



*Ministry of Water and Irrigation  
Jordan Valley Authority*

*Regional workshop on the M & E system to monitor  
and evaluate the PIM & IMT process in the  
SWIM-SM Countries  
Athens , 17-18 Nov. , 2014*

**By**

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## *The Cooperatives forms*

- Operation of FTAs by famers themselves (1997-2001)
- Water councils/committees (2001-2002)
- Water Users Associations (2002 Up to date)

# Water Users Associations in Jordan

- WUAs are cooperative civil voluntary non-profit organizations that are managed by the farmers.

The main objective of the WUAs is : Sustainable management of irrigation water resources in the JV through farmers participation.

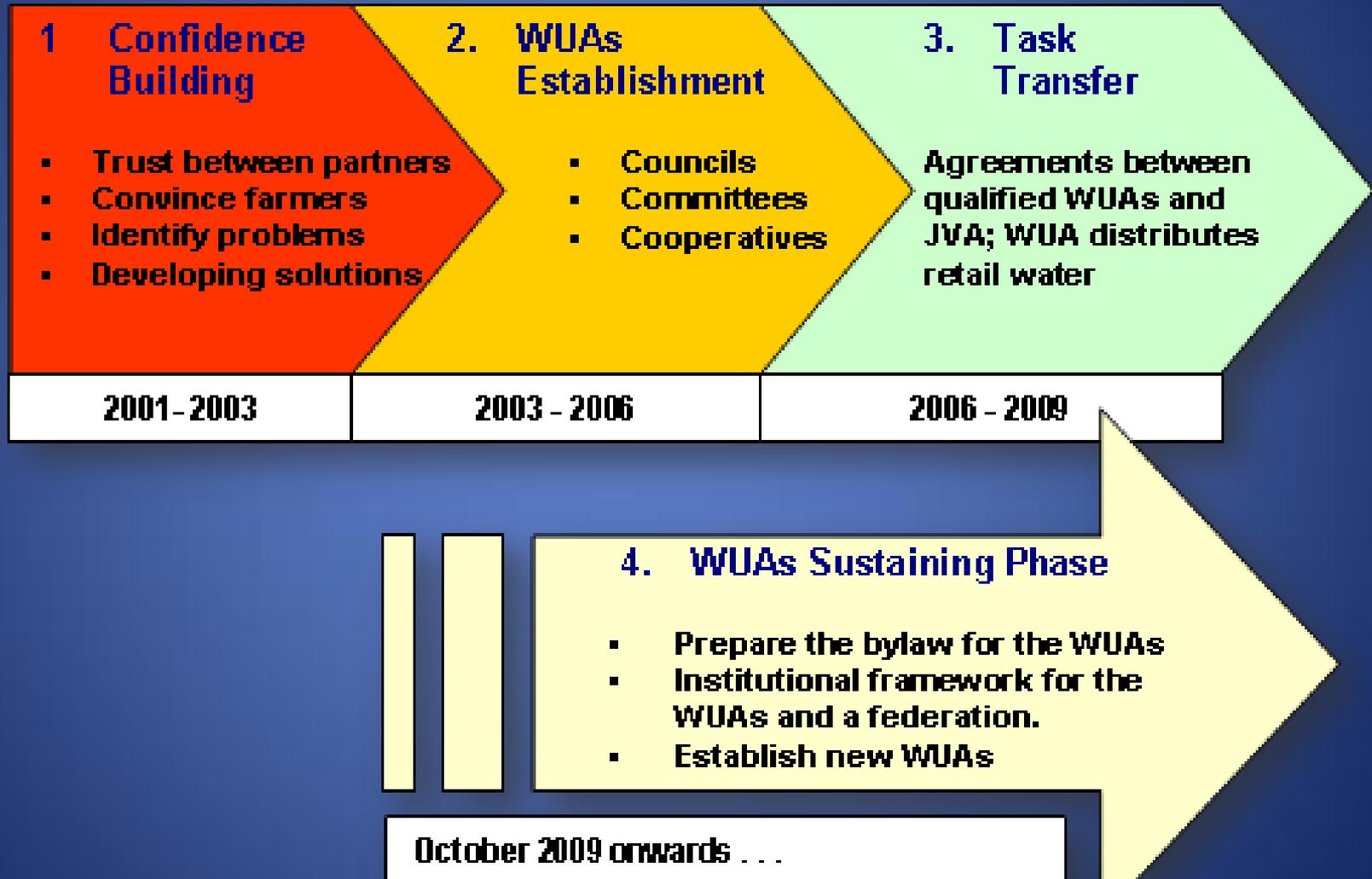
## On the governmental level (JVA):

Maintaining the infrastructure and optimal irrigation water use.

