Project Review and Planning workshop were to:

- Discuss and clarify objectives, roles and responsibilities of component working groups
- Review major accomplishments of WQIC to date
- Identify lessons learned and specific suggestions for continued implementation and sustainability of the project components
- Review and discuss the objectives of other donor activities that relate to the implementation of WQIC
- Develop and agree on the WQIC workplan for 1996

The Workshop focused on the nine major components of the WQIC/DAI project.

- Water Policy
- Irrigation
- Management Information Systems (MIS)

- Monitoring
- Artificial Recharge
- Public Awareness
- Pollution Prevention
- Central Laboratory Upgrade
- Human Resources Development

Approximately 63 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 Ms. Sophia Khlifi, WQIC/DAI Project Monitor and the local WQIC/DAI administrative team.

Major results of the Project Review and Planning workshop included specific agreements within each of the component working groups on how their work will be conducted in the future; an initial review and discussion of the 1996 workplans for each component; an increased commitment from senior MWI officials and project staff to identify and assign full and part time counterparts to project activities; improved communications between and among the nine components of the project; a better understanding of future resource needs; and an agreement by all parties to hold a similar review/planning workshop in one year's time.

This report provides an overview of the Project Review and Planning workshop design and the results achieved. The report attachments include the results and agreements from component working group meetings that were held as part of the workshop as well as the results of the workshop evaluation.

## 2. WORKSHOP DESIGN and RESULTS

Prior to the workshop, Ms. Alison interviewed approximately 21 individuals (Jordanian and expatriate) in Jordan and the U.S. who work with the WQIC/DAI project. The interviews helped to identify what is going well on the project, as well as issues that are impeding the implementation and sustainability of the project. The results of these interviews formed the basis for the design of the workshop. Many of these issues were also identified in the *Assessment of the WQIC Project*, conducted by John B. O'Donnell in August, 1995. Ms. Alison worked closely with key decision makers from MWI, the DAI technical assistance team and USAID project staff to ensure that the design of the workshop met their needs for future implementation of the project.

The Project Review and Planning workshop was designed as a 5 day activity and provided an opportunity for Jordanian and expatriate technical experts to gain a better understanding of progress that has been made on the WQIC/DAI project to date, as well as an opportunity to discuss ways to improve project performance in the next year. The workshop was designed to be highly participatory and to provide as much time as possible for the component working groups to begin discussing critical implementation issues facing each component.

### Day 1 - Working Groups

The workshop began on Saturday morning, November 11 with an official opening,

Opening remarks included comments from Dr. Bani Hani, Secretary General of MWI; Ms. Diana Swain, USAID Deputy Mission Director; Dr. Carl Dutto, USAID Coordinator of the Water Resources and Environment office; and Mr. Ed Stains, WQIC/DAI chief of party. The presenters called for improved cooperation, coordination and communications between and among the components in order to achieve the objectives of the project. The participants were encouraged to review what was working in the project and identify and focus on the project activities that can realistically be sustained without donor resources. Presenters also stressed the importance of strengthening and enhancing the skills of Jordanian experts who will continue the project's work after the consultants leave and USAID funding ends. Finally, the presenters stressed the need to be able to measure the results of the project in concrete terms.

Following the opening remarks, Ms. Alison reviewed the objectives of the workshop and provided an overview of the agenda. Participants agreed to work together using the following norms:

- Participate - contribute your ideas
- Listen to each other
- Only one person speak at a time - no side conversations
- Share discussion time - Don't express too many ideas at one time - Don't talk more than your share
- Have fun - Stay positive
- Start and end on time

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

Following the opening session and a short break, the facilitator introduced the first working group task. Each component working group was to meet to discuss and agree on the objectives of their working group, agree on how the group wants to work together, and clarify the roles and responsibilities of each working group. In the afternoon of day 1, each working group presented a short report to the plenary on their major agreements. In addition to the discussion task, the groups were given a process task, to strengthen their ability to facilitate their discussion session. The process task included the following directions:

- Be sure everyone knows each other. Ask each person to introduce themselves (name, agency they represent)
- Select a discussion leader (discussion leader should not be a member of the WQIC expatriate project staff)
  - The role of the discussion leader is to
    - facilitate the discussion so that everyone has an opportunity to participate
    - manage the time so that each question can be discussed
- Select a reporter to write down the major points and agreements of the group. Put your major agreements for the questions on flipchart (please write legibly)
- Decide who will report on the group's agreements
- Discuss the questions
- Use the last 10 minutes of the working group to summarize the agreements you reached and decide when you will meet again.
- Be prepared to make a **5-10 minute** report to the large group on the agreements reached by your group.

See Attachment 3 for Component Working Group Meeting # 1 presentations

Following the working group presentations, the participants reviewed the day's activities and commented favorably on the process being used to facilitate the workshop, before adjourning for the day.

### **Day 2 - WQIC/DAI Accomplishments and Lessons Learned**

Sunday morning, Day 2, began with an overview of the day and the assignment of the second working group task by Kathy Alison. The objective of the second task was to identify major accomplishments of WQIC over the first 22 months of the project. The groups were asked to identify the most significant accomplishments of their component, write them on a flipchart, and be prepared to make a 5-6 minute report to the large group on the 2 most important accomplishments of their component. The groups were again given a process task (see above) to enhance their ability to run their meeting more efficiently.

See Attachment 4 for major WQIC accomplishments by component.

Sunday afternoon, the working groups were asked to identify major issues affecting implementation of WQIC and to make specific suggestions to improve the ability of WQIC to meet project goals and improve the sustainability of the components. The working groups put their issues on flipchart as well as their suggestions for what to do and who should be responsible to take the lead in carrying out the suggestion. Each group posted their flipcharts on the wall in the main meeting room. A blank flipchart was posted next to each component's charts, divided into two columns. One column was headed **Suggestions/Questions** and the other column was called **Responses**. Participants were given ½ hour to

walk around the room, read each group's issues and solutions, and write any questions or suggestions they had on the blank sheet. Following this exercise, the groups reconvened, reviewed the questions and suggestions and wrote their answers and responses in the second column. Individuals took one final walk around the room to review the answers and then reconvened in the large group to discuss any major unresolved issues. Following a brief discussion of remaining issues and reactions from Dr. Bani Hani and Mr. Ed Stains about the results of the day, plus a review of the day's objectives, the workshop was adjourned.

See Attachment 5 for the results of Group Meeting # 3 - Project Issues and Possible Solutions.

### **Day 3 - Donor Coordination and Workplan Development**

Monday morning, Day 3 of the workshop, began with a working group task to start discussing the 1996 component workplans. As a first step, the DAI consultants provided their working group with an overview of the proposed component workplan for 1996. Each working group was asked to identify specific **management issues** that needed to be resolved before their workplan could be completed. On Monday afternoon, following the donor panel and lunch, the working groups participated in a question and answer period with Dr. Bani Hani, Ed Stains and Abdullah Ahmad (USAID project officer). Each group was able to ask their management questions at that time and get immediate reactions and responses from the WQIC management team.

The questions and responses are found in Attachment 6 of this report.

Following the initial workplan session on Monday morning, workshop participants met in plenary session to participate in a panel discussion on 5 Donor Projects that are implementing activities that are relevant to the implementation of WQIC. Panel members included Mr. Peter Ohlmeyer from the GTZ Water Master Plan project; Dr. Hazem El-Nasr, EXACT, who discussed the Regional Data Bank project; Dr. Manfred Hobbler, BGR, who discussed the North Jordan Ground Water Resources Project; Mr. Edward Qunqur, WAJ/UNDP, who provided an overview of the MWI Data Bank Project; and Mr. Fawzi Abu Niaaj, MWI/CIDA, who explained the current status of the CIDA reorganization proposal for MWI. Each panel member was given 10 minutes to explain the objectives of their project, the status of the project and what has been achieved to date; and how the project relates to WQIC. Following each presentation, participants asked clarifying questions and discussed the work being carried out by the other donors.

The workshop was adjourned following the project management discussion Monday afternoon.

Tuesday was a national holiday to celebrate King Hussain's Birthday, so there were no workshop sessions on November 14.

### **Day 4 - Workplan Preparation and Presentation**

On Wednesday morning, Day 4, each component work group continued discussions of their workplan. Each group was asked to prepare flipcharts that listed the major activities that would be carried out by the component over the next year, who would be responsible for taking the lead on the activity, when the activity would begin, and how much time would be needed from Ministry counterpart staff (both senior and junior) for each component. The working groups were also asked to begin to develop their training

plans. Each component will be responsible for their own training plan, but the training budget will be consolidated under the HRD component. Beginning Wednesday afternoon and continuing Thursday morning, a spokesperson for each working group presented a 10 minute overview of the component's major activities planned for 1996. It is important to note that the workplan session and presentations did not include a discussion or agreement on all of the details or activities that the components will be carrying out in 1996. The workshop did however provide an opportunity to begin discussing the workplan. Each component made commitments to continue these discussions over the next 2-week period to complete the design of the 1996 workplan.

See Attachment 7 for the component workplan presentations.

The final session of the workshop included identification of next steps, an evaluation of the workshop, and final comments by Dr. Bani Hani, Ed Stains and Dr. Carl Dutto (USAID).

In his final comments, Dr. Bani Hani thanked the working groups for their active participation during the 5 day session and pledged his continued support of the project, especially in authorizing Ministry staff to work full or part time on the project. He said the workshop had been very successful from his perspective. Ed Stains announced that regular staff and working group meetings would be reinstated to improve coordination and communications efforts. Dr. Carl Dutto stressed the need for the group to keep in mind the major results packages that were agreed to in earlier meetings on the USAID Mission's new Strategic Objectives for Water Resources and Environment. The successful implementation of WQIC project activities and achievement of WQIC project objectives are critical to accomplishing measurable results for the mission's water and environment portfolio.

Following the final comments, participants were asked to complete a short evaluation form. Based on the results of the evaluation, most participants seemed pleased with the workshop, including the design, the management and the facilitation. Many participants commented on the importance of the workshop in providing them an opportunity to help set the agenda for the next year of the project and the opportunity to find out what the various components are doing.

Those responding to the evaluation identified a number of issues that need additional work in the future, especially the nomination and authorization of counterpart staff, the need to better define MIS, and the need to agree on how MIS, the monitoring component and the laboratory upgrade activity should be more closely aligned. Other issues mentioned in the evaluation were sustainability of the activities and funding availability.

Attachment 8 contains the complete results of the evaluation.

Following a round of applause, the workshop was adjourned

### 3. CONCLUSIONS and RECOMMENDATIONS

The WQIC/DAI Project Review and Planning Workshop was successfully implemented and a follow-up workshop is already planned for next year. The workshop space at the Amra hotel worked well and almost all of the working group members were able to actively participate in all of the sessions. The logistical support provided by the WQIC/DAI administrative staff was well organized and was critical in making the workshop successful.

The component working group members seemed interested in the content of the discussions as well as the process that was used to ensure their participation. Many commented that they especially appreciated the opportunity to discuss the issues and the chance to lead the working group discussions and make presentations to the plenary. Many also commented on the norms that were used to help the group work together productively, especially the norm on giving everyone an opportunity to participate in the discussions.

