Sustainable Water Integrated Management (SWIM) -Support Mechanism



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Water is too precious to waste Main features of the proposed Regional comprehensive M&E system for PIM/IMT programs

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Summary of presentation

The presentation is essentially divided in 3 sections:

- The objectives and main characteristics of the proposed M&E system
- 2. The evaluation system
- 3. The main outcomes and outputs of the 4 modules including those aimed at evaluating impact

Objectives of the M&E system

- To monitor and evaluate the PIM/IMT process throughout its implementation stages, in order to alert governments and WUAs of favourable or negative variances from targeted achievements and enable them to take the necessary actions - including process adjustment - to ensure successful implementation of the PIM/IMT and efficient performance of the WUAs.
- M&E is a tool that assist governments and WUAs to improve their performance and as such should be viewed.

A special M&E system for on-going PIM/IMT programs (1)

M&E systems are normally designed at the **initial stages** of a project or program. Their purpose is to monitor if the planned activities are carried out according to the Plan of Work and to monitor if the all the outputs of the outcomes were achieved



If all the **activities** (of a given output)are carried out as planed the **output** is achieved

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If **all** related outputs are achieved **metric** related **outcome** is **generally** attained

A **special system** for assessing the present situation

- The proposed M&E systems however meets the challenge that most of the PIM/IMT programs in the Mediterranean Region are **already going - on** and they are at different stagess of development.
- Therefore the proposed M&E system has to assess the present situation. For this purpose it has to evaluate what outcomes and outputs were achieved in the past.
- As the actual outcomes, outputs of a given country are not known, the system has assumed those that are internationally accepted as part of the good practices in the implementation of PIM/IMT programs

In order to assess if the outputs and outcomes were achieved the system **proposes a number of indicators that in reality check if the related assumed activities were carried out**. Most of these indicator are of the "Logical (Y/N)" type A special system for monitoring and assessing future progress in the PIM/IMT program

- The M&E should not only be able to assess the present situation but even more important to monitor the progress in the future.
- The same indicators when applied for several years in the future which permit to assess the progress with respect to the present situation.
- In this respect the "Numerical indicators" are particularly useful. If data from past years are available they will provide good information of the past performance. In the same way future data will provide valuable information to asses the progress made with respect to the present situation

A dual purpose M&E system

In conclusion, the proposed M&E system has a dual purpose:

- The first time that the system is applied it will evaluate the present (and past) performance of the government and WUAs against internationally accepted good practices in the implementation of PIM programs.
- 2. Its application in the years to come will permit to monitor and evaluate the future progress of the government actions and WUAs to attain higher level of efficiency in the implementation of the PIM program. The progress will be assessed against the present situation

The modules of the proposed system

The proposed M&E system consists of four modules as per the objectives listed below:

- Module A: assesses the degree of political commitment towards the PIM/IMT process and the adequacy of the existing institutional arrangements in support of the establishment of the WUAs
- Module B: assesses the performance of the responsible irrigation agencies in the implementation of the PIM/IMT program. It includes also some few indicators for measuring impact of the government actions.
- Module C: Assesses the institutional, financial and technical performance of Water Users Associations
- Module D: Assesses the impact of WUAs' establishment

A single system with two parts

- The M&E system has been conceived as a single entity but made of two parts that can be managed separately by the Government staff and the WUAs.
 - Part 1 concerns modules A and B. Both modules are envisaged to be owned by the relevant irrigation agency which is responsible for the implementation of the PIM/IMT process in the country, and the irrigation agency's representations (offices) at the local and regional level.
 - Part 2 concerns modules C and D: Modules C & D are particularly relevant to the Water Users Associations. It is envisaged that the system should allow the aggregation of the indicators for all the WUAs at the local, regional and national level.

The type of indicators used

The proposed M&E system uses the following types of indicators

- Logical Indicators (Y/N). They consist of an statement and the users of the system has only to respond Yes or No as applied to the concerned government institution or WUA.
- Numerical indicators. They provide numerical information about an activity that has been carried out. Numerical indicators consist of one or more numerical variables. They are needed to determine the value of the numerical indicators.
- Numerical and qualitative indicators. They are essentially qualitative indicators where consulted people express qualitative opinions but results are expressed as percentages of the total number of people consulted.
- Information data. They are not truly indicators but provide information that helps to evaluate the results of some of the numerical indicators.

