



**Sustainable Water
Integrated Management (SWIM) -
Support Mechanism**



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**ANALYSIS OF THE RESPONSES TO THE CHECKLIST ON DATA & INFORMATION
AVAILABILITY FOR M&E OF PIM/ IMT IN THE SWIM COUNTRIES**

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Summary of presentation

- This presentation analyses the results of 7 questionnaires sent to the following Partners Countries (PCs): Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Palestine, and Tunisia.
- The questionnaires were developed in two parts:
 1. **Part A** applies to countries which have an existing M&E system, to obtain an overview of these systems and the practices associated with their implementation, without going into the details of the topics investigated within these systems.
 2. **Part B** tries to identify the kind of information that is being collected about the farmers' organizations (including cooperatives that are responsible for water distribution) even though this information is not part of an M&E system.

Part A. Summary of the responses of the questionnaire related to countries that have an M&E system to monitor and evaluate PIM/IMT programs

M&E System Objectives and Number of Indicators Used

	Objectives	Jordan	Tunisia	Egypt
A	To assess the geographical coverage (area (ha), number of irrigation systems transferred, locations and farmers involved) of the PIM/IMT program)	2	4	
B	To assess the degree of political commitment towards the process	3		
C	To assess the adequacy of the existing institutional arrangements in support of the establishment of the WUAs	2		9
D	To assess the technical and institutional performance of the WUAs	5-8	5	24
E	To assess the financial performance of the WUAs	2	2	4
F	To assess farmers needs for support to ensure the satisfactory performance of the WUAs	4	3	20
G	To assess the impact of WUAs establishment (crop production and socio economic issues)			10
H	Others - Please specify the "Others" if any:			42

Other relevant responses on Part A (1)

1. The monitoring systems are regularly updated (every 12 or 6 months depending of countries). All counties use similar gathering tools.
2. Countries have used the “outcomes” or “participatory” models for developing their M&E systems. Although the participatory model is more desirable the other one is also a very valid alternative.
3. All three countries have set targets to achieve.
4. Data collection is considered a high to medium difficulty which is in line with most of the monitoring systems.
5. All countries use similar methods for data collection.

Other relevant responses on Part A (2)

6. Ultimate responsibility for data collection remains with the central offices although regional and local offices support this work.
7. All countries have prepared manuals for the data collection.
8. The integration of the M&E system in the normal operation of the WUAs seems only to be partial although the answer from Tunisia needs to be clarified.
9. All countries use the information collected to improve or modify their PIM/IMT plans but also some other purposes are covered by the countries .

Main features of Part A

- Egypt, Jordan and Tunisia have M&E systems for assessing their respective PIM/IMT national programs.
- Although there are substantial differences in the number of objectives cover and the number of indicators (ranging from 14 to 109) the systems cover well their main purposes.
- There is a high degree of similarity in the responses among the 3 countries. They followed similar good practices.

Part B. Summary of the responses of the questionnaire related to countries that do not have an M&E system for following the PIM/IMT programs

Section A: AVAILABLE INFORMATION REGARDING THE PROCESS OF ESTABLISHING WUAs AND PRACTICES ASSOCIATED WITH THIS PHASE

Geographical coverage of the PIM /IMT programs (B.1)

	Total Positive Responses	Performance
Total area covered by the PIM/IMT programme	3	Medium
Number of irrigation systems under the partial or total management of the farmers	2	Low
Number of farmers benefiting from the programme	4	Medium
Distribution of the transferred irrigation systems by administrative area/district	3	Medium
Regional Average	3	Medium

Ranking system: up to 2 countries: “low”, up to 4 countries: “medium”, up to 6 countries: “high”.