In terms of project implementation, it will be important for project management and working groups to follow-up on many issues raised during the workshop, especially the identification and authorization of counterpart staff to ensure the sustainability of the WQIC activities. The initiation and staffing of the Planning unit will also be essential over the next year. It will also be critically important to strengthen the coordination between various components and to clarify and agree on the objectives of several of the components, especially the MIS, monitoring and central lab activities. Finally, there will be a need to keep the working groups informed and involved in the decision making process.

It is important to remember that the workshop was designed as a catalyst to begin discussions on key project issues. None of the issues raised and discussed during the workshop were completely resolved. It is now the responsibility of all those who participated to follow-up and meet their commitments. Additional work will be needed over the next year and over the life of the project to accomplish the project goal of improving the overall management and conservation of Jordan's water resources and the project purpose of increasing the quality and quantity of water available in the Zarqa River Basin System through water conservation.

**ATTACHMENT 1**  
**WORKSHOP OBJECTIVES AND AGENDA**

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

November 11, 12, 13, 15 & 16, 1995  
Amra Hotel, Amman Jordan

**Objectives:**

- **Discuss and clarify objectives, roles and responsibilities of working groups**
- **Review major accomplishments of WQIC to date**
- **Identify lessons learned and specific suggestions for continued implementation and sustainability of the project components**
- **Review and discuss the objectives of other donor activities that relate to the implementation of WQIC**
- **Develop and agree on the WQIC workplan for 1996**

Saturday, November 11, 1995  
**Day 1 - WORKING GROUPS**

**Agenda:**

- 8:30            Official Opening
- Dr. Bani Hani, Secretary General, Ministry of Water and Irrigation
  - Ms. Diana Swain, Deputy Mission Director, USAID
  - Dr. Carl Dutto, Director, Water, Environment and Agribusiness, USAID
  - Mr. Ed Stains, Chief of Party, WQIC/DAI
- Workshop Objectives, Overview of Day, Expectations for Working Together
- Kathy Alison, Facilitator
- 9:45            Coffee/tea break
- 10:00           Building Productive Working Groups - Group Task
- 10:30           Working Group Meetings
- 1:30            Buffet Lunch
- 2:30            Working Group Reports (10 minutes each)
- Policy
  - Irrigation
  - Industrial Wastewater Discharge Prevention
- 3:15            Coffee/tea break
- 3:30            Working Group Reports, cont.
- MIS
  - Monitoring/Recharge
  - Laboratory Upgrade
  - Public Awareness
  - HRD
- 4:30            Adjourn

Sunday, November 12, 1995

**Day 2 - WQIC ACCOMPLISHMENTS AND LESSONS LEARNED**

**Agenda:**

- 8:30 Overview of Day/Objectives
- 8:45 Working Group Task # 2: Major Accomplishments of Components
- 9:00 Working Group Meeting # 2
- 10:15 coffee/tea break
- 10:30 Reports from Working Groups + discussion/ additions/questions
- 12:30 Identification of Major Issues
- 1:00 Working Group Task # 3: Lessons Learned/Constraints/Possible Solutions
- 2:00 Buffet Lunch
- 3:00 10 minute reports from each group on specific suggestions for overcoming major constraints facing each component
- 4:30 Adjourn

Monday, November 13, 1995

**Day 3 - DONOR COORDINATION and WORKPLAN DEVELOPMENT**

**Agenda**

- 8:30 Overview of Day
- 8:45 Reactions to Issues and Suggestions from by Working Groups  
Dr. Bani Hani  
Ed Stains  
USAID Representative  
Discussion
- 10:00 Coffee/tea break
- 10:15 Donor Project Updates - Panel (10-15 min each)
- Peter Ohlmeyer, GTZ - Water Master Plan
  - Fawzi Abu Niaaj, MWI/CIDA - Organizational Structure of the Ministry
  - Dr. Hazem El-Nasr, EXACT - Regional Data Bank
  - Dr. Manfred Hobbler, BGR - North Jordan Ground Water Resources Project
  - Edward Qunqur, WAJ/UNDP - MWI Data Bank Project
- Questions and answers
- 12:15 Buffet Lunch
- 1:15 Overview of Workplan Task
- 1:30 Working Group Meeting # 4 - Workplan Design
- 3:00 Adjourn

Wednesday, November 15, 1995

**Day 4 - 1996 WORKPLAN PREPARATION**

- 8:30 Plenary Session - Overview of Day
- 8:45 Workgroup Meeting - 1996 Workplan Preparation
- 1:00 Buffet Lunch
- 2:00 Continue Workplan Preparation/Plan for Presentation of Workplan
- 3:30 - 4:30 Workplan Presentations (20 minutes + 10 minute discussion)
  - 3:30 - 4:00 Public Awareness
  - 4:00 - 4:30 Monitoring and Recharge
- 4:30 Adjourn

Thursday, November 16, 1995

**Day 5 - 1996 WORKPLAN PRESENTATION**

- 8:30 Plenary Session - Overview of the Day
- 9:00 - 12:30 Workplan Presentations:(20 minutes + 10 minute discussion)
  - 9:00 - 9:30 Irrigation
  - 9:30 - 10:00 Policy
  - 10:00 - 10:30 MIS
- 10:30 Coffee/Tea Break
  - 11:00 - 11:30 Laboratory Upgrade
  - 11:30 - 12:00 Industrial Wastewater Discharge Prevention
  - 12:00 - 12:30 Human Resource Development
- 12:30 Reactions to Workplan/Final Comments
  - Dr. Carl Dutto, USAID
  - Dr. Bani Hani, MWI
  - Ed Stains, WQIC
- 1:00 Workshop Evaluation
- 1:30 Buffet Lunch/Adjourn

**ATTACHMENT 2**

**LIST OF PARTICIPANTS BY COMPONENT WORKING GROUPS**

## LIST OF WORKSHOP PARTICIPANTS BY COMPONENT

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### **ATTACHMENT 3**

#### **WORKING GROUP MEETING # 1:**

#### **ESTABLISHMENT OF WORKING GROUPS**

##### **Objectives of Discussion Session:**

- Discuss and agree on the objectives of the working group
- Agree on how group wants to work together
- Clarify the roles and responsibilities of the working group

## WATER POLICY

### Questions/Responses

1. Review/Define the major objective of your working group. What do you hope your working group will be able to accomplish under WQIC?

Major Objective

*Formulating draft national water policy*

Minor Objective

*Establishing strategies and action plans for implementation.*

2. What do you see as the major role(s) of your working group (decision making, setting direction, coordination, consulting group, review group, resource for getting work done, other?). Please be specific.

*Providing and presenting the National Water Policy (NWP) for decision makers, along with all other materials related to policy.*

How often should you meet?

*Two meetings each week, and one full day meeting every month, and two evening meetings each month. Phase I (Policy profiles and statements) will be submitted by February 1996. Phase II, development of policy papers, will be begin during 1996 (relation with other donors: GTZ, CIDA ...)*

3. How can the working group have more input into the products being prepared? (Should various members of the working group provide design suggestions, help select Jordanian experts, provide expertise, participate in on-the job training, brief key decision makers, other?)

*Working group (of water policy) is flexible and allows the required input for policy preparation. This includes participation of experts from the various fields and entities.*

*Members of the group are active in preparing policy profiles, in participating in discussions for formulating policy statements, in providing recommendations for the National Water Master Plan and setting strategies and action plans for implementation.*

4. What specific steps are needed to help the group begin to assume the role of the consultant over the next several months? What authority and realistic incentives are required to support your active participation in the working group?

*In 1996 support of privately hired consultants will continue and be phased out during 1997.*

5. Do you have the right mix of expertise to accomplish the objectives of the working group? What membership changes are needed?

*Additional input is needed from different ministries and entities and will be introduced as needed. (This includes MOH, MIT, Tourism, EPA, JES).*

*A high level consultant with specific experience in water policy will be called for assistance.*

*National and international teams will be called upon to review the policies developed by the working group*

*Efforts will be invested in the promotion of the National Water Policy.*

6. What specific suggestions do you have to improve communications with other team members and with supervisors, the project coordinator, and your clients?

*Two seminars/workshops will be held for all working groups to discuss performance and progress and consequently improving communication and coordination between the group and other working entities (i.e. GTZ, UNDP, CIDA... etc.).*

7. Which of the other WQIC components do you need to coordinate with? Why? How will you do this? Who is responsible ?

*All WQIC components and other related projects.*

*Future meetings will be held upon group convenience.*

8. When will you meet again to follow-up on this discussion about the role of your working group? Who should take the lead in organizing that meeting?

*The group will follow up during regular meetings*

#### **Comments following presentation**

1. **The Policy, Planning and Studies Directorate within the Ministry will head/manage policy issues on a sustainable basis.**

## IRRIGATION

### Questions/Responses

1. Review/Define the major objective of your working group. What do you hope your working group will be able to accomplish under WQIC?

#### Major Objectives

*Efficient use of irrigation water in the Middle Valley.*

*Improve the quality of irrigation water*

2. What do you see as the major role(s) of your working group (decision making, setting direction, coordination, consulting group, review group, resource for getting work done, other?). Please be specific.

- *Coordination between JVA, MOA and MWI.*
- *Setting directions.*
- *Serve as review group.*
- *Resource for getting the work done.*

How often should you meet?

*Monthly, and as needed.*

3. How can the working group have more input into the products being prepared? (Should various members of the working group provide design suggestions, help select Jordanian experts, provide expertise, participate in on-the job training, brief key decision makers, other?)

*All of the above*

4. What specific steps are needed to help the group begin to assume the role of the consultant over the next several months? What authority and realistic incentives are required to support your active participation in the working group?

#### Steps needed

- *Official designation and authorization of working group members.*
  - a. *by position*
  - b. *by name.*
- *Preparation of the workplan.*
- *Tracking and implementation of the workplan.*
- *Preparation of quarterly report.*

#### Incentives needed

- *Financial*
- *Equipment (computers and other needed facilities)*
- *Transportation*

5. Do you have the right mix of expertise to accomplish the objectives of the working group? What membership changes are needed?

*No changes*

6. What specific suggestions do you have to improve communications with other team members and with supervisors, the project coordinator, and your clients?

- *Monthly meetings*
- *Group coordination*
- *Communication with the farmer client's through the IMS group.*
- *Minutes of meeting.*

7. Which of the other WQIC components do you need to coordinate with? Why? How will you do this? Who is responsible ?

- *Public awareness*
- *HRD (provide training)*
- *Policy and planning (policy formulation and studies needed).*

*Our group leader will be responsible for coordinating with the other components.*

8. When will you meet again to follow-up on this discussion about the role of your working group? Who should take the lead in organizing that meeting?

*First Sunday of every month between 12 and 2.*

#### **Comments following presentation**

1. The working group should sign off on the scope of work for each activity and should review and approve each report. After working group approval reports should be submitted to the project coordinator for approval.
2. The working group should be responsible for following up and ensuring that reports get completed and approved.

## MANAGEMENT INFORMATION SYSTEM

### Questions/Responses

1. Review/Define the major objective of your working group. What do you hope your working group will be able to accomplish under WQIC?

#### Major Objectives

- *Review recommendation for the structure design.*
- *Achieve a comprehensive MIS*
- *Establish a Steering Committee*
- *Obtain consensus for a definition of MIS*
- *Standard procedures to use MIS*
- *Unify database structure*
- *Unify protocols for networking*

2. What do you see as the major role(s) of your working group (decision making, setting direction, coordination, consulting group, review group, resource for getting work done, other?). Please be specific.