## On the farmers level:

Improvement of the level of provided services.

# Implementation phases



## WUA Legal Umbrella:

- WUA's in Jordan were registered in independent financial and administrative cooperative ( under cooperative law and by law)- legal umbrella for JCC.
- JCC makes periodic visits to monitor WUAs and the General Assembly Meetings.
- JCC provides auditing services.
- JCC provides training courses ( management , accounting, computer,.....).
- JVA began to transfer water management function to qualified WUA's based on JVA article No.30

# WUA's in Jordan Valley

Under Construction

7

Only Participation  
without Transfer

3

55.940 Dunum

Transferred Tasks with  
Partially cost

4

33.435 Dunum

Transferred Tasks with  
cost

12

95.146 Dunum

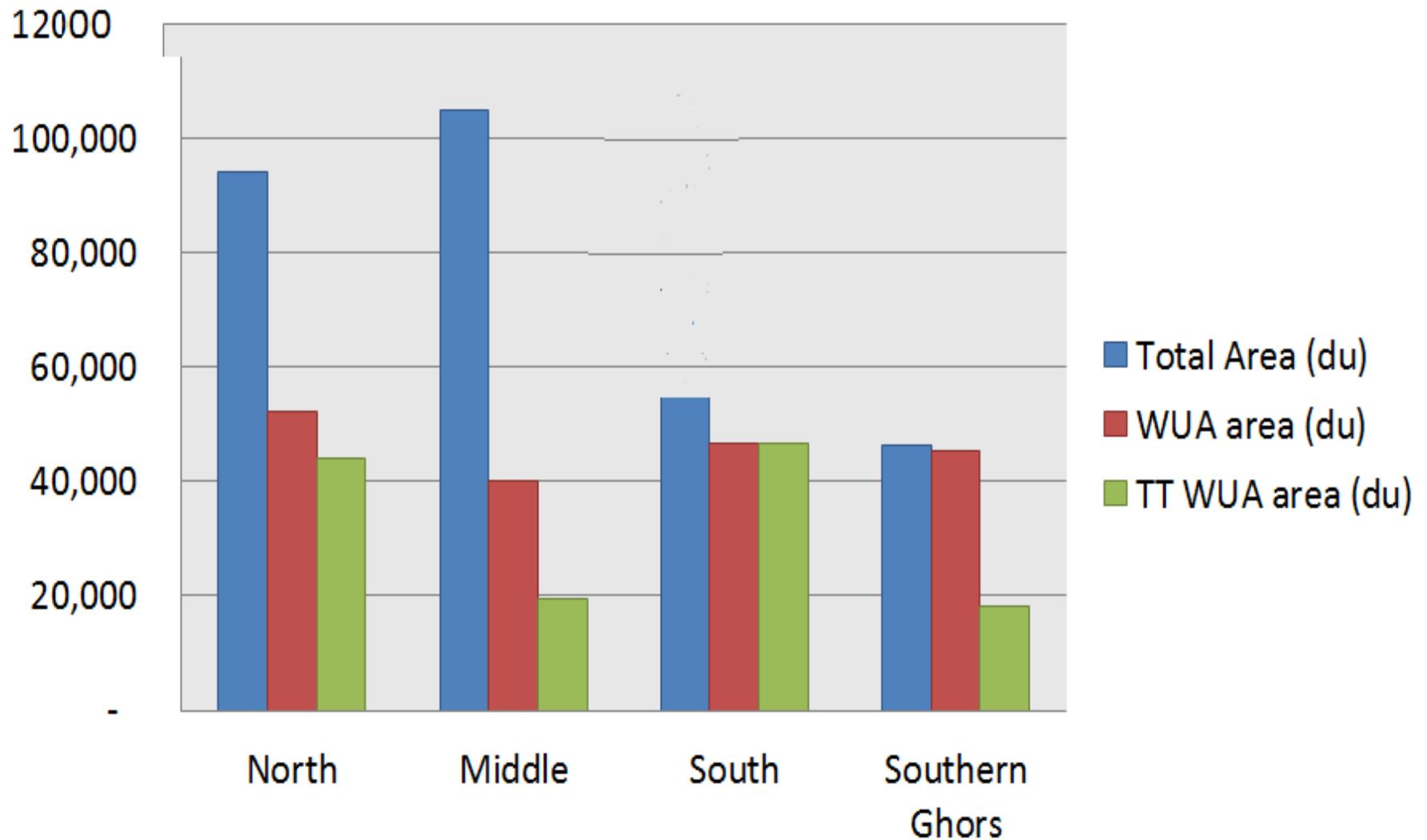
Total

26

184.521

Dunum

## Area Coverage of WUA per region



# Geographical distribution of WUAs in the Jordan Valley

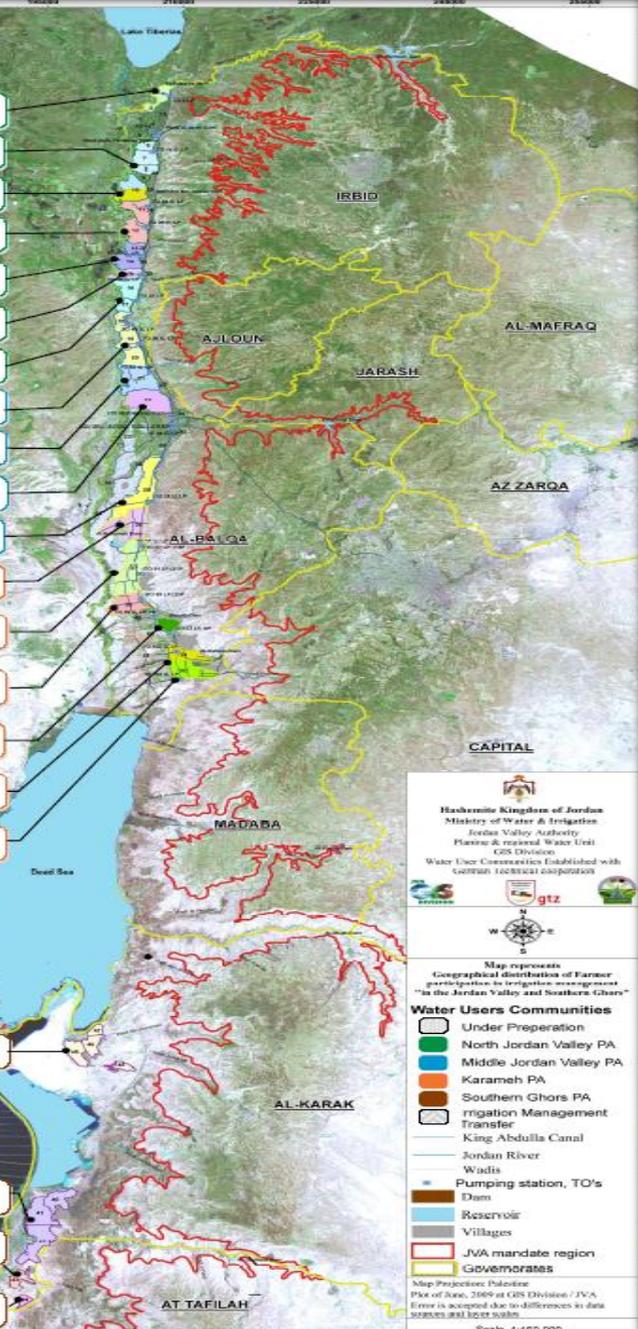
شمال وادي الأردن		
المساحة المروية	المساحة بالحدود	مشاركة الترابية
1231	49072	مساحة المشاركة
2549	44010	المساحة الكلية
48%	48%	نسبة التغطية

وسط وادي الأردن		
المساحة المروية	المساحة بالحدود	مشاركة الترابية
1170	44825	مساحة المشاركة
1954	72280	المساحة الكلية
60%	62%	نسبة التغطية

جنوب وادي الأردن		
المساحة المروية	المساحة بالحدود	مشاركة الترابية
1773	58230	مساحة المشاركة
1773	58230	المساحة الكلية
100%	100%	نسبة التغطية