Adequacy of institutional arrangements (B.2)

Adequacy of institutional arrangements	No. of positive responses	Performance
Are the objectives of the PIM/IMT programme clearly defined?	5	high
Is there any Coordination Committee (or similar mechanism) established?	4	medium
Is the coordination effective?	3	medium
Is there a clear line of command in the implementation of the PIM/IMT Programme	2	low
Are the roles and responsibilities of the actors involved clearly defined	3	medium
Have adequate training programmes been defined for major stakeholders	4	medium
Regional Average	3.5	medium

Questions B.3 to B.5

- **Financial commitments towards the process (B.3)**
 - Algeria, Jordan and Tunisia indicate they have very good level of information.
 - Most of the financing comes from the central Government and multilateral organizations.
 - NGOs also play an important role.
 - The level of financial information appears satisfactory.
- **Legal reforms for WUAs (B.4)**
 - Legal reforms have been undertaken only by two countries (Palestine and Tunisia).
 - This is one of the major reasons that explain why the PIM/IMT process in the region progresses slowly and without satisfactory results.
- **Reforms affecting the irrigation agency (or concerned ministry) (B.5)**
 - Irrigation Agencies, or concerned ministries, have enacted some reforms as result of the PIM/IMT processes in most of the countries.
 - This is a significant result, especially when considering that three of these countries report a reduction in the number of O&M staff.

Main features of Part B, Section A

Section A of the questionnaire

1. The geographical coverage of the data concerning location of the systems, number of farmers involved and their regional distribution is low. This is a very strong shortcoming to assess the progress of the PIM/IMT program
2. A clear line of command in the IMT implementation appears a common shortcoming but the rest of institutional arrangements are medium to high
3. The level of financial information at government level appears satisfactory. Central governments are the main financers with some bilateral agencies
4. Legal reforms have been undertaken only by two countries. This is one of the major reasons that explains why the PIM/IMT process in Region progress slowly and with not so satisfactory results
5. Irrigation Agencies, or concerned ministries, have enacted some reforms as result of the PIM/IMT processes. Even two countries report that the number of staff has reduced.

Part B. Summary of the responses of the questionnaire related to countries that do not have an M&E system for following the PIM/IMT programs

**Section B: INFORMATION REGARDING THE
IMPLEMENTATION PROGRAMME OF WUAs AND
PRACTICES ASSOCIATED WITH THIS PHASE**

Awareness campaigns and related events

- All the six countries which responded reported that they have undertaken awareness campaigns among the farmers affected by PIM/IMT, of which
- Three countries report that they have monitored and evaluated the results of the campaigns, with the results being available in only two of these countries.
- Tunisia reports that they cover all the good practices in this domain, followed by Jordan. Only these two countries report having used TV and radio to inform farmers about the PIM/IMT program.
- Five countries report that they have organized meetings with the concerned stakeholders, while study tours targeting farmers and government staff were organized by three countries.

Steps undertaken by the Irrigation Agency in the establishment of the WUAs (B.5)

The process of implementing PIM/IMT has been divided into 12 Steps.

- Jordan and Egypt report that they have covered the 12 steps while
- Tunisia and Morocco report that they have covered 7 steps and Palestine 5.

This provides the idea that Jordan and Egypt have been very thorough in the implementation of the 12 steps while the other countries have undertaken significant shortcuts,

Support services provided after establishing WUA. (B.7)

	No. of Positive Responses ⁷	Performance
Extension	5	High
Agribusiness	1	Low
Marketing	1	Low
Credit for WUAs and farmers	1	Low
Dispute resolution	2	Low
Training in technical aspects	6	High
M&E of management performance	3	Medium
Subsidy for the cost of water	3	Medium
Government assistance for the rehabilitation and improvement	5	High
Easy communication with the irrigation agency	4	Medium
Government support for the establishment of networks of WUAs at regional or national level	3	Medium
Ensuring fair elections	5	High
Regional Average	3.3	Medium

Main problems encountered in the implementation (B.8)

Most important problems

Least important problems

WUA cannot apply sanctions	Politician's resist IMT
Weak legal framework for IMT	Agency reform & staff disposition or relocation
Inadequate farmers' payment for O&M	Resistance to IMT by local government
Irrigation Systems heavy deterioration	Farmers resist IMT
Inadequate support services	No clear/single IMT policy or programme
	Democratic elections of WUA officers difficult to achieve
	Conflicts between farmers/villages

Israel and Algeria did not respond to this question

Sources and use of information (B.9)

Sources of information for the reported problems (B.9)

- From the several sources given in the questionnaires those that were most widely used were: “government reports” and “specific questionnaires”. Only two countries (Egypt and Jordan) made reference to the M&E system and WUAs reports as source of information for the problems indicated in sub heading “d”.