- *Recommendations to decision makers (regarding WQIC and other MIS-related projects)*
- *Set direction*
- *Coordination*
- *Review group*
- *Partially resource for getting work done*

How Often should you meet?

*Once a month, or as needed.*

3. How can the working group have more input into the products being prepared? (Should various members of the working group provide design suggestions, help select Jordanian experts, provide expertise, participate in on-the job training, brief key decision makers, other?)

- *Provide design suggestions*
- *Help in selecting Jordanian experts*
- *Provide expertise within the group capability*
- *Participate on the job training*
- *Brief the key decision makers*
- *Obtain full support to the group by decision makers*

4. What specific steps are needed to help the group begin to assume the role of the consultant over the next several months? What authority and realistic incentives are required to support your active participation in the working group?

- *Provide intensive training (orientation)*
- *Delegation of authorities*
- *Share the tasks with the consultants*
- *Provide incentives*

5. Do you have the right mix of expertise to accomplish the objectives of the working group? What membership changes are needed?
  - *Yes*
  - *To be discussed at later stages*
  
6. What specific suggestions do you have to improve communications with other team members and with supervisors, the project coordinator, and your clients?
  - *Create and develop a teamwork spirit*
  - *Improve the atmosphere of working conditions*
  - *Social gatherings*
  
7. Which of the other WQIC components do you need to coordinate with? Why? How will you do this? Who is responsible ?
 

*All of them - due to the relevant nature*
  
8. When will you meet again to follow-up on this discussion about the role of your working group? Who should take the lead in organizing that meeting?
 

*Next month.*

#### **Comments Following Presentation**

1. Obtain a link with the National Geographic Center.
2. Stress also training to build capabilities within the Ministry. The centralization of the MIS should be targeted towards policy and planning activities and to leave the distribution issues for domestic water to WAJ and for irrigation water to JVA.
3. Develop an MIS environment which includes WAJ, JVA and MWI and through which information can be obtained when needed.
4. Need link with Higher Council of Science and Technology.
5. Need to obtain agreement from MWI on a unified MIS.
6. Need a framework for MIS

## MONITORING

### Questions/Responses

1. Review/Define the major objective of your working group. What do you hope your working group will be able to accomplish under WQIC?

Main objective:

- *To design a unified monitoring system for water resources management*

Sub-objectives and Responsible Parties:

- *Review existing monitoring systems within MWI. (WQIC, Working Group)*
- *Establish short and long term objectives. (WQIC)*
- *Establish a unit to implement the unified monitoring system (WG, MWI)*
- *Develop standard monitoring procedures for quantity and quality of surface and ground water (WQIC, WG)*
- *Upgrade monitoring network and plan for each surfate water basin and ground water aquifer (WQIC, WG)*
- *Establish a unified water resources data bank (WQIC, WG)*

2. What do you see as the major role(s) of your working group (decision making, setting direction, coordination, consulting group, review group, resource for getting work done, other?). Please be specific.

- *Recommend and advise all decision makers*
- *Coordinate with other components (MIS, Laboratory, HRD)*
- *Review documents and reports*
- *Set directions for implementaiton (centralized is preferred over decentralized)*

How often should you meet?

*Meetings as needed, but at least once every two weeks*

3. How can the working group have more input into the products being prepared? (Should various members of the working group provide design suggestions, help select Jordanian experts, provide expertise, participate in on-the job training, brief key decision makers, other?)

- *Recommendations for selecting stations and equipment*
- *Help in selecting Jordanian experts (such as the contractors for installation of equipment)*
- *Provide expertise to help in technical aspects*
- *Participate in on-the-job training*
- *Brief all key decision makers through memos and meetings*

4. What specific steps are needed to help the group begin to assume the role of the consultant over the next several months? What authority and realistic incentives are required to support your active participation in the working group?

*Steps: Establish a unit to follow-up and implement the Working Group activities and add more staff to take over after the consultants leave.*

*Authority/incentives: Strengthen and authorize working group member's contributions with respect to their other duties.*

5. Do you have the right mix of expertise to accomplish the objectives of the working group? What membership changes are needed?

*No Response*

6. What specific suggestions do you have to improve communications with other team members and with supervisors, the project coordinator, and your clients?

*No Response*

7. Which of the other WQIC components do you need to coordinate with? Why? How will you do this? Who is responsible ?

*No Response*

8. When will you meet again to follow-up on this discussion about the role of your working group? Who should take the lead in organizing that meeting?

*After preparation and review of draft working plan and then review and evaluate the process every 6 months*

#### **Comments following presentation**

1. There is an entity in the Ministry dealing with Regional Cooperation - therefore the Monitoring group does not need to deal with this issue.
2. Variation in data measured (example: Aquifers in north Badia)
3. Use automation to transfer data from measuring stations to the Ministry. However, it was noted that this is beyond the scope of the project.
4. A monitoring unit should be established to eliminate duplication of effort and to define priorities.
5. The project will provide training (?)

## ARTIFICIAL RECHARGE

### Questions/Responses

1. Review/Define the major objective of your working group. What do you hope your working group will be able to accomplish under WQIC?

#### Major Objective

*Increase ground water resources by using A.R. (quantity and quality improvement)*

#### Sub-objectives and Responsible Parties

- *Identify data needs, techniques, and practices (review previous studies) (WG & WQIC)*
- *Advise and coordinate with other organizations (examples: WQIP, Mujeb, Azraq w. Moussa, and water harvesting studies at universities) (WG)*
- *Training, technology transfer, human resources development (WQIC & WG)*
- *Select and screen sites for A.R. (WG)*
- *Feasibility Studies, Engineering Design (WQIC & WG)*

2. What do you see as the major role(s) of your working group (decision making, setting direction, coordination, consulting group, review group, resource for getting work done, other?). Please be specific.

- *Recommend and advise decision makers*
- *Coordinate with other components (Monitoring, MIS, HRD)*
- *Review documents and reports (not construction)*

How often should you meet?

*Meetings as needed at least once every two weeks*

3. How can the working group have more input into the products being prepared? (Should various members of the working group provide design suggestions, help select Jordanian experts, provide expertise, participate in on-the job training, brief key decision makers, other?)

- *Recommendations for design suggestions (conceptual design)*
- *Help selecting Jordanian experts (throughout entire process)*
- *Provide expertise to help in technical aspects*
- *Participate in on-the-job training*
- *Brief all key decision makers (memos, meetings)*

4. What specific steps are needed to help the group begin to assume the role of the consultant over the next several months? What authority and realistic incentives are required to support your active participation in the working group?

*Steps: Establish a unit to follow up and implement the Working Group activities. Add more staff.*

*Authority/incentives: Strengthen and authorize working group member's contributions with respect to their other duties.*

5. Do you have the right mix of expertise to accomplish the objectives of the working group? What membership changes are needed?

*No Response*

6. What specific suggestions do you have to improve communications with other team members and with supervisors, the project coordinator, and your clients?

*No Response*

7. Which of the other WQIC components do you need to coordinate with? Why? How will you do this? Who is responsible ?

*No Response*

8. When will you meet again to follow-up on this discussion about the role of your working group? Who should take the lead in organizing that meeting?

*After preparation and review of draft working plan and then review the process every 6 months*

#### **Comments following presentation**

1. What is the scope of Artificial Recharge? It covers the whole kingdom
2. Priority will be given to areas with depletion and salinity problems. This means recharging aquifers which are deteriorating in order to improve water quality. Also, to recover water which might be lost during the winter season and to use treated wastewater.
3. The working group must continue activities after the expatriate consultants leave.
4. Dr. Bani Hani - Not every "to do" item can be solved by forming units. Some technical problems will be solved within current MWI framework.

## PUBLIC AWARENESS

### Questions/Responses

1. Review/Define the major objective of your working group. What do you hope your working group will be able to accomplish under WQIC?

- MWI and JES will implement a public awareness programs, in cooperation with other ministries and NGOs
- Coordinate a public awareness program with result teams, NGOs and other interest groups
- To assist in the development of a public awareness policy in MWI

2. What do you see as the major role(s) of your working group (decision making, setting direction, coordination, consulting group, review group, resource for getting work done, other?). Please be specific.

- Setting direction
- Coordination with public sector NGOs and other components
- Review and supervising studies, workshops, seminars and lectures
- Provide resources (e.g. to other ministries and others)
- Implementation of activities
- Provide training to others (e.g. NGOs, women's federation, etc)

How often should you meet?

*We meet twice a week and when necessary*

3. How can the working group have more input into the products being prepared? (Should various members of the working group provide design suggestions, help select Jordanian experts, provide expertise, participate in on-the job training, brief key decision makers, other?)

*The working group already provides major input into the products. However, we need to meet with MWI officials, USAID, and JES officials every 3 months to get feedback on the work program.*

4. What specific steps are needed to help the group begin to assume the role of the consultant over the next several months? What authority and realistic incentives are required to support your active participation in the working group?

*The working group already shares in planning and reports to some extent. In March, they will be responsible for writing the monthly report and developing work plans.*

5. Do you have the right mix of expertise to accomplish the objectives of the working group? What membership changes are needed?

*Yes but we may need more staff in MWI to accomplish the work. We need not to have changes but we need staff to stay for a long time.*

6. **What specific suggestions do you have to improve communications with other team members and with supervisors, the project coordinator, and your clients?**

*Need to have regular meetings with staff. Meet supervisors and project coordinator as a team every three months. Meet with clients in forums, and follow-up meetings.*

7. **Which of the other WQIC components do you need to coordinate with? Why? How will you do this? Who is responsible ?**

*All components. Public Awareness is an important part of each component to extend information to the public.*

*Coordinators of JES and MWI.*

8. **When will you meet again to follow-up on this discussion about the role of your working group?**

*The group will meet again on Nov. 19th at 9am at MWI offices*

**Who should take the lead in organizing that meeting?**

*MWI and JES coordinators will manage that. They will develop an agenda in cooperation with other public awareness working groups*

#### **Comments following presentation**

1. **The public awareness component needs to be sustainable. A long term plan needs to be developed**
2. **Suggested that the DAI contract, JES grant and RSCN plan need to have one public awareness plan. They need to work together.**
3. **There is a need to have a well trained MWI public awareness unit.**

## POLLUTION PREVENTION

### Questions/Responses

1. Review/Define the major objective of your working group. What do you hope your working group will be able to accomplish under WQIC?

#### Major Objective

*Develop a cooperative relationship between the Chamber of Industry (Private Sector) and the Government (MWI) to encourage implementation of pollution prevention and control by the industries.*

2. What do you see as the major role(s) of your working group (decision making, setting direction, coordination, consulting group, review group, resource for getting work done, other?). Please be specific.

- *Setting direction*
- *Coordination*
- *Review and resource*

How Often should you meet?

*Meetings are once a month.*

3. How can the working group have more input into the products being prepared? (Should various members of the working group provide design suggestions, help select Jordanian experts, provide expertise, participate in on-the job training, brief key decision makers, other?)

- *Design suggestion*
- *Any other constructive suggestions*
- *Participate in on-the-job training.*
- *Brief key decision makers*

4. What specific steps are needed to help the group begin to assume the role of the consultant over the next several months? What authority and realistic incentives are required to support your active participation in the working group?