الأفوار الجنوبية		
المساحة المروية	المساحة بالحدود	مشاركة الترابية
1560	46950	مساحة المشاركة
1560	46950	المساحة الكلية
100%	100%	نسبة التغطية

- المساحة المروية: 2, المساحة الكلية: 2,327, عدد الوصيات الترابية: 111
- المساحة المروية: 12, المساحة الكلية: 1,268, عدد الوصيات الترابية: 212
- المساحة المروية: 27.1, المساحة الكلية: 1,132, عدد الوصيات الترابية: 23
- المساحة المروية: 38, المساحة الكلية: 7,141, عدد الوصيات الترابية: 28
- المساحة المروية: 37, المساحة الكلية: 9,328, عدد الوصيات الترابية: 119
- المساحة المروية: 31, المساحة الكلية: 8,939, عدد الوصيات الترابية: 33
- المساحة المروية: 21, المساحة الكلية: 2,241, عدد الوصيات الترابية: 15
- المساحة المروية: 6, المساحة الكلية: 1,011, عدد الوصيات الترابية: 17
- المساحة المروية: 60, المساحة الكلية: 11,592, عدد الوصيات الترابية: 130
- المساحة المروية: 11, المساحة الكلية: 11,048, عدد الوصيات الترابية: 21
- المساحة المروية: 98, المساحة الكلية: 9,800, عدد الوصيات الترابية: 121
- المساحة المروية: 81, المساحة الكلية: 17,971, عدد الوصيات الترابية: 24
- المساحة المروية: 91, المساحة الكلية: 17,971, عدد الوصيات الترابية: 24
- المساحة المروية: 9.8, المساحة الكلية: 1,268, عدد الوصيات الترابية: 23
- المساحة المروية: 1, المساحة الكلية: 1, المساحة المروية: 1, عدد الوصيات الترابية: 1
- المساحة المروية: 8,899, المساحة الكلية: 8,899, عدد الوصيات الترابية: 17
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- المساحة المروية: 12,707, المساحة الكلية: 12,707, عدد الوصيات الترابية: 168
- المساحة المروية: 21,707, المساحة الكلية: 21,707, عدد الوصيات الترابية: 280
- المساحة المروية: 21,707, المساحة الكلية: 21,707, عدد الوصيات الترابية: 280
- المساحة المروية: 21,707, المساحة الكلية: 21,707, عدد الوصيات الترابية: 280
- المساحة المروية: 1,560, المساحة الكلية: 1,560, عدد الوصيات الترابية: 28



Hashemite Kingdom of Jordan  
 Ministry of Water & Irrigation  
 Jordan Valley Authority  
 Planning & research Water Unit  
 GIS Division  
 Water User Communities Established with  
 certain institutional cooperation