Number of indicators of the proposed M&E system

Module	Numeri cal	Logical	Total No. of indicators per module	Estimated No. of Data variables for the numerical indicators	Numerical Indicators requiring Surveys	Information Data
Module A	4	15	19	8		0
Module B	16	14	30	32		1
Total Part 1	20	29	49	40		1
Module C	25	20	45	32	5	14
Module D	6	0	6	6		1
Total Part 2	31	20	51	38	5	15
Total M&E system	51	29	100	78	5	16

Note. In the evaluation of impact several indicators already defined in other modules are used but not counted here since they do not represent new information.

The evaluation system proposed (1)

- The evaluation of the results arising from the indicators is the most useful part of any M&E system.
- Often evaluation criteria are not well defined and evaluation and become largely subjective.
- As requested by the participants of the Workshop of Athens an effort has been made to define more precisely the evaluation process.
- The proposed evaluation system is base on the assignment of points with only 3 categories : 2 points, 1 point and 0 points. For each category ranges of the value of indicators are defined and point assigned accordingly. The system is equally applied to all indicators
- The definition of the ranges for each category of points were defined according to international experience but in several instances national inputs will be needed
- The specific meaning of the number of points changes for every indicator but in general terms :
 - 2 = satisfactory situation
 - 1 = improvements are needed
 - 0 = the situation is unsatisfactory

Assessing outputs

• The achievement of an output depends on the activities carried out (indicators). With the system of points is possible to assess the degree of achievement of the output. An example is given below:

	Indicator s	2 points	1 point	0 points	Total
Output 1	Indicator 1		1		1
	Indicator 2	2			2
	Indicator 3			0	0
	Indicator 4	2			2
	Indicator 5	2			2
	Total	6	1	0	7

- The maximum number of points is 10 and the number of points obtained is 7.
- The degree of achievement is 70 % that indicates that the output has not fully achieved but with some improvements the full achievement will be possible.
- For the future improvements: first priority is indicator No. 3 and second priority is Indicator No. 1

Assessing outcomes

Outco mes	Ouputs	Indicator s	2 points	1 point	0 points	Total
Ο		Indicator 1		1		1
U		Indicator 2	2			2
T		Indicator 3			0	0
	Output 1	Indicator 4	2			2
С		Indicator 5	2			2
Ο		Total	6	1	0	7
М		output 1				
Е		Indicator 6	2			2
	Output 2	Indicator 7	2			2
1		Indicator 8		1		1
1		Total output 2	4	1	0	5
	Total outcome 1		10	2	0	12

Completing the process of evaluation

- The points system can never be a complete evaluation since the human input is needed to understand the reasons behind the values obtained by some of the indicators.
- With this purpose evaluation sessions are planned in the process to confront the numerical results with the local experience and arrive at a shared evaluation.
- The evaluation process should be completed with an annual plan of work aimed to correct the major deficiencies encountered

How the system will operate in practice

- 1. The existing draft of the system will be given to a subcontractor to develop the processing of the information in an automatic manner.
- 2. Once the system is developed it will be installed in the respective offices of the government and selected WUAs
- 3. Training of users will take place
- 4. Concerned institutions (Irrigation agency and WUAS) will be requested to fill in the requested information (number of tables)
- 5. The system will use the above information automatically to determine the indicators and made the points evaluation.
- 6. The results obtained will be discussed and evaluation completed locally. Plan of improvements should be prepared
- 7. The M&E system may be modified according to the lessons learnt
- 8. Results of the experience will be presented and discussed at an international meeting

Part 1.Assessingthe performance of the government agencies involved in the implementation of the PIM/IMT program

It is comprised of 2 modules:

Module A: assesses the degree of political commitment towards the PIM/IMT process and the adequacy of the existing institutional arrangements in support of the establishment of the WUAs Module B: assesses the performance of the responsible irrigation agencies in the implementation of the PIM/IMT program

Outcomes and outputs of Module A

	Module A		
Number of outcome	Assumed Outcomes	Outputs	Number of Indicators
A.1	•	1. A government statement declaring the PIM/IMT program a national priority is available	1
A.2	The PIM/IMT program has been institutionalized for the planning and implementation phases	1. Coordination mechanism is in place	3
A.3	The PIM/IMT program is supported with a national PIM/IMT Plan which is	 A national PIM/IMT Plan with financial and human resources allocated is available Annual budget for rehabilitation available 	3
A.4	operational Government effectively regulating WUAs establishment and		1 5
	functioning	2. Existing legal framework is used but plans to reform it exist	2
A.5	Irrigation agency functioning effectively according to a new institutional framework	1. Legal framework of irrigation agency revised and administrative reforms made	4
8		Total	19