- *Local and overseas consultant.*
- *Computers, cars.*
- *Administrative assistance.*
- *Establish a pollution prevention office at MWI.*
- *Overtime salary (incentives)*
- *Overseas training (incentives)*

5. Do you have the right mix of expertise to accomplish the objectives of the working group? What membership changes are needed?

*We have the right mix to achieve the objectives.*

6. What specific suggestions do you have to improve communications with other team members and with supervisors, the project coordinator, and your clients?

*Communicate with the industries with full cooperation between MWI and ACI (Chamber)*

*Assign full time qualified coordinators at MWI and ACI.*

7. Which of the other WQIC components do you need to coordinate with? Why? How will you do this? Who is responsible ?

- *Policy group*
- *Public awareness group*
- *Monitoring group*
- *HRD*

*Coordination will be conducted:*

- *on a regular and as needed basis and*
- *through exchange of information.*

*Person responsible: MWI/ACI coordinators*

8. When will you meet again to follow-up on this discussion about the role of your working group? Who should take the lead in organizing that meeting?

- *Meeting - first week of December*
- *Leader - Eng. Rania Abdel Khaleq*

#### **Comments following presentation**

1. Need focal point at MWI for pollution prevention and control
2. Need action plan for institutional recommendations
3. Identify the responsibility for each organization (i.e. MWI, Department of Environment) working on pollution prevention and control in order to eliminate duplication of efforts. We need clear roles and responsibilities for each organization.

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## CENTRAL LABORATORIES

### Questions/Responses

1. Review/Define the major objective of your working group. What do you hope your working group will be able to accomplish under WQIC?

*Expedite the lab upgrading process  
Equipment (A&B)  
Skills  
QA/QC Operations and Procedures*

2. What do you see as the major role(s) of your working group (decision making, setting direction, coordination, consulting group, review group, resource for getting work done, other?). Please be specific.

*1. Setting recommendations for project activities related to the lab  
2. Reviewing the products of consultatns or special groups working on lab. and upgrading such as QA/QC procedures  
3. Setting directions for the scope of studies related to labs  
4. Coordination with other project components (monitoring and MIS)*

How often should you meet?

3. How can the working group have more input into the products being prepared? (Should various members of the working group provide design suggestions, help select Jordanian experts, provide expertise, participate in on-the job training, brief key decision makers, other?)

*Group should participate in setting terms for designs, selection of experts, training requirements and selection of trainees*

4. What specific steps are needed to help the group begin to assume the role of the consultant over the next several months? What authority and realistic incentives are required to support your active participation in the working group?

*The work group will continue only until the equipment is installed. It is not an indefinite assignment.*

*Incentives/authority: The decision makers should react positively to the group's suggestions and recommendations.*

5. Do you have the right mix of expertise to accomplish the objectives of the working group? What membership changes are needed?

*To have the right mix, one member should be added to substitute for the member who left earlier (a microbiologist)*

6. What specific suggestions do you have to improve communications with other team members and with supervisors, the project coordinator, and your clients?

*To hold bi-monthly (once in 2 months) meetings with MIS and Monitoring group coordinators and supervisors*

7. Which of the other WQIC components do you need to coordinate with? Why? How will you do this?

*MIS and Monitoring*

Who is responsible ?

*The group coordinator*

8. When will you meet again to follow-up on this discussion about the role of your working group? Who should take the lead in organizing that meeting?

*After the preparation and review of the 1996 workplan*

*Hassan Amro*

## HUMAN RESOURCES DEVELOPMENT

### Questions/Responses

1. Review/Define the major objective of your working group. What do you hope your working group will be able to accomplish under WQIC?

- *Establish an HRD Directorate & establish clear responsibilities and duties*
- *Provide training facilities*
- *Seeking finance for each HRD activity through different resources*
- *Establishment of a training plan and its phases, taking into consideration CIDA's expected recommendations.*
- *Revision and updating of the Manpower Plan (MPP) to meet the needs of MWI functions (present and future)*
- *Keep up with up-to-date technologies and their transfer (especially computerization)*
- *Work towards developing the MWI training center into a Regional Center*

2. What do you see as the major role(s) of your working group (decision making, setting direction, coordination, consulting group, review group, resource for getting work done, other?). Please be specific.

*All Roles. Because of the supportive nature of HRD*

How often should you meet?

*Meetings bi-monthly initially and monthly at a later stage and as needed*

3. How can the working group have more input into the products being prepared? (Should various members of the working group provide design suggestions, help select Jordanian experts, provide expertise, participate in on-the job training, brief key decision makers, other?)

- *Design suggestions*
- *Help select Jordanian expert after evaluation*
- *Provide expertise*
- *Facilitate on-the-job training through coordination and evaluation*
- *Brief decision makers and make recommendations for development and upgrading of MWI functions*

4. What specific steps are needed to help the group begin to assume the role of the consultant over the next several months? What authority and realistic incentives are required to support your active participation in the working group?

*Establishment of an HRD Directorate and staff required, along with specific job descriptions.*

5. Do you have the right mix of expertise to accomplish the objectives of the working group? What membership changes are needed?

*Theoretically, yes!*

6. What specific suggestions do you have to improve communications with other team members and with supervisors, the project coordinator, and your clients?

*Set periodic meetings with team members, as needed for supervisors and coordinator. With clients, whenever required.*

7. Which of the other WQIC components do you need to coordinate with? Why?

*Practically all of them, because of the supportive nature of HRD*

How will you do this?

*Through suggestions mentioned in # 6 above*

Who is responsible ?

*Director of the HRD Directorate*

8. When will you meet again to follow-up on this discussion about the role of your working group?

*The last week of November Inshallah*

Who should take the lead in organizing that meeting?

*Hala will organize*

#### **Comments following presentation**

1. Human Resources Development has many facets. HRD needs to include planning and development as well as implementation
2. Need to have manpower development in MWI that will provide a special type of training to promote the skills of the people within the Ministry. We need to focus on training for all the units. Trainers for this unit need to come from within the water sector. Trainers need to be those people who have experience.
3. Human resources development is much larger than training

**ATTACHMENT 4**  
**RESULTS OF WORKING GROUP MEETING 2**  
**MAJOR WQIC/DAI COMPONENT ACCOMPLISHMENTS**

Objective of Discussion Session:

- Identify major accomplishments of each WQIC/DAI component over the first 22 months of the project.

## **WATER POLICY**

### *Major Accomplishments:*

1. *Developed and institutionalized a process for the development of a National Water Plan:*
  - a. *Formulation of the policy committee*
  - b. *Identification of 24 issues and sub-issues*
  - c. *Formulation of working groups*
  - d. *Preparing 20 profiles for issues and sub-issues*
2. *Establishment of the Directorate of Planning and Studies.*

### *Indirect Achievements:*

- a. *Institutional participation*
- b. *Formulation of outlines for strategies and action plan, and recommendation for updating water master plan.*
- c. *Interest and concern of other countries and international donors and specialists in the water sector.*

## **IRRIGATION**

### *Major Accomplishments:*

1. *Conveyance Study.*
  - *Draft report for Phase A has been completed.*
2. *Irrigation Water Management.*
  - *On-farm irrigation management baseline study completed.*
  - *Ten persons received training in USA.*
  - *Ten persons received training in Egypt (WUO's).*
  - *Sixteen farmers received training on irrigation system operation.*
  - *Twenty JVA O&M employees are currently taking a training course on O&M of pressurized pipelines*

### *The Two Major Accomplishments:*

- *Shifting the focus towards training.*
- *Identification of the bottleneck in on-farm irrigation system O&M.*

## MANAGEMENT INFORMATION SYSTEM

### *Major Accomplishments:*

- \*\*1.** *Developed the Management Information System conceptual design and conducted selection of preferred MIS structure.*
- \*\*2.** *Procured and installed Oracle (RDBMS) 7.1.  
Trained staff from the three organizations (MWI, JVA, and WAJ)*
- 3.** *Conducted survey of existing hardware and software (applications) and reporting system.*
- 4.** *Produced detailed Engineering Design (proposed final MIS report)*

### **\*\* Most important accomplishments**

## MONITORING

### *Major Accomplishments:*

- 1.** *Survey document - long and short term objectives, field visits, other monitoring projects in the Ministry, listing all monitoring sites (surface water, ground water quality and quality).*

*Data need from central laboratory, UNDP project and others.*

- \*\*2.** *Adequacy reports: table 8 item (1.4)*
- \*\*3.** *Upgrade plan (6) volumns*
- \*\*4.** *Equipment identification and procurement (in progress)*
- 5.** *Overseas training plan approved.*

### **\*\* Major accomplishments of component**

## ARTIFICIAL RECHARGE

### *Major Accomplishments:*

- \*\*1.** *(ARDND) - Artificial Recharge Data Need Documents*
- \*\*2.** *Artificial Recharge proposed list GIS (29) sites - then 8, then 3 sites for feasibility studies and selection of 1 for demonstration site*
  
3. *Data collection, reports, studies*
4. *Short term/long term objectives*
5. *Priorities: water deficit in 24 potential areas*
5. *Site selection (73)*
6. *Site screening (12)*
7. *Table (8) item (1.5) (methodology criteria and site selection).*

## PUBLIC AWARENESS

### *Major Accomplishments:*

1. *The program created awareness for over 12,000 people to conserve water through:*
  - *Mass communication*
  - *Personal contact and training, made through radio and TV, leader training, behavioral studies, focus groups, workshops, seminars, lectures, and special events (e.g. water festivals and walks).*
  
2. *Training developed staff and volunteers to implement activities. This developed a strong cooperation between MWI, JES, RSCN, JES branches, Women's Federation, schools, other ministries, and NGOs.*
  
3. *There is evidence of change through monitoring of water bills (RSCN activity)*

## POLLUTION PREVENTION

### *Major Accomplishments:*

1. *Audits*
2. *Feasibility Studies*
3. *Reconnaissance Audits*
4. *Overseas Training*
5. *Financial Mechanism Study*

## CENTRAL LABORATORY UPGRADE

### *Major Accomplishments:*

1. *Central lab. assessment report*  
*JVA lab assessment report*

#### *Highlights the needs for:*

- *Equipment to be purchased and installed*
- *QC and QA procedures upgrading*
- *Health and safety*
- *Training*

2. *Category B1 equipment:*

*Procurement = 10% \$ value*

*Installation = 2% \$ value*

### *Status of other component tasks*

- |    |  |                      |
|----|--|----------------------|
| 1. | <i>Central lab assessment report</i>                               | <i>100%</i>          |
| 2. | <i>JVA lab assessment report</i>                                   | <i>100%</i>          |
| 3. | <i>New central lab conceptual design</i>                           | <i>100%</i>          |
| 4. | <i>Nationwide lab report (not completed, report not submitted)</i> |                      |
| 5. | <i>Installation and procurement of B1 category</i>                 | <i>5-15%</i>         |
| 6. | <i>Central lab overseas training plan</i>                          | <i>(partly done)</i> |
| 7. | <i>Training B1 category</i>  | <i>0%</i>            |

## HUMAN RESOURCES DEVELOPMENT

### *Major Accomplishments:*

#### 1. Courses Developed:

- *Training Needs Assessment, 1994, 45 priority courses identified*
- *Curriculum development (19 of 45 being developed)*
- *Computer courses; center established*
- *680 trainees up-to-date (basic computer courses)*
- *English language courses (4 levels, 74 people)*
- *Technical report writing courses (90 people)*

#### 2. Training Center:

- *Design*
- *Construction*
- *Finalization of formalities, including finance*
- *Expected date of construction start - March 1996, 2 years for completion*

#### 3. Overseas Training:

- *Training centers inspection (Egypt 6)*
- *On-farm management (USA) 1 person*
- *Pollution prevention (USA) MWI-5, ACI-5*
- *Pressurized pipeline (USA) JVA-4 (management, installation, operation)*
- *Management of public awareness campaigns (JES 6)*
- *Water users association (Egypt 10)*
- *Drainage (Egypt 3)*
- *Micro-irrigation (USA 6)*
- *Annual conference of environment (USA 1)*

#### 4. Equipping facilities:

- *Computer lab (6 stations)*
- *Training room (20 persons - eighth floor)*

**ATTACHMENT 5**  
**RESULTS OF WORKING GROUP MEETING # 3**  
**PROJECT ISSUES**

**OBJECTIVES:**

- Identify major issues affecting implementation of WQIC.
- Make specific suggestions to improve the ability of WQIC to meet project goals and improve the sustainability of the components.