Is the information of the sub heading “d” (used to guide /modify the PIM/IMT program? (B.9)

- Jordan and Tunisia responded positively to this question. The rest responded “No” or not responded at all. This could indicate that there is not a good feedback of the problems encountered into the development of the programs and/or the sources of information are not used.

Main features of Part B (2)

Section B of the questionnaire

1. All countries appear well informed of the need **for awareness campaigns for the farmers** and they have used different methodologies to carry them out.
2. Only two countries have followed the **main steps of the implementation “road map”**. The rest have cover about the half of the potential steps. This indicates important shortcomings in the implementation strategy.
3. Also the support services after transfer appear limited but there is a good understanding of their need.
4. **The problems affecting the process are known** but this information is rarely used to improve the implementation strategy except Tunisia and Jordan that report that they use the information to improve the process.

Part B. Summary of the responses of the questionnaire related to countries that do not have an M&E system for following the PIM/IMT programs

**Section C: INFORMATION REGARDING THE
MANAGEMENT PERFORMANCE OF WUAs AND
PRACTICES ASSOCIATED WITH THIS PHASE**

Functions of the WUAs (B.10)

	DZ	IL	JO	MO	PA	TN	EG	Total	Performance
Distribution of irrigation water	√	√	√	√	√	√		6	High
Drainage(soft maintenance)*						√		1	Low
Maintenance		√	√	√	√	√	√	6	High
Financial and administrative control		√		√	√	√		4	Medium
Agribusiness								0	Nonexistent
Management of wells		√		√		√	√	4	Medium
Rehabilitate or improvement of irrigation system		√		√	√	√		4	Medium
Contribute to the watershed management				√				1	Low
Total by country	1	5	2	6	4	6	2		
Regional Average								3.3	Medium

Questions B.11 and B12

- **Hydraulic coverage of the WUAs (B.11)**

- Only 3 countries responded. Egypt and Tunisia indicated that their systems cover “secondary canal and sometimes primary canals”. Jordan indicates that they cover only tertiary canals.

- **Technical services providers (B. 12)**

- Israel, Morocco, Jordan and Tunisia responded positively. The rest negatively . This is a serious shortcoming for effective management of the Irrigation systems

Legal rights of the WUAs (B.13)

	DZ	IL	JO	MO	PA	TN	EG	Total	Performance
Water right or Water concession		√		√		√		3	Medium
WUAs Can cut water supply to members		√		√	√			3	Medium
WUAs Can fine members		√		√	√	√	√	5	High
WUAs Can have a bank account		√	√	√		√	√	5	High
WUAs Can have properties		√	√	√			√	4	Medium
WUAs Can contract services		√	√	√		√		4	Medium
WUAs canals have right of way			√	√		√	√	4	Medium
WUAs Can impose payments of fees to members		√		√		√	√	4	Medium
Total by country	0	7	4	8	2	6	5		
Regional Average	4								Medium

Rights and responsibilities of members of WUAs (B. 14)

Rights of the member of the association	Total number of countries	Performance
Water right held by the members	3	Medium
Voting rights	7	Very High
Member can get compensations for damages	2	Low
Members must provide land for construction/repairs of Infrastructure	4	Medium
Payment of fees	5	High
Membership is obligatory	1	Low
Regional Average	3.7	Medium

The largest coverage of the mentioned rights goes to Jordan (rights 1-5) followed by Egypt and Tunisia (4).

Adequacy of the operation of the irrigation system (B. 15)

Column1	DZ	IL	JO	MO	PA	TN	EG	Total	Availability of Information
Degree of satisfaction of the farmers with the irrigation scheduling			√		√			2	Low
Delivery performance index	√		√			√		3	Medium
Delivery reliability index	√		√					2	Low
Head/tail water allocation index	√		√			√		3	Medium
Number of disputes over water allocation			√					1	Low
Adequacy of the annual allocation of water	√		√			√	√	4	Medium
Irrigation distribution efficiency	√		√*			√	√	4	Medium
Total by country	5		7		1	4	2		
Regional Average	2.4								Low

Large information gaps for most countries except Jordan. Egypt indicated that is not responsibility of its department to collect this information

Adequacy of the maintenance (B. 16)