Outcomes and outputs of Module B

	Module B		
Number of outcome	Assumed Outcomes	Outputs	Number of Indicators
B.1	WUAs are established according to plan	1. PIM targets of equipped area have been achieved	2
B.2	Water users are supportive of the	1. Awareness needs assessment carried out	1
	PIM/IMT program	2. Information and communication materials produced and available	1
		3. Awareness campaigns carried out	1
		4. Water users contacted and informed of roles and responsibilities	1
B.3	WUAs receive guidance and support from the irrigation agency	1. Support Units formed , staffed and functioning effectively	2
Support Units	Support Units	2. Staff of the Support Units adequately trained	1
1	WUAs leaders and staff know their responsibilities and have the necessary skills to carry out their work	1. Training needs assessment for the WUAs leaders and staff is carried out	1
		2. Training for the WUAs leaders and staff is implemented	2
		3. Training evaluated	1
B.5	Financial management capacity of WUAs developed and operative	1. Financial training implemented	3
	woas developed and operative	Financial system installed and operated by trained accountants	1
		3. Financial systems of WUAs operate according to the established procedures	1
		Subtotal 5 outcomes module B	18

Outcomes and outputs of Module B (cont.)

B.6	Government effectively regulating Federations of WUAs and implementing them according to plan	1. WUA Federations legally formed and functioning effectively	1
		2. WUA Federations established according to plan	2
B.7	WUAs are in the financial position of maintaining and operating the irrigation system	Income and O&M costs match for most of the WUAs	1
B.8	A monitoring and evaluation (M&E) system provides inputs for the evaluation of PIM program and improving the performance of WUAs	M&E system is defined and operative	4
B.9	Reduced cost of operation and maintenance and greater availability of water in the irrigation systems transferred to WUAs	Rehabilitation needs in the irrigation systems transferred to the WUAs identified and works undertaken	4
		Subtotal 5 outcomes module B	12
		Total module B	30

Part 2.Assessing the performance of the Established WUAs

It is comprised of 2 modules:

Module C: Assesses the institutional, financial and technical performance of Water Users Associations Module D: Assesses the impact of WUAs' establishment

Outcomes and outputs of Module C

Number			Number of
of	Assumed Outcomes	Outputs	Indicators
C.1	WUAs formerly established	WUA has clear functioning rules	1
C.2	Governance bodies of the WUA	1. General assembly functioning regularly	3
	functioning adequately	2 Administrative Council functioning regularly	2
		3. Women represented in governance bodies	2
		4. WUA's activities audited internally	1
		5 . Annual financial and work plan approved	2
C.3	The irrigation system is operated	1.A reliable and efficient water delivery is provided	
	according to accepted standards	within the annual allocation	4
C.4	Irrigation water is provided timely	1. Timely irrigation water supply is provided	
	and equitably		2
		2. Irrigation water is equitably provided	3
C.5	Improved level of water delivery	1. Procedures for improved operation and	6
C.6	Improved control of all technical	1. Financial and administrative systems of records are	
	and financial activities	established	3
		2 Improved control of cost of major components of	
		budget	1
		3. Detailed and accurate records of Irrigation service	2
C.7	Improved level of service provision	1. President of the WUA applies good management	
		practices	4
		2. Farmers of the WUA and government staff (of the	
		irrigation agency) are satisfied with the performance of	
		WUA	2
	Operation and maintenance costs	Illegal abstractions are reduced	
C.8	are reduced		2
	Increased opportunities for	M&E system generates information for the evaluation	
	improving the performance of the	of the performance of WUA	
C.9	WUA		2
C.10	Improved level of overall use	Reuse of drainage water	3
		Total number of indicators	45

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Module D : Evaluation of impacts in the WUAs

Module D		
Area of assessement	Number o	f Indicators
	New	Existing
1. Use of water resources		2
2. Financial viability of WUAs		3
3. Management of the WUA		1
4. Agricultural production	3	
5. Environmental effects	3	
total	6	6

Thanks for your attention

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