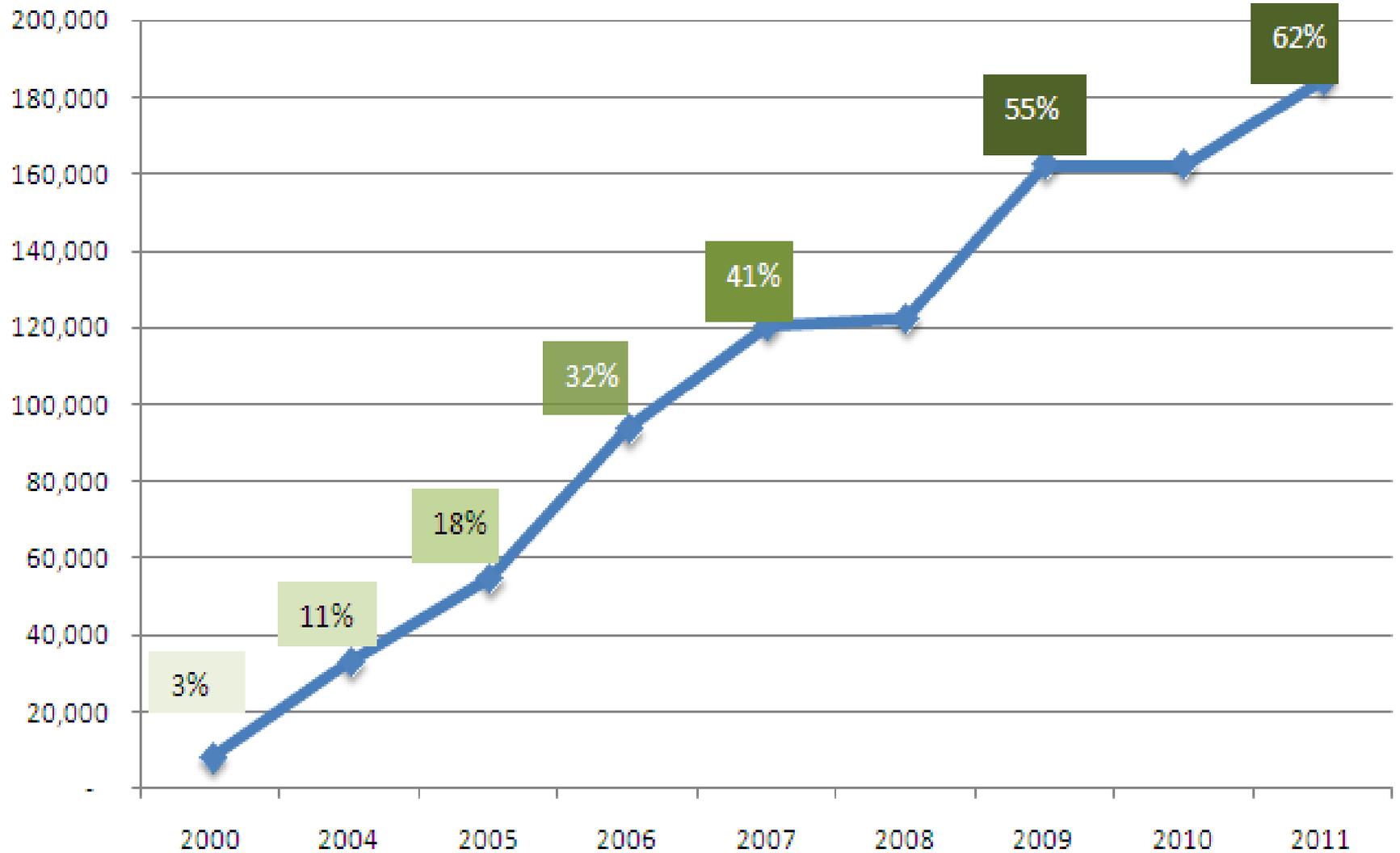
Map represents  
 Geographical distribution of Farmer  
 participation in irrigation management  
 "in the Jordan Valley and Southern Ghors"

**Water Users Communities**  
 Under Preparation  
 North Jordan Valley PA  
 Middle Jordan Valley PA  
 Karamah PA  
 Southern Ghors PA  
 Irrigation Management  
 Transfer  
 King Abdulla Canal  
 Jordan River  
 Wadis  
 Pumping station, TO's  
 Dam  
 Reservoir  
 Villages  
 JVA mandate region  
 Governorates

