



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



Project funded by
the European Union

Water is too precious to waste

**M&E System Application To Monitor & Evaluate the
Participatory Irrigation Management (PIM) and Irrigation
Management Transfer (IMT) Process**

2.2 M&E per outcome

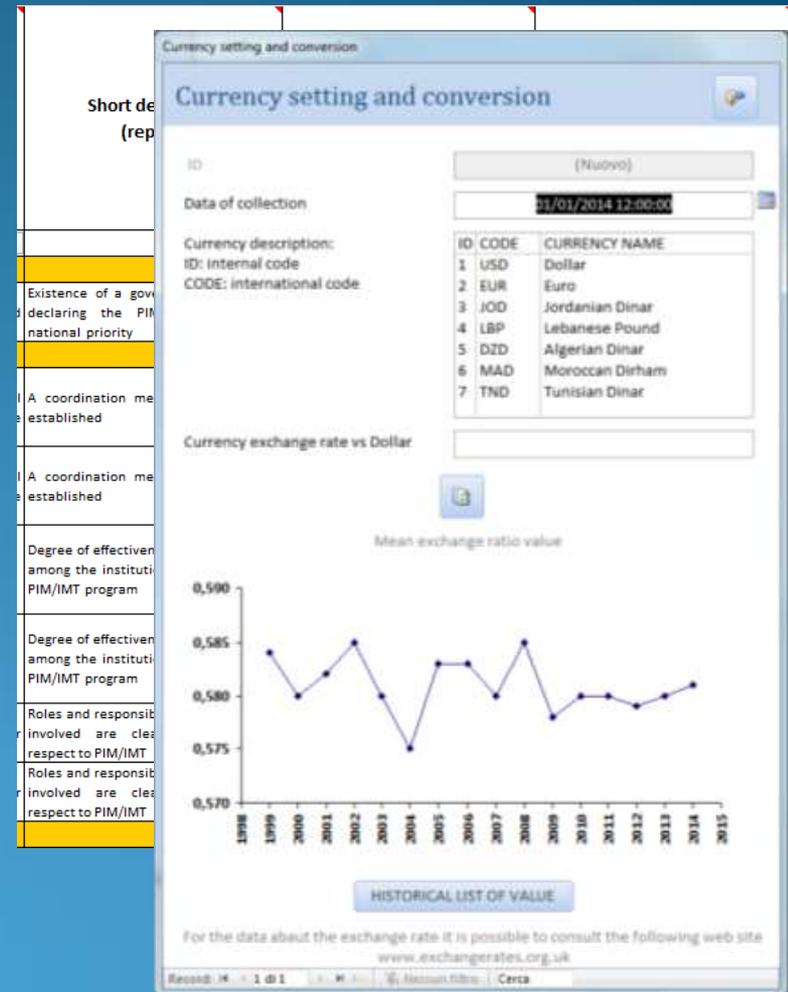
This activity is implemented in collaboration with CIHEAM IAM Bari



Organization into outputs

The section containing the numerical indicators includes all the variables needed for the calculation of the indicator. This set of tables is used in the field to collect the required data. The tables have internal validation capability in case that responses are not framed within the expected answer.

The system is capable of processing the information collected in the field and producing a complete list of the values of the indicators grouped by outcomes and outputs. For those “Numerical Indicators” or “Information Data” or variables where data may be available for several years the system is able to generate graphs with trends.



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Indicators per output

The system is able to make an evaluation of the results obtained for the indicators according to established criteria.

The evaluations at the level of indicator are aggregated at the level of output and outcome.

The reports illustrate the outputs and results after the appropriate calculation procedures carried out by the information system.

MONITORING		
Outcome	Output	Indicator
A.1 - the implementation of the PIM program is improved activities	Agreement Data that according the PIM program's national priority to activities	A.1.1 - Success of agreement document according the PIM program's national priority
OUTCOME A1		
A.2 - the PIM program has been institutionalized for the planning and implementation phase	Coordination mechanism is in place	A.2.1 - A coordination mechanism has been institutionalized A.2.2 - Degree of effectiveness of coordination among the institutions participating in PIM program A.2.3 - Roles and responsibilities of the main involved are clearly defined with respect to PIM program
OUTCOME A2		
A.3 - the PIM program is supported with a national PIM program that will be operational	A national PIM program with financial and human resources allocated to evaluate	A.3.1 - A national PIM program with financial and human resources allocated
		A.3.2 (AR) - Percentage of the annual budget allocated to the irrigation agency for the PIM program with respect to the budget two years ago
		OUTPUT A3.1
		A.3.3 (TMR) - Percentage of the total number resources allocated by the irrigation agency to the PIM program in last year with respect to two years ago
		OUTPUT A3.2
		A.3.4 (AFAR) - Percentage of the annual financial allocation for the rehabilitation (AFAR) or replacement of the existing irrigation systems last year with respect to 2 years ago
OUTCOME A3		