## WATER POLICY

**ISSUE # 1:** *Time required to complete phase I*

### WHAT TO DO

- A. *Add one full day workshop each month*
- B. *Add two night sessions each month*

### WHO TO DO IT

*Bassam Al-Tal*  
*Bassam Al-Tal*

Questions	Responses
1. Define your strategies and action plans for 1996	The 1996 workplan will answer the question
2. Is the time required to prepare policy statements, strategies and action plans not a major issue?	It is not a major issue because we already allocated more time to speed up the process. One full day and two night sessions per month have already been planned.
3. How can you say that there are no major issues affecting the water policy?	We meant that the group has no major issue in the process of formulating the National Water Plan of Jordan

Additional Comments:

- 1. Policy, Planning, and Studies Directorate within the Ministry will head/manage policy issues on a sustainable basis.

## IRRIGATION

### ISSUE # 1: *Equipment budget (AID and CIP)*

WHAT TO DO	WHO TO DO IT
A. <i>Prepare a list of the equipment needed</i>	<i>DAI and JVA</i>
B. <i>Request funding from AID</i>	<i>DAI and JVA</i>
C. <i>Water charges and revenues to be allocated for JVA rather than MOF</i>	<i>JVA</i>

### ISSUE # 2: *Training*

WHAT TO DO	WHO TO DO IT
A. <i>Identify training needs</i>	<i>Irrig. Working Group</i>
B. <i>Develop training programs</i>	<i>Irrig. Working Group</i>
C. <i>Submit program to MWI, JVA and USAID for approval</i>	
D. <i>Select candidates</i>	
E. <i>Conduct training programs</i>	

Questions	Responses
1. How can JVA operate and maintain their projects without government allocation of funds?	There will be a transition period where JVA will be separated from MOF and Civil Service Commission
2. Are expected revenues from water charges sufficient to meet support expenditure (i.e. O&M)?	During the transition, staff will be reduced and water charges raised. JVA will only focus on irrigation water delivery
3. Once people are trained, do you have projects in mind to use their new skills?	Yes
4. How can you select the candidates for training?	Ideally, based on position, qualifications and need

#### Additional Comments:

1. JVA must recover costs from the farmers
2. It is strongly recommended that a budget be allocated to JVA, and that JVA funds be separated from the civil service so that JVA can operate and maintain their projects
3. JVA should be operated as an autonomous agency

## MANAGEMENT INFORMATION SYSTEMS

### ISSUE # 1: *Implementation of MIS and staff needed*

<b>WHAT TO DO</b>	<b>WHO TO DO IT</b>
A.. <i>Obtain consensus from all ministry organizations</i>	<i>Working Group</i>
B. <i>Officially identify the steering committee</i>	<i>Secretary Generals</i>
C. <i>Establish MIS units in WAJ, JVA, MWI</i>	<i>Secretary Generals</i>
D. <i>Concept of operation plan</i>	<i>Steering Committee</i>
E. <i>Obtain funding</i>	<i>WQIC?</i>

### ISSUE # 2: *Unified Systems Structure*

<b>WHAT TO DO</b>	<b>WHO TO DO IT</b>
A.. <i>Obtain full support from Secretary Generals to access data (existing)</i>	<i>Secretary Generals</i>
B. <i>Hire a consultant to evaluate existing database systems and determine standard format</i>	<i>Secretary Generals</i>

Questions	Responses
1. What do you mean by a Steering Committee?	A committee of representatives of the three organizations (WAJ, JVA, MWI)
2. In the current age of MIS technology, why can't you link databases/MIS "virtually"? Why do you need an overall central physical location?	Because we are dealing with three different organizations with three different managements. No intention to have a central physical location.
3. Why are you recommending establishing an MIS in WAJ, MWI and JVA?	We have to deal with the current situation (3 organizations) for the time being .
4. Have you any response for pollution and hazardous waste in your information that can be quickly directed to the control room to stop pollution?	It is a monitoring issue.
5. Why are you stressing the technical component of MIS and giving little interest in the management component?	We are stressing both.
6. Consolidate MIS in WAJ and JVA before unifying MIS.	Addressed by issue 1C

#### Additional Comments:

1. Working Group/Consultant needs to clearly define MIS, recommend how to structure MIS within the water sector and hold a seminar for the Ministry to explain it.

## MONITORING

### ISSUE # 1: *Organization of Monitoring Activities*

WHAT TO DO	WHO TO DO IT
A.. <i>Clarify activities to be centralized</i>	<i>WQIC &amp; MWI</i>
B. <i>Unified Monitoring unit within MWI (JVA, WAJ, MWI)</i>	<i>MWI</i>
C. <i>Standardized databases and data collection activities</i>	<i>WQIC &amp; MWI</i>

### ISSUE # 2: *Nationwide Upgrade Plan*

WHAT TO DO	WHO TO DO IT
A.. <i>Secure additional funding</i>	<i>MWI &amp; MOP</i>
B. <i>Staff: - Collect Data</i> <i>Carry on AWRG Mission (MG Work??)</i> <i>Maintain Monitoring System</i> <i>Add people to implement plan</i>	<i>MWI to do all</i>
C. <i>Add counterpart (full-time) staff (currently ½ person - should be increased to 1½ persons)</i>	<i>MWI</i>
D. <i>Unify and standardize the water database in MWI</i>	<i>MWI</i>
E. <i>Make current staff more effective through training</i>	<i>MWI &amp; WQIC through HRD component</i>

Questions	Responses
1. How much will 2A cost? Be specific for HRD work (2E)	2A. \$2.4 million 2E. We will present in 1996 workplan
2. How do you differentiate between aquifers in old groundwater wells?	We don't cross-screen wells as monitoring wells
3. How do you standardize the databases?	Establish a single monitoring function with database management responsibility
4. How can you modernize the existing monitoring system in the water sector?	By implementing the upgrade plan and adequacy recommendations

#### Additional Comments:

1. Monitoring group should hold a seminar or summarize their reports and present to the Minister and Secretary Generals for action.

## ARTIFICIAL RECHARGE

### ISSUE # 1: Staff

WHAT TO DO	WHO TO DO IT
A. Assign full time junior staff from MWI.	MWI
B. Release current working group from some responsibility to help in short term.	JVA & WAJ
C. Subcontract some clear tasks (well defined)	WQIC Project ?
D. Look for coordination (workload sharing) with other organizations.	ARWG & Project
E. Increase effectiveness of ARWG by training.	WQIC & MWI (supported by HRD)

### ISSUE # 2: Implement Results

WHAT TO DO	WHO TO DO IT
A. Build/construct an AR project (pilot).	MWI & (other donor?)
B. Workshop for colleagues in WAJ/JVA.	WQIC + MWI + ARWG
C. Exchange results with other countries in international cooperation.	MWI

QUESTIONS	ANSWERS
1. a. What kind of training, be specific so HRD can put in their work plan?  b. What is the cost of the workshop so we can budget?	We are preparing training plan and budget and will provide as soon as possible.
2. How can you increase the efficiency of AR by training?	A more qualified Working Group will produce better results
3. What are the utmost goals of AR?	Increase groundwater resources and reduce losses. We need staff and budget to do this with Artificial Recharge
4. Is the group considering subsurface storage of flood water in suitable areas?	Yes, but this is only one of five alternatives
5. Is it possible to increase wastewater especially in K.S. treatment plant to our desert?	Yes, it is under study, but many issues are being considered

**PUBLIC AWARENESS**

**ISSUE # 1:** *To develop a good follow-up and feed back system with target audience.*

**WHAT TO DO**

**WHO TO DO IT**

- A. Name a liaison officer for each trained group.*
- B. Develop a regular meeting with them.*
- C. To develop an evaluation form which contains:  
the activities implemented  
what changes they have seen*

*Target group  
Public awareness team  
Public awareness team*

**ISSUE # 2:** *To provide more training in communication skills and mass media for staff.*

**WHAT TO DO**

**WHO TO DO IT**

- A. Identify trainers*
- B. Identify the areas we need:  
focus group  
management  
comm. development  
desktop publishing*

*Public awareness staff  
Local trainers*

QUESTIONS	ANSWERS
1. Why should you provide training on mass media for your staff, rather than taking assistance from mass media specialist?	We want a sustainable program that can produce its own PA materials.
2. Define trained group, given all the local groups trained. Do you have staff to liaison with all trained groups on a regular basis?	JES branches, WF, university students, school teachers, army, civil defense, civil service, ministries. Liaison officer from each group meets every 3 months as a group.
3. Will your activities continue after the end of WQIC?	Yes, it will continue if there is a budget allocated for that!
4. Performance indicators other than bills - are there any?	Questionnaires, focus group, water measurements.
5. How many garden owners have you convinced not to use drinking water for irrigation?	Our aim is to minimize the use of water (optimization issue).