- A highly satisfactory coverage of information on the following 8 indicators is mentioned by Algeria, Jordan and Tunisia (7 indicators out of 8):
 1. Gap between desired levels of maintenance and those achieved
 2. Level of siltation of canals and drains *
 3. Frequency of maintenance works
 4. Increase /decrease in the waterlogging and drainage affected areas
 5. Increase/ decrease of the maintenance costs
 6. Time needed to repair major breakdowns
 7. Number of breakdowns of pumping equipment
 8. No. of complaints
 9. Others
- Here Egypt reports that this type of data is not responsibility of their department. The rest of the countries indicate total absence of information availability for assessing the adequacy of maintenance works carried out by WUAs.

Adequacy of the financial system (B. 17)

	DZ	IL	JO	MO	PA	TN	EG	Total	Availability of Information
Annual financial resources available at the WUA.		√	√	√		√	√	5	High
Government subsidies to the expenditures of the WUA.		√	√	√		√	√	5	High
Distribution of the collected money by destination (the amounts (or the percentage) that goes back to the irrigation agency, to the WUAs, etc)			√			√		2	Low
Water users' payment rate		√	√	√		√		4	Medium
Cost of major rehabilitation works			√	√		√		3	Medium
Rate of government/farmers contributions to major rehabilitation works				√		√		2	Low
Total by country		3	5	5		6	2		
Regional Average	3.33								Low to medium

Accounting practices (B 18)

	DZ	IL	JO	MO	PA	TN	EG	Total	Performance
Accounting system according to national regulations		√	√			√		3	Medium
Rules for the distribution of costs among users		√		√		√	√	4	Medium
Existence of a committee that control the correctness of the accounts		√	√			√		3	Medium
Annual budget compared with the planned expenditures						√		1	Low
Total by country	0	3	2	1	0	4	1		
Regional Average	2.5								Low to medium

Assessment of the quality of the management

	DZ	IL	JO	MO	PA	TN	EG	Total	Performance
Manual of organization and functions			√			√	√	3	Medium
Criteria for the selection and evaluation of staff			√				√	2	Low
Established communication system with the water users			√			√	√	3	Medium
Guidelines for the preparation of the Strategic Development Plan for the coming 5 years						√	√	2	Low
Procurement practices and contract negotiation						√	√	2	Low
Monitoring and Evaluation (M&E) system			√			√	√	3	Medium
The M&E system is well integrated with the PIM/IMT process of implementation						√	√	2	Low
Documentation unit (technical and financial) of the WUA			√			√		2	Low
Number of meetings held by the Administrative Board		√	√			√	√	4	Medium
Rules of the Administrative Board		√	√			√	√	4	Medium
Guidelines for budget preparation			√			√		2	Low
Website established and updated regularly							√	1	Low
Training programmes for staff of the WUA			√			√	√	3	Medium
Preparation of annual reports		√	√			√	√	4	Medium
Total by country	0	3	10	0	0	12	12		
Regional Average	2.6								Low to medium

Main features of Part B (3)

Section C of the questionnaire:

- 1. Functions of the WUAs.** The emerging picture is that Israel, Morocco Palestine and Tunisia cover most of the functions mentioned. However the rest of the countries have large gaps indicating limited functions assigned to the WUAs that will require attention in the future.
- 2. Hydraulic coverage of the WUAs.** Most of the WUAs have limited hydraulic responsibility (tertiary canals) but in few countries they cover much larger areas or the whole irrigation system. The limited coverage of area has strong incidence in the economic viability of the WUAs.
- 3. Technical services providers.** About half of countries use the services of technical staff for the management of the WUAs but the other half not and this surely affects their performance.
- 4. Legal rights of the WUAs.** The coverage of the legal rights listed is high for 3 countries and medium for the rest, which is a satisfactory coverage.
- 5. Rights and responsibilities of members of WUAs.** There is a medium coverage of the rights listed with a great variability among countries. This indicates weaknesses in the legal framework.