REGIONAL AND LOCAL OFFICE LIST			
Regional and local office list			
REG CODE	REGIONAL NAME	LOC CODE	LOCAL NAME
1 North Directorate			
		2	North Shouneh (DA 5)
		3	Al-Manshiyyeh Pump Station 14
		4	Sheik Hussein Pump Station 28
		5	Al-Mashare Pump Station 33
		6	Wadi Ar-Rayyan Pump Station 41
		1	North Shouneh (DA 3, 4)
2 Middle Directorate			
		8	Al-kraymeh Pump Station 55
		7	Abu-Seido Pump Station 50
3 Karameh			
		10	Ghor Kabed Pump Station 91
		11	Ghor Kabed Pump Station 95
		12	Al-Kafrein
		13	Ar-Rama
		9	Ghor Kabed Pump Station 81
4 South Directorate			
		16	Al-Khunezeera
		14	Mazra'a, Haditha
		15	Feifa

Typology of requested input: Logical, Numerical and calculated

Type of input

The information that we want to acquire can be stored in different way depending on its nature, 4 types of input are considered:

IL: for logic input, normally an answer to a specific question (Yes or No);

IN: for numeric input (No. of people, a money value, areal measure, etc.)

IQ: for qualitative-coded input (normally a valuation question precompiled)

CA: for calculation, the field with this specificities, self determinates its value through the use of a formula

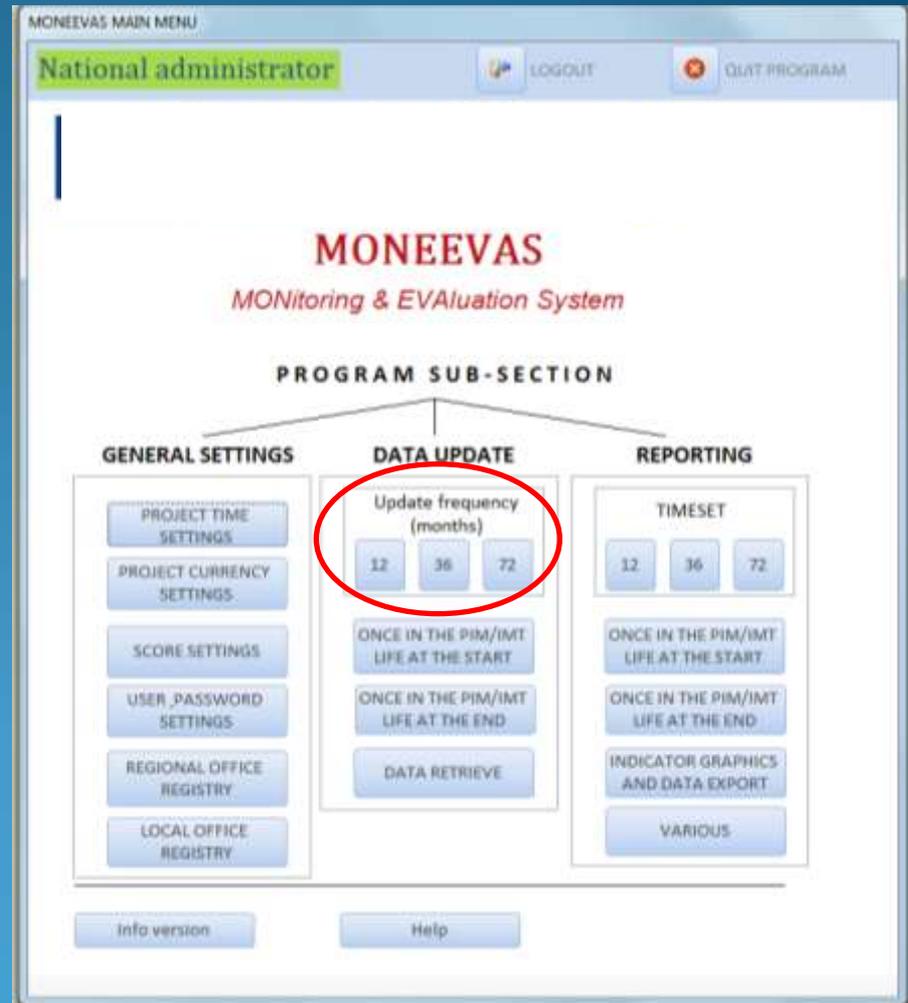
output/outcome MODULE	SUBJECT OF REQUEST	LEVEL OF AGGREGATION	TYPE OF AGGREGATION	LEVEL OF APPLICABILITY	REVISER	TYPE OF INPUT	FREQUENCY	GRAPHICS & REPORT	CODE	Acronyms for numerical indicators
A	N			N		IL	12		A01010	
A	N			NR		IL	36		A02010N	
	R	N	C	NR		IL	36		A02010R	
A	N			NR		IQ	12		A02020N	
	R	N	C	NR		IQ	12		A02020R	
A	N			NR		IL	36		A02030N	
	R	N	C	NR		IL	36		A02030R	
A	N			N		IL	36		A03010	
A	N			NR		IN	12		A03021N	AB1n
	R	N	S	NR		IN	12		A03021R	AB1r