**Additional Comments**

- 1. We are looking for sustainability for this component

57

## POLLUTION PREVENTION

### ISSUE # 1: *Institutionalization and Staffing*

WHAT TO DO	WHO TO DO IT
A. <i>Establish a section at MWI and staff it with qualified personnel and appoint coordinator</i>	<i>MWI/Chamber coordinators &amp; expanded team</i>
B. <i>Expand Pollution Prevention section at Amman Chamber of Industry and support with qualified staff and a coordinator.</i>	
C. <i>Enhance the cooperation between MWI and ACI.</i>	
D. <i>Provide training and incentives for staff and industry.</i>	
E. <i>Follow up progress mechanism.</i>	
F. <i>Incentives and regulations for industry.</i>	

### ISSUE # 2: *Expand the objective of the project from pollution prevention and clean technology to include pollution prevention and control in Jordan.*

WHAT TO DO	WHO TO DO IT
A. <i>USAID, MWI approval to this modification.</i>	<i>Working Group of MWI and ACI (extended team)</i>

QUESTIONS	ANSWERS
<i>1. What do you mean by 1F?</i>	<i>The incentives to encourage industry to implement PP and control.</i>
<i>2. What is the role of Ministry of Environment in the pollution control in Jordan?</i>	<i>Responsibility to be clarified.</i>
<i>3. How will you enhance the cooperation between MWI and ACI?</i>	<i>Develop a mutual agreement for cooperation</i>
<i>4. If the section is within MWI, how will you stop it from being subject to political considerations within WAJ and JVA (for example agr. interests)?</i>	<i>Within MWI (including WAJ, JVA, MWI).</i>
<i>5. Is there any "industrial pollution" in Amman, Zarqa area?</i>	<i>Many. At least 40 industries currently do not meet the discharge standards.</i>

#### Additional Comments

1. **Need focal point at MWI for Pollution Control**
2. **Needs action plan for institutional recommendation to establish Pollution Control unit**
3. **Need to coordinate and cooperate with Department of Environment and General Corporation for the Protection of the Environment**
4. **Need formal agreement between Chamber of Industry and MWI**

58

## LABORATORY UPGRADE

**ISSUE # 1:** *Formulating comprehensive QA/QC procedures (WAJ, JVA).*

<b>WHAT TO DO</b>	<b>WHO TO DO IT</b>
A. <i>Secure required LOE from USAID</i>	<i>WQIC, MWI</i>
B. <i>Secure external consultants</i>	<i>WQIC, MWI</i>
C. <i>Develop plans</i>	<i>Consultants &amp; MWI</i>
D. <i>Review the plans</i>	<i>MWI</i>
E. <i>Implement plans</i>	<i>Consultants &amp; MWI</i>
F. <i>Train on new QA/QC procedures</i>	<i>Consultant, MWI and any possible overseas or international programs.</i>

**ISSUE # 2:** *Procure equipment included in list B2 (and recommended equipment for JVA labs)*

<b>WHAT TO DO</b>	<b>WHO TO DO IT</b>
A. <i>Prepare detailed design for a new lab</i>	<i>MWI</i>
B. <i>Choose the location</i>	<i>MWI</i>
C. <i>Obtain funding for the construction</i>	<i>MWI, WQIC</i>
D. <i>Select contractor</i>	
E. <i>Construct the lab</i>	<i>MWI &amp; funding agency</i>
F. <i>Relocate equipment and resources existing</i>	<i>MWI, WQIC, consultant</i>
G. <i>Procure list B2 and for JVA lab</i>	<i>WQIC, USAID</i>
H. <i>Install equipment</i>	<i>Consultant</i>
I. <i>Train WAJ &amp; JVA staff on use &amp; operation</i>	<i>Consultant</i>

QUESTIONS	ANSWERS
<i>1. Why a new lab for MWI?</i>	<i>It is not for MWI - It is a new location because of space limitations to accept new equipment</i>
<i>2. What about distributing activities on satellite labs?</i>	<i>Satellite labs will continue to perform tests according to their capabilities, and it is too expensive to upgrade all lab. In addition lab upgrade includes sophisticated equipment for special and non-frequent tests.</i>
<i>3. What does the group think of coordinating with existing labs, and making use of idle equipment there?</i>	<i>Coordination with other labs (RSS, MOH, MOA, universities, etc.) has been studied and taken into consideration. WQICP and the WG are not aware of any idle equipment.</i>

## HUMAN RESOURCES DEVELOPMENT

### ISSUE # 1: *Non - Existence of HRD Directorate*

WHAT TO DO	WHO TO DO IT
A. <i>Definition of task and responsibilities</i>	
B. <i>Appointment of qualified staff (within &amp; outside MWI)</i>	
C. <i>Training the staff</i>	WQIC
D. <i>Office space</i>	

### ISSUE # 2: *Training Facilities*

WHAT TO DO	WHO TO DO IT
A. <i>Locate training facility</i>	
B. <i>Identify Trainer staff</i>	
C. <i>Training trainers</i>	
D. <i>Others</i>	

### ISSUE # 3: *Coordination between other donor agencies*

WHAT TO DO	WHO TO DO IT
A. <i>Meetings, joint staff committees</i>	
B. <i>Support for certain facilities</i>	
C. <i>Communication (more)</i>	

QUESTIONS	ANSWERS
1. Would you define the scope, i.e. extent of your training plans (new employees, or new technologies)?	Training needs are defined by the concerned area, the role of HRD is to review these needs according to job requirement
2. Is there a "skills matrix" for MWI staff to allow you to locate skilled trainers?	No. One of our objectives is to conduct a Manpower Plan (MPP) and identify skills available and needed, setting criteria. Who? a function of HRD!

#### Additional Comments

1. Working Group needs more JVA and WAJ representatives to provide input into HRD plan.

**ATTACHMENT 6**

**PLENARY SESSION**

**DISCUSSION OF MAJOR MANAGEMENT ISSUES FACING IMPLEMENTATION  
OF WQIC**

## MANAGEMENT ISSUES

### Pollution Prevention:

**Q: Why limit industrial pollution prevention activities to the Zarqa area?**

*A: During the WQIC project design four years ago, USAID agreed with WAJ, JVA, MWI, JES and the Amman Chamber of Industries to focus on the Zarqa region. Since financial resources were limited, the pollution prevention activities could not be carried out for the whole Kingdom. The Zarqa region was chosen because it produces 30% of the groundwater and because a large number of industries are located in the Zarqa basin.*

**Q: The pollution prevention working group wants to conduct more audits/feasibility studies in order to transfer technology and train staff. Is this possible?**

*A: If the project cannot cover these additional audits, the Amman Chamber of Industries should discuss this directly with USAID.*

### Monitoring:

**Q: How can we expand the implementation of the monitoring activities to cover the whole country?**

*A: Funds under the project are limited however, CIP funds will be used for implementation of the monitoring system equipment.*

**Q: If no additional resources are available, should we not include in the workplan the proposed expansion of the scope of the monitoring system?**

*A. The MWI and USAID will review the workplans and decide how to best utilize the additional available funds. We may also consider funding from other sources i.e. other donors, CIP funds.*

**Q: How can we implement the monitoring unit within the Ministry?**

*A: Guidance and recommendations are needed from the working group on the Ministry's tasks and role with regard to monitoring. There are two issues that need to be considered:*

- How to optimize procedures for monitoring*
- Explore the possibilities for location and role of the monitoring units*

**Artificial Recharge:**

**Q: How should we follow up with the implementation of the Artificial Recharge component after the end of the engineering design?**

*A: The sustainability question keeps arising. The recommendation is to select one site, implement, and train staff to follow up.*

**Human Resources Development:**

**Q: What is your vision for a Human Resources Development Directorate?**

*A: In order to move forward, the HRD working group should do the following:*

- 1. Find space for the training center*
- 2. Review and finalize curriculum development prepared by the University of Jordan*
- 3. Conduct training of trainers. Select trainers by specialty within the water sector.*
- 4. Review and take into consideration the CIDA study*

*We are trying to obtain funds from the Ministry of Finance to develop and build the training center. We are also waiting for the Directorate to be reviewed and approved according to our by-laws.*

**Q: There is some concern that HRD activities cannot move forward since they hinge on the appointment of additional staff by the ministry.**

*A. The HRD unit needs to develop and propose a staffing plan.*

**Q: What are incentive sources for training?**

*A. Perhaps the by-laws for the training center can be reviewed and set up separately to allow more flexibility to set up incentives. It may be possible to review and resolve this issue at the Ministry level. We need to propose a plan*

**Lab Upgrade:**

**Q: What happens if the lab upgrade activities are not completed by January 1997?**

*A: The actual PACD for the project is 9/30/99. Again, make proposals on your needs for our consideration.*

**Irrigation:**

**Q: Which equipment and vehicles can be purchased through CIP funds? Please provide guidelines for accessing CIP funds?**

*A: No CIP funds are available from MWI for the Irrigation component. Meet with the Secretary General to discuss use of CIP funds allocated to JVA.*

**Q: Who will fund Tal-Al Thahab weir upgrade? If the pipeline starts at Hwart, how will the upgrade be funded?**

*A: It is not in the scope of the WQIC Project. This needs to be coordinated/funded through JVA.*

**Q: Can a satellite training unit be set up to conduct computer and English training in the valley?**

*A: Yes, this can be considered.*

**MIS:**

**Q: We understand that there is no money in WQICP to establish and support the MIS. Is this correct?**

*A: No, there are funds available for MIS under WQICP and additional CIP funds are earmarked for this activity.*

**Q: Do you support the establishment of a steering committee to deal with administrative and technical issues related to MIS?**

*A: Yes, the working group should assume this role.*

**Q: We propose hiring a consultant to evaluate the structure of the databases. Do you support this?**

*A: Include this in your workplan for 1996.*

**Additional comments regarding management issues:**

1. Each component should submit needs/plans for working with the Public Awareness and HRD components so that they can consider these needs in their workplans.
2. Each component should review their working group composition and make recommendations on additional staff needed to carry out their activities on a sustainable basis. We would like to define roles and responsibilities of the working groups so that MWI can get the procedures and appointments approved.
3. The working groups' responsibility should be to support the Project Coordinator by:
  - Reviewing and providing input on Scopes of Work;
  - Preparing Requests for Proposals (RFPs) for subcontracts and developing specifications for procurement;
  - Evaluating proposals;
  - Reviewing and approving (or disapproving) reports and providing comments for inclusion in the final products.
4. How will USAID evaluate component priorities? *Based on financial constraints and result packages.*

**ATTACHMENT 7**  
**RESULTS OF WORKING GROUP MEETING # 4:**  
**COMPONENT WORKPLANS**

**Objective:**

- Develop and agree on the WQIC workplan for 1996.