Main features of Part B (4)

Section C of the questionnaire:

6. **Adequacy of the operation of the irrigation system.** The information available on the different parameters that permits some judgment on the adequacy of the operation of the irrigation system is low. Hence the evaluation of the performance of the WUAs is predominantly incomplete.
7. **Adequacy of the maintenance.** Algeria, Jordan and Tunisia indicated a good coverage of the maintenance information but the rest of the countries have low or medium coverage. This limited information is a limitation for assessing the performance of WUAs.
8. **Adequacy of the financial system and good accounting practices.** Israel, Jordan, Morocco and Tunisia have a good coverage of information regarding the financial system. Egypt has very limited information and for the rest of the countries, nothing is reported. Accordingly low to medium availability of information can be concluded. The associations in Israel, Jordan, Morocco and Tunisia seem to cover most of the good practices. In general the countries scored low to medium on compliance with these practices.
9. **Assessment of the quality of the management.** Of the 14 practices listed to ensure good quality of management at the WUAs, Jordan, Tunisia and Egypt cover most of these practices. Israel covers only three, while the rest of the countries did not report any information. The general performance on such practices by the PCs is low to medium with large discrepancies among countries.

Part B. Summary of the responses of the questionnaire related to countries that do not have an M&E system for following the PIM/IMT programs

**Section D: INFORMATION RELATED TO
ASSESSING THE IMPACT OF THE
ESTABLISHMENT OF WUAS**

Information related to operation and maintenance (B.18)

	DZ	IL	JO	MO	PA	TN	EG	Total	Availability of Information
Increase/decrease in water resources transferred to the WUA	√	√	√			√		4	Medium
Reduction of the overall water use per hectare by the farmers	√	√	√					3	Medium
Reduction of use of polluted water in irrigation	√							1	Low
Irrigation system expanded	√			√		√		3	Medium
Change in irrigated area	√					√		2	Low
Total by country	5	2	2	1	0	3	0		
Regional Average	2.6								Low to medium

Recovery of costs

	DZ	IL	JO	MO	PA	TN	EG	Total	Availability of Information
% Annual Reduction of government expenditures in O& M of irrigation systems	√		√			√	√	4	Medium
Water users' payment rate	√	√	√			√		4	Medium
Farmers awareness about costs, benefits and risks	√		√				√	3	Medium
Total by country	3	1	3	0	0	2	2		
Regional Average	3.7								Medium

Management of the WUAs

	DZ	IL	JO	MO	PA	TN	EG	Total	Availability of Information
Number of farmers supporting the WUA management			√				√	2	Low
Percentage of leaders of the association that are women			√				√	2	Low
Farmers awareness about their rights , functions and responsibilities			√			√	√	3	Medium
Total by country	0	0	3	0	0	1	3		
Regional Average	2.3								Low

Socio economic issues

	DZ	IL	JO	MO	PA	TN	EG	Total	Availability of Information
Annual cropping intensity		√	√		√	√		4	Medium
Crop yield per unit of water used		√	√					2	Low
Land profitability			√					1	Low
Gross value of production (GVP)			√			√		2	Low
Gross value of production / Irrigated cropped area			√					1	Low
GVP/Crop Water Requirements (CWR)	√		√			√		3	Medium
Water profitability			√			√		2	Low
Total by country	1	2	7	0	1	4	0		
Regional Average								2.1	Low

Related to the environment (B.21)

	DZ	IL	JO	MO	PA	TN	EG	Total	Availability of Information
Production area lost due to soil salinity and water logging	√					√		2	Low
Incidence of water related diseases		√						1	
Total by country	1	1	0	0	0	1	0		
Regional Average								1.5	Low

General observations about Part b. Section D

- An effort was made in drafting the questionnaire to reduce the number of indicators in this section because it is usually one weak point of the M&E.
- it is evident that the coverage of the information regarding the impacts is generally low. *This appears a serious shortcoming which indicates that at regional level, little is known about the positive or negative impact of PIM/IMT policies and programs.*

Main features of Part B (5)

Section D of the questionnaire:

- The available information regarding the impacts is generally low. This appears a serious shortcoming that indicates that at regional level little is known about the positive or negative impact of IMT/PIM policies and programs.

Main conclusion

- The emerging regional picture is that the 3 countries that have an M&E system cover the most important aspects but have also substantial gaps in the information collected.
- Those that do not have such a system the existing information indicates that they appear interested in this kind of information but lack an effort to integrate it in a common regional M&E system.

Thanks for your attention

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