Frequency of monitoring and codification

The unit of frequency is in months, but the monitoring frequencies are every 12, every 36, every 72 months and once in the PIM/IMT lifetime.

You can also enter historical data through the input forms, thanks to which the database will be populated.

Simply select the desired frequency option, and the masks data entry will appear, organized according to the coding sequences and included in the database system structure



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The image displays two overlapping screenshots of a software application titled "National input mask - 12M". The top screenshot shows a form with several sections:

- GENERAL A B** (with a year selector set to 2006)
- B03025N:** Number of Government Staff at the Support Unit: fully dedicated to provide support to PIM/IMT program (NGSPIM/IMT) up to last year. For staff that is not working full time they should be converted to full time. Example: 4 persons working 1/2 time is equal to 2 persons full time. Staff of the support units can be at the local level, at the regional or national level at the headquarters of the irrigation agency. (Input field: no. of people)
- B03026N:** Number of Actual training days carried out for the staff of the Support Units during the last year. Note that the staff of the support units can be trained at the local level, and at the regional and national levels (at the headquarters of the irrigation agency). (Input field: no. of day)
- B03027N:** Number of Training Days Planned for the staff of the Support Units during the last year. Note that the staff of the support units can be trained at the local level, and at the regional and national levels (at the headquarters of the irrigation agency). (Input field: no. of day)
- B03028N:** Annual ME report is produced, with the results integrated into the annual workplan. "WUAs should produce an annual report with the results of the indicators and the corresponding evaluation integrated into the annual workplan and forming the basis for actions next year". (Input field: yes)
- B03029N:** Annual amount of rehabilitation/improvement needs for each irrigation system transferred? (Input field: yes)
- B03030N:** A technical study where the main problems of the irrigation system is identified and a list of rehabilitation/improvement. Normally this is carried out together with the technical study. (Input field: yes)
- B03031N:** If the government meet to determine the priority works to be carried out. (Input field: yes)

The bottom screenshot shows a similar form with a large empty text area and two input fields at the bottom:

- ID:** 3
- REFERENCE YEAR:** 2006

The bottom status bar of the application shows "Record: 14 2 45" and "Cerca".

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Reporting per level

For every hierarchical level you can get the report to display the data, indicators, results and scores: this greatly facilitates the interaction with the system, regional and national level, and makes possible an estimate of the expected results.

The ability to export data, makes also possible to create charts and reports in external programs



Currency setting and conversion

Currency setting and conversion

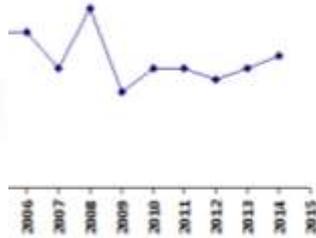
ID: (Nuovo)

Data of collection: 31/01/2014 12:00:00

Currency description:
ID: internal code
CODE: international code

ID	CODE	CURRENCY NAME
1	USD	Dollar
2	EUR	Euro
3	JOD	Jordanian Dinar
4	LBP	Lebanese Pound
5	DZD	Algerian Dinar
6	MAD	Moroccan Dirham
7	TND	Tunisian Dinar