## WATER POLICY

<b>Major Activities</b>	<b>Resources Required</b>	<b>Start Date</b>
<b><i>A. Develop Policy Document</i></b>		
<i>1. Complete Policy Profiles &amp; Statements</i>	<i>Policy Committee Secretariate</i>	<i>1 Jan 96</i>
<i>2. Assemble Review Team</i>	<i>SG/COP</i>	<i>March</i>
<i>3. National W.P. Conference</i>	<i>PC</i>	<i>April</i>
<i>4. Final Report</i>	<i>PC</i>	<i>May</i>
<i>5. Official Approval</i>	<i>MWI/USAID</i>	<i>July</i>
<b><i>B. Policy Studies</i></b>		
<i>1. Final Scope of Work for for 4 studies</i>	<i>COP/PC</i>	<i>August</i>
<i>2. Recruit study teams</i>	<i>COP</i>	<i>September</i>
<i>3. Begin Studies</i>	<i>PC/COP</i>	<i>October</i>
<b><i>C. Develop DPS</i></b>		
<i>1. Define Role &amp; Staff Needs</i>	<i>Director/COP</i>	<i>January</i>
<i>2. Develop Job Description</i>	<i>Director/COP</i>	<i>March</i>
<i>3. Appoint Key Staff</i>	<i>SG</i>	<i>Apr-June</i>
<i>4. Develop Training Plan</i>	<i>Director/COP</i>	<i>September</i>
<i>5. Initiate Training</i>	<i>HRD</i>	<i>November</i>
<b><i>D. Special Studies</i></b>		
<i>1. Case Studies for IME HRD, Public Awareness, Policy</i>	<i>SG</i>	<i>March</i>
<i>2. Other studies when identified</i>		

## IRRIGATION

<b>Major Activity</b>	<b>Personnel</b>
<i>A. Delivery System</i>	<i>Avadis Serpekian &amp; Tayseer Ghezawi</i>
<i>B. Rehabilitation System</i>	<i>Maintenance Engineer</i>
<i>C. Improve Water Quality</i>	<i>Maintenance Engineer</i>
<i>D. Change Delivery Scheduling</i>	<i>Operation Engineer</i>
<i>E. Train O&amp;M Staff</i>	<i>O&amp;M Engineers</i>
<i>F. On-Farm System</i>	<i>Mustafa Abu-Zeid and Avadis Serpekian</i>
<i>1. Irrigation Management Service</i>	<i>One MOA Extensionist One JVA Engineer</i>
<i>2. Pilot farms</i>	<i>One MOA Ext. One JVA Engineer</i>
<i>3. Farmer Training</i>	<i>One MOA Ext. One JVA Engineer</i>
<i>4. Extension material preparation</i>	<i>Consultant</i>
<i>G. Zarqa River Conveyance Study</i>	<i>M. Hanbali and Avadis Serpekian</i>

## MANAGEMENT INFORMATION SYSTEMS

### Major Activities

#### **A. MIS Administration**

1. *Identify technically appropriate dedicated and authorized MIS representatives.*
2. *Define MIS concepts for the Ministry.*
3. *Implement Ministry MIS structure and staff, resources for each organization.*

#### **B. Evaluate and Unify Applications** *(hire third party consultants)*

#### **C. Develop Concepts of Operation Plan**

*(The description of information flow, quality assurance, security.....etc.)*

#### **D. Procure/install MIS equipment/resources/communications.**

#### **E. Operate MIS**

*Operate database/develop information programs, global quality assurance for database.*

#### **F. MIS Training**

##### 1. *Local Training:*

- a. *6 persons/5 months - system analysis*
- b. *6 persons/5 months - system programmers*
- c. *3 persons/8 weeks - system engineers*
- d. *3 persons/8 weeks - system communication*
- e. *n persons/3 weeks - Oracle*

##### 2. *Overseas Training:*

- a. *5 persons/3 weeks - from the steering committee, study tour*
- b. *3 persons/Master Degree in MIS*
- c. *3 persons/ B.Sc. in computer*

##### 3. *Workshops:*

- a. *National MIS workshop - 2 days for 80 persons in local hotel*

## MONITORING GROUP

### Major Activities

#### A. Administration

1. Establish Ministry Monitoring System Structure and Resources (unified monitoring entity)
2. Develop Operations Plan for management of monitoring functions
3. Approve/authorize procurement of additional equipment (CIP funds)
4. Create a team to establish a water database

**Resources required:** Work Group - 10 person months & Consultant - 1 person month between Jan - Dec, 1996

#### B. Develop Detailed Water Monitoring Plans

1. Develop surface water basins plan
2. Develop ground water aquifer plans

**Resources required:** Work Group - 12 person months and Consultant - 6 person months between Jan - Dec, 1996

#### C. Upgrade Water Monitoring Systems Networks

1. Install surface water monitoring equipment for Zarqa River Basin
2. Install B2-A7 aquifer in Amman-Zarqa
3. Procure and install additional water monitoring equipment
4. Prepare O&M manuals

**Resources required:** Work Group - 24 person months and Consultant - 3 person months between Jan - June, 1996

#### D. Establish a central water database management system

**Resources required:** Work Group - 24 person months. Consultant - 12 p/m

#### E. Training

1. Overseas training
2. Local short-term training

**Resources required:** MWI - 50 person months & Consultant - 3 person months

## PUBLIC AWARENESS GROUP

Major Activities	Resources Required	Start Date												
<b>A. Implement activities with other ministries and NGOs</b>	<b>MWI &amp; JES coordinators</b>	<b>Jan, 1996</b>												
<p>1. Continue work already started</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><u>Major</u></p> <ul style="list-style-type: none"> <li>* JES branches</li> <li>* Education</li> <li>* Universities</li> <li>* Women's Fed</li> <li>* Other Women's Organizations</li> </ul> </td> <td style="width: 50%; vertical-align: top;"> <p><u>Minor</u></p> <ul style="list-style-type: none"> <li>* AWQAF</li> <li>* Health</li> <li>* Army</li> </ul> </td> </tr> </table>			<p><u>Major</u></p> <ul style="list-style-type: none"> <li>* JES branches</li> <li>* Education</li> <li>* Universities</li> <li>* Women's Fed</li> <li>* Other Women's Organizations</li> </ul>	<p><u>Minor</u></p> <ul style="list-style-type: none"> <li>* AWQAF</li> <li>* Health</li> <li>* Army</li> </ul>										
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<p>2. Begin Coordination with:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">M. of Tourism</td> <td style="width: 50%;">Jamal</td> </tr> <tr> <td>M. of Information</td> <td>Salma Ahmed</td> </tr> <tr> <td>M. of Agriculture</td> <td>Ayesh</td> </tr> </table>			M. of Tourism	Jamal	M. of Information	Salma Ahmed	M. of Agriculture	Ayesh						
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<p>3. Develop sustainable programs in Governates</p> <ul style="list-style-type: none"> <li>a. Use JES branches for coordination and resources</li> <li>b. Name an extension officer from each organization involved</li> <li>c. Extension officers report to JES branches</li> <li>d. JES branches report all activities to Public Awareness Unit</li> </ul>														
<p>4. Use results of studies to define strategies in developing activities</p>														
<p><b>B. Develop Mass Communications through:</b></p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">* Brochures</td> <td style="width: 50%;">Salma Ahmed</td> </tr> <tr> <td>* Video film and spots</td> <td>Salma Ahmed</td> </tr> <tr> <td>* Posters and stickers</td> <td>Ahmed and Awamleh</td> </tr> <tr> <td>* Competitions</td> <td>JES</td> </tr> <tr> <td>* Document all lectures and publish</td> <td>Sami &amp; Ayesh</td> </tr> <tr> <td>* Exhibits and special events</td> <td>Jamal &amp; Ayesh</td> </tr> </table>			* Brochures	Salma Ahmed	* Video film and spots	Salma Ahmed	* Posters and stickers	Ahmed and Awamleh	* Competitions	JES	* Document all lectures and publish	Sami & Ayesh	* Exhibits and special events	Jamal & Ayesh
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<p><b>C. Establish a National Committee for Public Awareness</b></p> <table border="0" style="width: 100%;"> <tr> <td style="width: 40%;">* Select a national chairperson</td> <td style="width: 30%;">Secretary General &amp; JES President</td> <td style="width: 30%;">January '96</td> </tr> <tr> <td>* Select a committee</td> <td>Secretary General &amp; JES President</td> <td></td> </tr> <tr> <td>* Develop responsibilities</td> <td>PA Unit</td> <td></td> </tr> </table>			* Select a national chairperson	Secretary General & JES President	January '96	* Select a committee	Secretary General & JES President		* Develop responsibilities	PA Unit				
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**POLLUTION PREVENTION & CONTROL  
INDUSTRIAL WASTEWATER DISCHARGE PREVENTION**

<b>Major Activities</b>	<b>Start Date</b>
<i>A. Establish a pollution prevention section within the Ministry</i>	<i>Jan., 96</i>
<i>B. Conduct an additional 4 audits and 2 feasibility studies</i>	<i>"</i>
<i>C. Procure and install 3 demonstration units</i>	<i>"</i>
<i>D. Public Awareness</i>	<i>"</i>
<i>E. Train Personnel</i>	<i>"</i>
<i>1. US training</i>	<i>12 participants for 3 weeks in July, 1996</i>
<i>2. Workshops by WEF/NGO*</i>	<i>6 workshops (3 days each) for 20 participants each</i>
<i>3. National conference</i>	<i>2 conferences( 3 days each) for 100 participants - Jan. 96 &amp; Dec. 96</i>
<i>* a workshop with the new department of environment to clarify responsibilities</i>	
<i>F. Assist in financing pollution prevention and waste minimization and control tech. implementation</i>	

*G. Reconnaissance visits*

**Resources Required**

*2.5 person years from MWI*

- 1 Senior counterpart (full time)*  
    *\* to be appointed by Secretary General. Qualifications: minimum of 5 ½ years related experience*
- 3 additional counterparts (part time)*

*1 person year from Chamber of Industries*

## LABORATORY UPGRADE

### Major Activities

#### A. Completion of procurement and installation of B1 category equipment

*\* The help of specialists from the manufacturers will be used to install certain equipment*

#### B. Follow-up on Space Issue

1. Laboratory engineering design
2. Obtain funds for new lab
3. Select contractor

#### C. Begin developing QA & QC (in laboratories)

1. Lab operation procedures
2. Analytical method procedures
3. QA/QC procedures

*\* 2 experts for 1 person month each*

#### D. Training

##### 1. Local

- a. conduct training after installation of B1 equipment  
*\* The help of specialists from the manufacturers will be used*
- b. QA/QC local training (lab staff)  
*- local experts*

##### 2. Overseas

- a. Finnigan MAT - USA - 1 person/3 weeks
- b. QA/QC training - USA - 2-3 persons/4-6 weeks
- c. Identification and measurement of natural radiological contaminants - USA - 1 person/4 weeks
- d. Training on analytical chemistry methods - USA - 2 persons/4 weeks

#### E. Follow-up on the upgrading construction and provision of the lab Data Base and LIPS system

*\*\* communications with other related working groups*

#### F. JVA laboratory

*Follow-up on provision of the requested equipment according to the assessment report*

*"Funding, procurement, installation"*

## HUMAN RESOURCES DEVELOPMENT

### Major Activities

#### **A. Support establishment of an HRD Directorate within the MWI**

1. *Revise HRD phase I action plan*
2. *Develop list of functions for HRD personnel to be assigned*
3. *Set employee requirements and personnel*
4. *Train HRD director*
5. *Revise phase II action plan*

#### **B. In-Service Training**

##### **1. Local Training**

###### **a. Curriculum Development**

- *locate temporary facilities*
- *equip it for training*
- *set criteria for selection of trainers and coordinators*
- *develop an incentive scheme (introduction)*
- *train trainers (TOT)*
- *train coordinators*
- *develop criteria for trainees*
- *develop training plan with University of Jordan*

###### **b. Permanent Training Center**

---DESIGN---

- *set training specifications*
- *equip the training facilities*
- *revise training center management handbook*
- *staff training center*
- *train of training center director*
- *train audio-visual specialist*
- *update training needs assessment*
- *develop training plan*

###### **c. Computer Training**

- *assign coordinators and trainers*
- *train coordinators and trainers*
- *upgrade courses*
- *incentive mechanism*
- *training plan*

##### **2. Overseas Training**

- *identify component needs*
- *USAID approval*
- *develop programs*
- *nominees approved*
- *English language (tests)*

### ***C. Manpower Plan***

- *revise CIDA recommendations*
- *compare functions vs job descriptions*
- *to identify training needs*
- *work with MIS to develop MIS database*
- *build skills matrix*