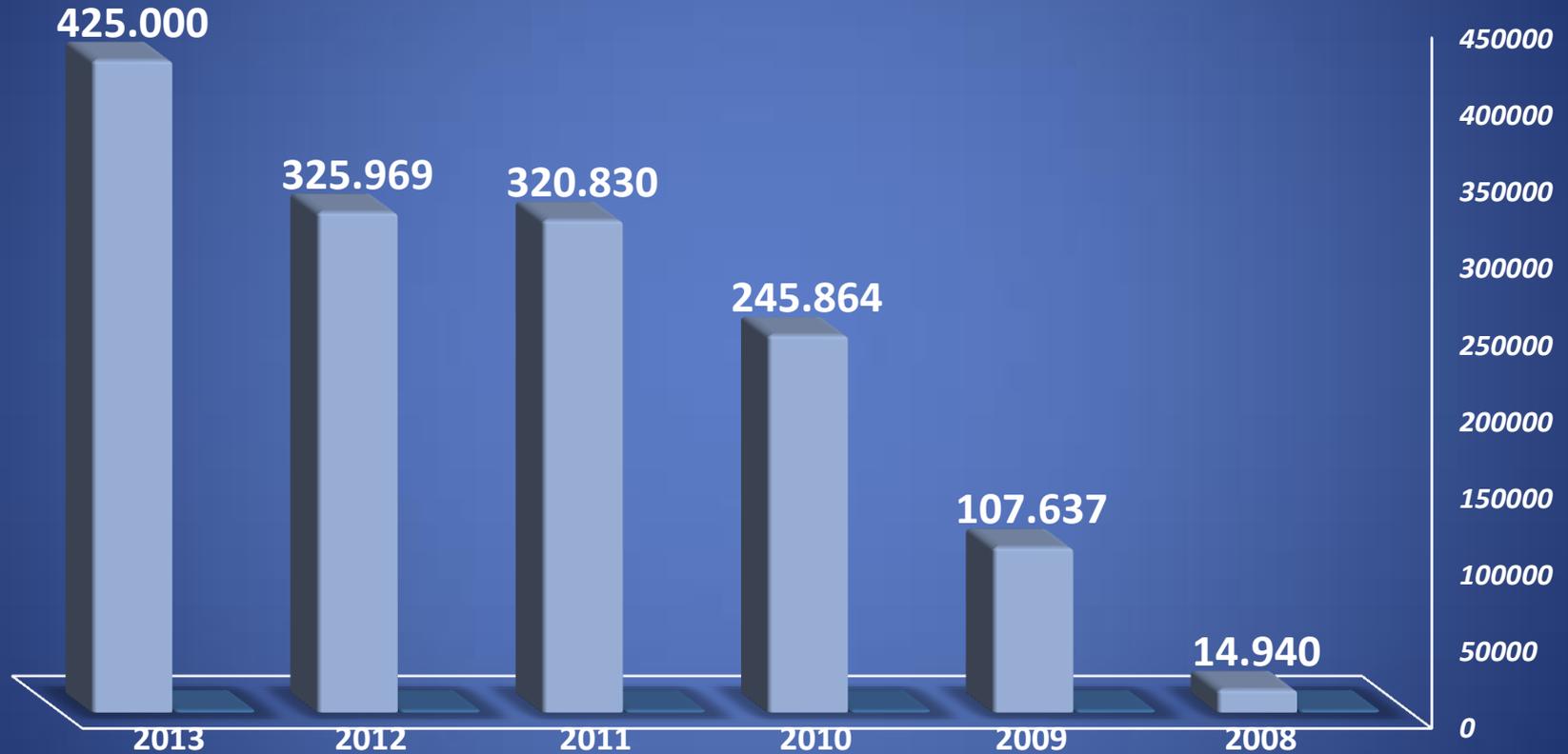
Map Projection: UTM  
 Plot of June, 2009 at GIS Division / JVA  
 Error is accepted due to differences in data  
 sources and scales.