ange ratio value



2006 2007 2008 2009 2010 2011 2012 2013 2014 2015

LIST OF VALUE

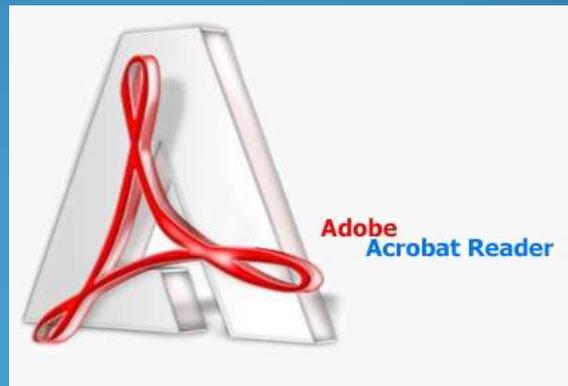
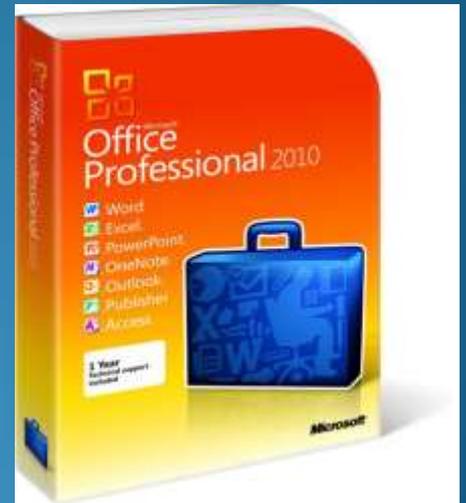
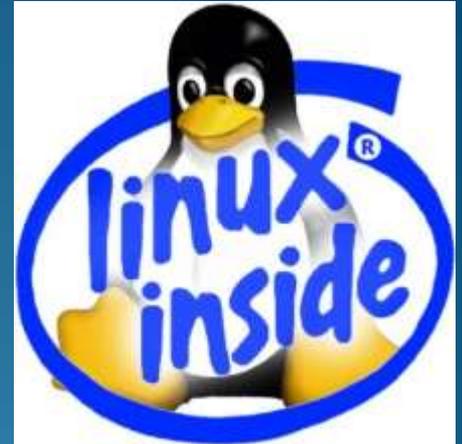
It is possible to consult the following web site
angerates.org.uk
Cerca

Justification of software selection

The first reason for the choice was the time available for development, making it impossible to consider solutions based on other application platforms, such as "open source"

The second reason is the availability of a platform for distribution to regional and national level that enables all operators of all levels to work without having any software license: it is advisable to purchase a Microsoft Office Professional 2010 Suite at the national level, for any changes to the structure after the release phase

The last and most important reason is the possibility to use any kind of computer at the local level, provided they are able to run the software Adobe Acrobat Reader 9 or later versions



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Input Data Mask at Regional and National Level

Regional office registry

Regional office registry

REGIONAL OFFICE UNIQUE CODE:

Name of Irrigation Agency responsible for the PIM/IMT program:

DETAILED INFORMATION

OFFICIAL ADDRESS INFORMATION

CITY	<input type="text"/>	ZIPCODE	<input type="text"/>
STREET	<input type="text"/>	CIVIC NUMBER	<input type="text"/>