**ATTACHMENT 8**

**WORKSHOP EVALUATION RESULTS**

## WORKSHOP EVALUATION RESULTS

### A. Workshop Objectives

Forty seven 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 and clarify objectives, roles and responsibilities of working groups  
**4**
2. Review major accomplishments of WQIC to date  
**4**
3. Identify lessons learned and specific suggestions for continued implementation and sustainability of the project components  
**3.8**
4. Review and discuss the objectives of other donor activities that relate to the implementation of WQIC  
**3.7**
5. Develop and agree on the WQIC workplan for 1996  
**3.8**

## **B. Opinions and Feedback**

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

- \* For me to be "in the boat", and to understand the available interest / opportunities, and to know what we are aiming for in 1996 activities which will benefit the project and help to achieve the goals.
- \* Cooperation and identification of each work team in MWI & WAJ & JVA. The way each group worked.
- \* a) Getting used to team work and b) participants from the different groups became aware of all components of the WQIC project.
- \* Being able to participate and contribute our ideas.
- \* The sustainability of the project.
- \* Defining the specific goals and achievements that should be met within the project life span.
- \* Getting together and exchanging ideas.
- \* Communication between participants (within work groups and the group at large).
- \* Workshop objectives.
- \* For the working groups who have new members, it built a good foundation for getting the work done.
- \* Developing the workplan for 1996.
- \* The benefit of this workshop was to promote and develop working in teams as groups.
- \* The primary benefit is the preparation of the 1996 workplan.
- \* Team work; Solid, clear plan for 1996; Support of MWI; involvement of other entities.
- \* To start to think and cooperate together.
- \* Overview of the activities of the different WQIC components.
- \* Review and discussion of different activities of the components. The opportunity to meet with other working groups.
- \* It was how to gather the participants' and how to let them be free in their thinking.
- \* To encourage teamwork and have the chance to talk with decision makers.
- \* I don't see much benefit in this workshop, most of the working group members who were invited had nothing to do with the project, the consultant was selling useless ideas to increase his budget and make it sound like it was the group's idea and he succeeded in that.
- \* To get the work groups together and talking with each other.
- \* A good brief on the WQIC.
- \* Coordination with other working groups.
- \* The primary benefit of this workshop is that the working groups have a very good chance to sit together, knowing what each other is doing, and work progress of each group, and where and how they may cooperate.
- \* The 1996 work plan. (2)
- \* To contact each other and know what the others do, and how to cooperate and coordinate.
- \* Get the people together to achieve team spirit.
- \* To know the other groups programs for 1996.
- \* The team of the MIS is almost known.
- \* To exchange ideas between the different component's representatives.
- \* Better understanding of different members from different organization, and the exchange of different ideas.
- \* A good experience and knowledge.

- \* We were able to discuss and change some roles of the working groups.
- \* (1) Identification of general project objectives and components; (2) Demonstration of the difficulty of resolving issues or constraints and achieving objectives; (3) Interrelationship of components & donor projects and indication of lack of planning & coordination of these activities.
- \* Having the opportunity to deal with different tasks and different issues. To work as a group team. To have the whole group meet and discuss their issues.
- \* Getting involved in other project components, getting benefit of other ideas to succeed in our work.
- \* The workshop gave an opportunity to better plan for future activities.
- \* The primary benefit is getting acquainted with the activities of the donors and exchange of ideas with others.
- \* Brainstorming and Team Building.
- \* Planning, Team work, Information and knowledge, discussion
- \* Better understanding of the project components, Recognition of working group abilities, Preparing ourselves for the work and activities of 1996.
- \* Good summary about WQIC and its activities in Jordan and knowing the situation about water in Jordan.
- \* Identifying objectives.
- \* Cooperation, knowing the thinking of others in solving difficulties

## 2. What workshop activity could have been done better?

- \* Pollution prevention and control and the others are similar, but some of activity groups missed a lot of new ideas to help in developing.
- \* None (10)
- \* 1996 Workplans (4)
- \* Closer coordination between groups members.
- \* Irrigation.
- \* It would have been good to have an overall presentation on where these components came from, and what the Ministry committed to initially (MWI and USAID presentations).
- \* The working groups.
- \* All activities were performed well.
- \* Policy.
- \* The other donor activities are necessary but somehow it needed to be more lively.
- \* The water policy.
- \* It could not be better.
- \* great workshop design.
- \* The linkage between different working groups and concerned partners.
- \* All the working group worked hard and have done a good job.
- No. 1 - discuss the objectives and the interaction of the working groups. (3)
- \* MIS and pollution prevention.
- \* To have farmers participate in the workshop.
- \* MIS, ?!
- \* Pollution prevention.
- \* To agreed about the responsibilities of the steering committee.
- \* The overall workshop may have included too many persons who cannot or will not contribute directly toward the project or achieving project objectives.
- \* The arrangement of the workshop. The clarification of the problems and its solution.
- \* Better communication between components, Integrating the overall project goals.

- \* To be clear in defining the problems related to project implementation.
- \* The absence of answers for issues hinders the activity.
- \* On major issues we could have asked the group to give solutions instead of questions.
- \* Planning.
- \* Donors activities and their relationship to WQIC. (2)
- \* Accomplishments of WQIC (2)
- \* No other workshop can do better.

**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?**

- \* Authorization of the nominated people and the time constraint.
- \* Yes, laboratory policy and legislation and law was not covered in our conference. WAJ Secretary General was not in the meeting to know the problems.
- \* 1) Budgeting ambitious activities. (request from other donors if necessary).
- 2) Some linkage between components are still not clearly defined (Further discussions will be helpful).
- \* MIS & Labs
- \* Yes , (1) The definition of the MIS; (2) The duties of the laboratories to avoid duplication of efforts.
- \* Provision of adequate funds to secure appropriate sustainability of project activities after the planning horizon.
- \* The MIS, Water Monitoring, Lab, and Pollution Prevention components should unify their efforts.
- \* I believe that the issues won't be resolved within 1 or 2 weeks, which is the time frame in which to finish the 1996 workplan. There is always next year.
- \* Yes I do.
- \* In our case we must follow up with other people outside of the working group on 1) funding of Tal AlThahab weir upgrade; 2) funding to upgrade JVA O&M equipment and vehicles; 3) We must push hard to get some training conducted in the Jordan Valley.
- \* Staffing
- \* I think most of the important and major issues have been dealt with.
- \* The issues are:-1) Assigning of counterparts. 2) The MIS, Laboratory Upgrade and the Water Quality Monitoring System.3) The benefit which should be derived by the planning directorate / unit from various studies
- \* 1) Activities available in various entities need more deep thoughts for better set up and coordination. 2) Project components versus MWI directorates and units need more attention.
- \* Not clear the continuity in the future because there is no real cooperation between WAJ, JVA & the Ministry (MWI).
- \* Administrative issues.
- \* Working group integration. We have to keep discussing issues with each other.
- \* None (6)
- \* 1- Staff requirements. 2- Logistical requirements. 3- Organizations to be created.
- \* The last comment that Carl Dutto made that activities should be linked to enhancing the capabilities of the planning unit within the Ministry should have been addressed in the workplan activities.
- \* Management to formalize the roles and responsibility of the workgroups and resolve the levels of TA, training, & commodities.

- \* Institutional set up.
- \* Some issues were not resolved like working group members responsibility. Should be resolved during future meetings with the working group
- \* We have dealt with all the issues deeply and I have no specific criticism
- \* Staffing and budgets
- \* Sustainability of the activities and the integration between.
- \* Yes, some of the concepts are not clear for the group and to solve it they have to know it.
- \* Some of activity definitions were not clear to some members in the different working groups. To solve it, the different groups related to each other have to meet from time to time.
- \* Yes, some definitions of some basic terms are not understood or at least not unified among all components and sometimes among the working groups themselves.
- \* Not good communication between the components.
- \* Some of the concepts of the operation plan are not clear to the working groups.
- \* Yes, many issues. - 1) Ministry decision making regarding many project components.; 2) Ministry execution of working group recommendations; 3) Resource constraints like funding limitations.
- \* Finding the funds for some of the issues. (2)
- \* The main unresolved issue is the non-existence of the organizational unit which will support and coordinate with the donor and follow-up the activity and ensure sustainability.
- \* Working group members identifications.
- \* Less cooperation with other component and to do so we have to arrange for another workshop or discussion and meeting to solve.
- \* A lot of issues are still unresolved. This could be anticipated due to the nature of the project. I understand that adequate and reasonable solutions will be reached during the implementation year.
- \* No, but certain elements should be defined more specifically.
- \* The allocated budget needs to be clarified.
- \* Yes, private sector financing. I would prefer that in future workshops, some people from Jordanian Private Sector should be invited.

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

- \* It was successful and excellent.
- \* Very good.(2)
- \* It was marvelous.
- \* Excellent (3)
- \* Too long. Needed shorter, more concise approach. Remove team building with other donor discussions, concentrate on project requirements.
- \* It's very good design and facilitation. (7)
- \* No comment (8)
- \* Design - too long. Facilitation - O.K.
- \* Very good workshop and all facilities are in excellent order.
- \* I have and I got a good impression about how smoothly the workshop was facilitated.
- \* It was perfect.
- \* It was nicely done.
- \* Good (6)
- \* Kathy did a great job in facilitation, she always could control the discussion and guide them to the right direction.

- \* You get what you pay for! we hired the BEST.
- \* The workshop design and management were well done professionally.
- \* O.K.
- \* The arrangements and design of the workshop were very good and comfortable. You were lucky in getting the program facilitator (Kathy). She has done her job very well, she is initiative and has valuable ideas and good experience for such work. In addition her performance, she is beautiful and smart which made it attractive and acceptable deal with her.
- \* Achieved the objectives very well
- \* For me, translation to Arabic could help me to know everything because there were some expressions that were new for me.
- \* Members should have had the chance to prepare the issue, meet and discuss things before the workshop. Facilitator has done a remarkable job.
- \* It's managed well.
- \* Great management, great people, great food, great organizations, keep up the good work.
- \* We don't have the real National Water Master plan.
- \* Thought this was appropriate.
- \* The workshop should include the key figures from all entities of MWI, (at least assistant secretary generals in JVA, WAJ)
- \* Excellent job. Try to involve high ranking officials from WAJ, JVA next time. The more involved they are, the more supportive they can be.

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

- \* O.K. (4)
- \* I believe that all our comments and arrangement must be distributed to all sectors in our ministry and to put all our comments in the hand of Secretary Generals and the Minister.
- \* Fairly good.
- \* Very good. (3)
- \* Couldn't have been any better, congratulations.
- \* Excellent (4)
- \* Adequate.
- \* I have one comment about develop and agree on the workplan 1996.
- \* No comment (13)
- \* Well I think all the arrangements related to this project were well prepared and well managed.
- \* Good. (5) - Thank you
- \* All Perfect.
- \* Very great.
- \* Arrangement were good, so are the logistics.
- \* How about another hotel?.
- \* As mentioned, the arrangements and logistics were good, and Kathy performs very well. There was a change every day in dealing with the programmed activities, these is no routine behavior during working days and not boring. Again, Kathy was dynamic and flexible, so I was very satisfied and I appreciated all the efforts that have been provided.
- \* Very convenient.
- \* It is arranged well.
- \* Great and fun.
- \* It is very good and we hope to have another one in near future.

- \* It is well arranged with good logistics.
- \* The arrangements were also good.
- \* Arrangements, logistics are very good.
- \* Professional work.
- \* Very well done.

42