Scale 1:100,000  
 Map No. 04.28

## Official Farmers' Participation Cumulative area (du)



# *Total Contract Value(JOD/Year) for TT*



**National targets:**  
Raising the performance of infrastructure & improve the level of services provided to citizens

**Substantial Institutional Values**  
- Participatory  
- Justice in providing service

**Institutional Goals:**

- Reduce water losses
- Raising the irrigation efficiency

**WUA's**

Reduce complaints

Transparency

Regular quantitative and operational pressure

Reduce violations

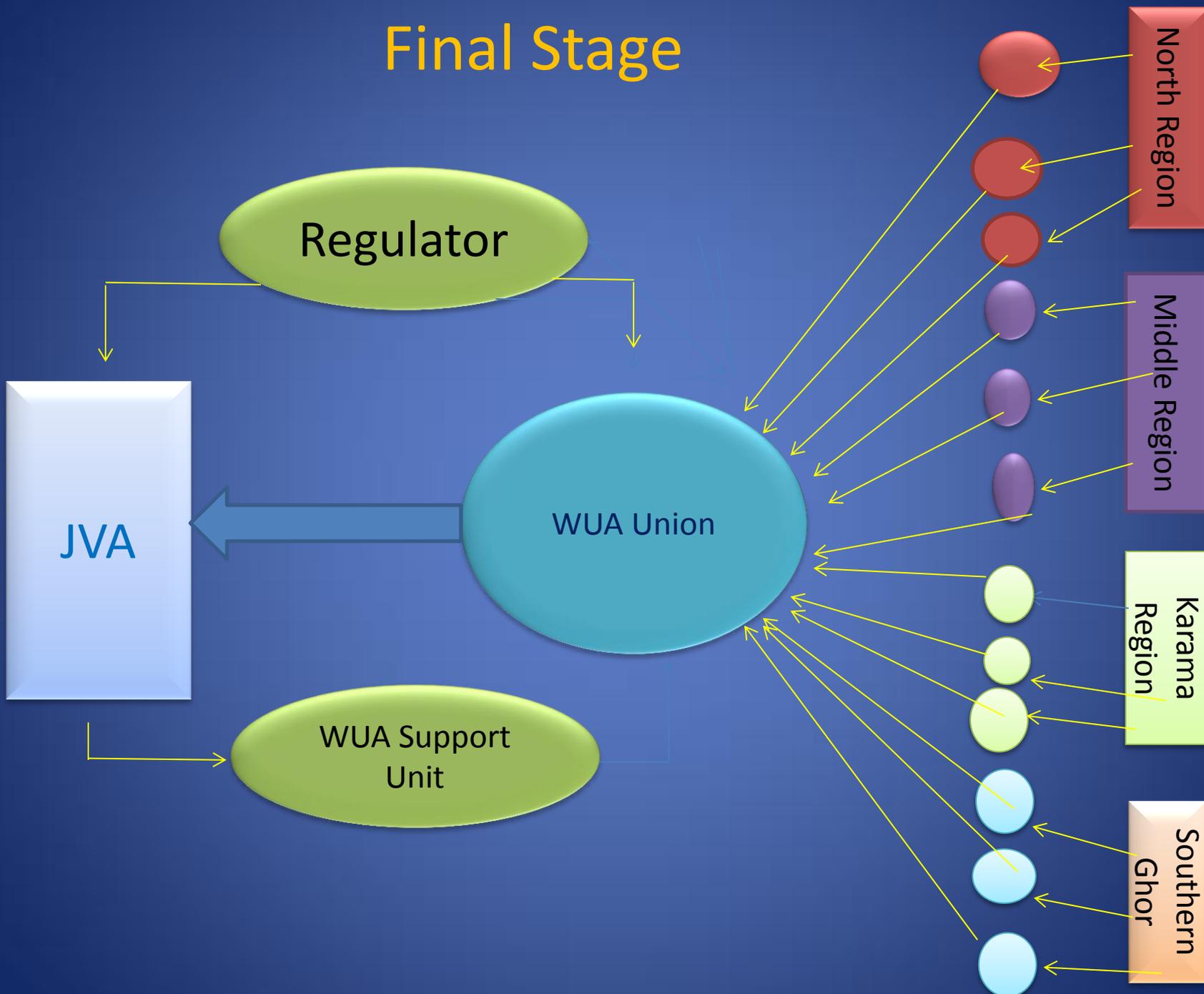
Regular maintenance and upgrading

Participation of farmers among them

Equitable distribution of irrigation water

Improve the level of service provided to farmers

# Final Stage



# LESSONS LEARNT

# LESSONS LEARNT FROM E & M SYSTEM

In general the discussions illustrated that the participants have a strong appreciation for the system. Since the M&E system application helps identify the decisions and actions that are needed to improve the PIM/IMT process, it can serve to some extent as a decision support system. The following points were expressed by the participants in terms of the perceived lesson learnt. They have been grouped into four main issues / questions around which the discussion was made in order to facilitate the responses.

## **JVA staff *On the results of the system***

- ❑ The M&E system is very important for JVA; not only for its capacity to monitor performances at all levels but because it has been an eye opener to some of the deficiencies and the issues that need to be addressed/resolved.
- ❑ The system is not only for monitoring and evaluation but is a good tool to help in planning and decision making. In that sense it can be considered as a decision support system. The results of the system should be adopted by the decision makers.
- ❑ Plans and vision are the missing ingredients in the PIM/IMT process in Jordan as clearly evidenced by the system.
- ❑ The system has made evident the need to prepare an action plan for the next 3 years. This should include the necessary human and financial resources (including resources need for equipment such as computers, printers, etc.) to support the PIM/IMT process. The development of the plan will also support the M&E system adequately.
- ❑ The implementation of the actions identified as result of the evaluation should be supported by another project or institution to ensure the sustainability of the pilot implementation results
- ❑ Documentation and classified information are very important in evaluating performance and this is what the system allows for.