President name

Referent name

Referent mail

Referent phone

Record: 4 di 4 Cerca

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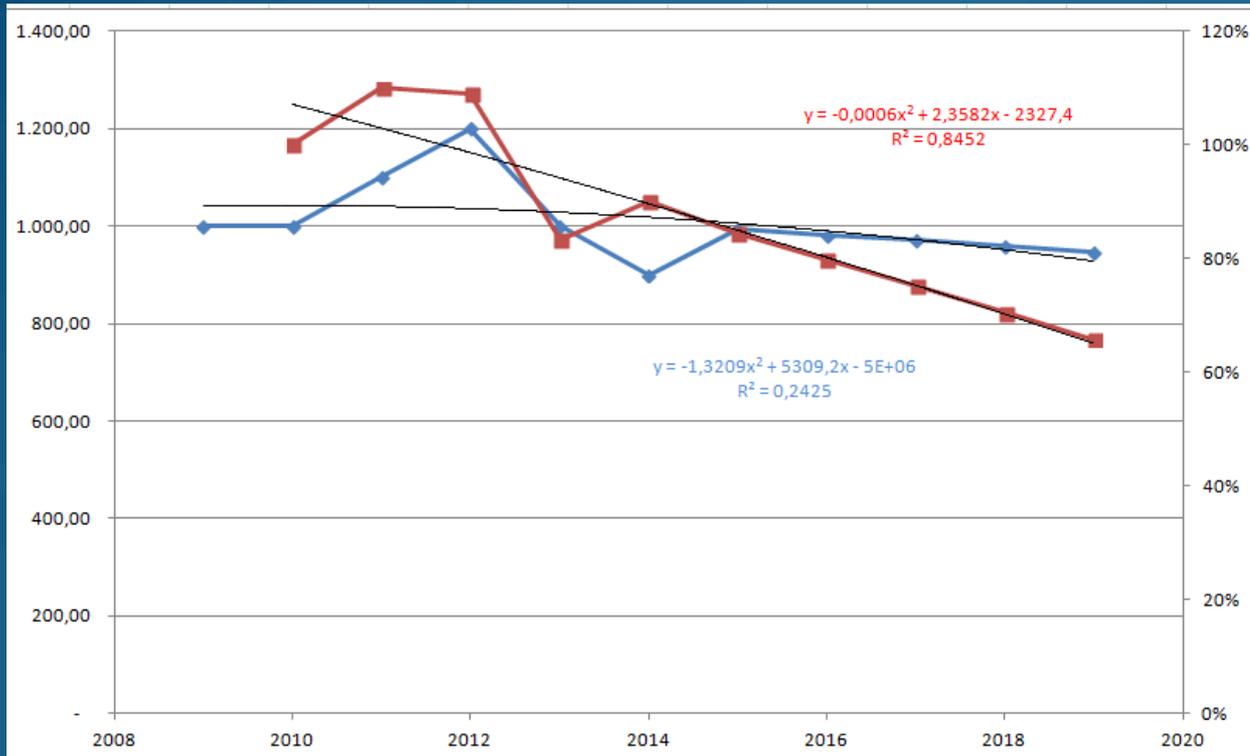
MONITORING						EVALUATION		
Outcome	Output	Indicator	Graphs	Score system (total)	Total	Max score	Evaluation	Comments
A.1 - The implementation of the PIM/ITM program is supported actively	Government decision making the PIM/ITM program a national priority is available	A.1.1 - Extent of government decision making the PIM/ITM program a national priority	10				Score 2 means the activity has been carried out and the output achieved. Score 0 means the output has not been achieved.	The fact that government needs explicit their support to the PIM program is a positive sign practice but its absence does not mean necessarily that the PIM program is not supported. Therefore the score '0' means only that the government does not want to make support to policy through this. Why support the PIM program.
		OUTCOME A1					2	
A.2 - The PIM/ITM program has been institutionalized for the planning and implementation phase	Coordination mechanism is in place	A.2.1 - A coordination mechanism has been established	10				Score 0 means inputs from different government agencies are properly coordinated, into any case and line of command is unique. Score between 0 and 2 indicates deficiencies in the coordination and it will be necessary to look to the specific indicators to identify where the deficiencies are. Score 2 means that the coordination is excellent.	
		A.2.2 - Degree of effectiveness of coordination among the institutions participating in PIM/ITM program	10					
		A.2.3 - Roles and responsibilities of the entities involved are clearly defined with regard to PIM/ITM	10					
OUTCOME A2						6		
A.3 - The PIM/ITM program is supported with a national PIM/ITM plan which is available	A national PIM/ITM Plan with financial and human resources allocated is available	A.3.1 - A national PIM/ITM plan with financial and human resources allocated	10				If the indicator value is 2 the output has been achieved. If the value is 0 the output has not been achieved. The progress scoring system for indicators A.3.2 and A. 3.3 is related to the age of the PIM/ITM process. An annual decreasing trend in the allocation of financial and human resources is positive after 2-25 years of the PIM/ITM program, since the more time is transferred the socio-governmental indicators should be improved. However PIM may not be true in all cases since during the initial years, the government may require the resources constant or even increase them. For this reason it is important to look at the trend during a period of at least 2 to 25 years to make a more precise evaluation. The scoring system may be modified according to local experience.	
		A.3.2 (AR) - Percentage of the annual budget allocated to the irrigation agencies for the PIM/ITM programs with respect to the budget two years ago	10					
		A.3.3 (THR) - Percentage of the total human resources allocated by the irrigation agencies to the PIM/ITM programme in last year with respect to two years ago	10					
	Annual budget for rehabilitation activities	OUTPUT A3.1					6	A score of 0 points means that the annual budget with the human resources is allocated according to the needs of the PIM/ITM program. Lower points indicated that the trend is not as expected and reasons should be investigated.
		A.3.4 (ARR) - Percentage of the annual financial allocation for the rehabilitation (ARR) or replacement of the existing irrigation systems last year with respect to 2 years ago	10					Indicator A.3.4 aims to verify the continuity of funds for rehabilitation works in the beneficiary areas. A score between 2 and 10 indicates that the budget allocated is maintained within reasonable limits but a 0 indicates an abrupt decline that should be clarified in some countries the PIM/ITM process could be slow. And the budget increase might continue beyond 2 years. It is therefore important to track the trends based on the specific country's PIM program timeline.
OUTPUT A3.2						2		
OUTCOME A3						8		

Creating Reports at Regional and National Level

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Creating Graphics at
Regional and
National Level