# ***JVA staff data collection and data flows***

- ❑ The system requires a lot of data and a long time for data collection, however some time the meaning of some indicators and variables were not clear according its concepts.
- ❑ The volume of information needed is very large. In order to enable regular utilisation of the system, JVA will need to adapt their present information system to facilitate the data entry into the M&E system. This is task will require some time and external support.
- ❑ The data flow procedures should be clearly defined involving all relevant departments (including the human and financial resources departments) to integrate the requirements of the system into its business functions. JVA will need to delineate data flows from the different departments/donors to ensure timely availability of data for the system, which will require a follow up period of 6-12 months from SWIM.
- ❑ The M&E system has put in evidence the limitation of not having cost centres that would allow improved knowledge of JVA O&M costs at the main intake (pump station) of each WUA. Having such cost centres would also allow aggregating O&M costs at the regional and national levels. In this regard, considerable number of data had to be estimated since the required data were not available on a segregated level. The JVA system of financial data collection should be modified to provide more readily the required information for the system.
- ❑ Likewise, all PIM/IMT related data had to be estimated for each region to the best of JVA's knowledge (Ex: Financial allocations, human resources, training, awareness campaigns, etc.)

## ***JVA staff On Potential improvements for the system***

- ❑ The meaning of some of the indicators was not entirely clear. The cumulative effect of SWIM coaching and the workshop enabled better understanding of such indicators.
- ❑ The Arabic version of the system (when finalised) also should facilitate the understanding of the indicators.
- ❑ The number of indicators at present is very large. Reduction of the number of indicators is desirable. This, together with the capacity of the system to inactivate (a) the indicators that are not considered relevant in a given country or where results can be indirectly deducted, and (b) the data which have proven difficult to collect, should make the system more manageable.
- ❑ Although some graphics are now provided more detailed information is needed.
- ❑ Range of scoring is limited in some cases but the system offers good possibilities to change or adapt them to local situations.

## *JVA staff On Management of the system*

- ❑ The communication with the WUAs needs to be strengthened to have a better understanding of their problems and needs. The system offers good basis to improve this communication which is much necessary.
- ❑ The management of the system under Intranet or internet (cloud) was largely discussed but it was considered that the WUAs will have practical difficulties with it. Hence it was considered more appropriate to continue with the installation of the system in individual computers. However, JVA may install it in its Intranet system to allow a more general use within the organization.
- ❑ The support of the SWIM and the developers will be needed in the future in order to anchor the utilisation of the system in JVA, including further training on the latest version of the system.

## WUAs- representatives

- They expressed high satisfaction with the system which they consider essential for their work because it allows for measuring the performance of the associations.
- Many of the difficulties that they face have their origin in the lack of vision of what will be the future development of the associations. There is an urgent need for JVA to develop a clear vision of their future.
- Although the functioning of the system is clear, adapting the information and integrating it into the WUA data collection procedures will require a follow up period of 6-12 months in which they will need support from JVA and SWIM experts.
- New computer facilities will be needed since the existing ones are old and not suitable for the system, whereas other associations do not have computer facilities.

# SWIM-SM consultant

**The consultant was requested to provide his view on the future needs of the PIM/IMT program In Jordan and they are summarized below:**

□The PIM /IMT program has already accumulated considerable experience since its start in 2002. The processes for the initial establishment of the WUAs are well defined and most of the WUAs have a good organization and do a reasonable operation and maintenance. However they are too limited in their financial responsibilities. JVA should not only accelerate the transfer of more functions but also delegate more financial responsibilities.

□The present organization of the WUAs as cooperatives presents several limitations that were discussed during the event. It would be more adequate if the WUAs are part of the organizational structure of JVA but with a high degree of independence. This may require special authorization to JVA by the Ministry of Water resources. If in the next future this is not feasible the JVA should implement some financial incentives for the farmers that are member of the associations as compared to those that are not members (at the present there is no particular advantage for a farmer to become part of the WUAs).

□The M&E system could be a useful instrument to evaluate the WUAs that have higher performance and therefore to evaluate those that are more prepared to undertake more functions.



Disk filter and sand filter

Thank You

