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JORDAN VALLEY WATER USERS ASSOCIATIONS (WUAS): FUTURE ROLES AND RESPONSIBILITIES REPORT

May 2013

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INSTITUTIONAL SUPPORT AND STRENGTHENING PROGRAM (ISSP)

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ACRONYMS

du	dunum
FAO	Food and Agricultural Organization
GiZ	Deutsche Gesellschaft fur Internationale Zusammenarbeit, GmbH
GOJ	Government of Jordan
ha	hectare
IMF	International Monetary Fund
IMT	Irrigation Management Transfer
IRG	International Resources Group
ISF	Irrigation Service Fees
ISSP	Institutional Support and Strengthening Program
JCC	Jordan Cooperative Corporation
JD	Jordanian Dinar (1 JD = 1.41 US$)
JV	Jordan Valley
JVA	Jordan Valley Authority
KAC	King Abdullah Canal
KTD	King Talal Dam
m3	meter cubed of water
MCM	Million Cubic Meters
MJV	Middle Jordan Valley
MOA	Ministry of Agriculture
MOM	Management, Operation and Maintenance

MWI Ministry of Water and Irrigation

NGO Non-Governmental Organization

NJV North Jordan Valley

USAID United States Agency for International Development

WAJ Water Authority of Jordan

WUA Water User Association

EXECUTIVE SUMMARY

Recognizing the difficulty of managing farm-level irrigation in the Jordan Valley (JV), the Jordan Valley Authority (JVA), along with GIZ (GTZ), started forming Water User Associations (WUAs) in the JV about 10 years ago. To date they have formed 24, with 19 registered as cooperatives and five in the process of registration. Although legally registered as independent cooperatives, the JVA clearly sees these associations as an operational arm of JVA, with control by JVA. JVA's interpretation of the law is that WUAs cannot collect water fees and, even though they are legally for-profit organization, JVA discourages WUAs from carrying out any income generating activities. Therefore, WUAs are dependent upon JVA for funding. At present 12 WUAs have signed Task Transfer (TT) Agreements that provide a limited amount of income, primarily for operational staff salaries. Another four WUAs have signed TT Agreements with no cost to JVA, as all operational activities are carried out by volunteers.

The WUA Survey carried out by ISSP[i], contains a significant amount of detail about these WUAs. This document is an excellent source of information, especially on internal management by WUAs and their financial and technical performance. These WUAs cover about 65% of the irrigated area in the Jordan Valley (JV), with the expectation that in the long-run all of the irrigated area in the JV will be served by WUAs. Given its budgetary situation, JVA has seen WUAs as a means of reducing the costs of carrying out its irrigation operation and maintenance responsibilities, especially below the pump stations. Yet, the age of the irrigation infrastructure in the JV ranges from 41 to 25 years and is in serious need of rehabilitation. Therefore, WUAs face a challenging task in operating and maintaining irrigation infrastructure that is slowly failing. This is further complicated by their lack of funding, as well as maintenance equipment.

The Government clearly hopes that in the near future WUAs will become self-sufficient and that JVA will take on the more limited role of a bulk water supplier, providing water to WUAs on a contract basis. In some sense, JVA staff also share this hope. Yet at the same time JVA staff members are concerned about their long-term employment possibilities as WUAs take over more and more of their present tasks. Thus, while JVA recognizes the need for WUAs, it also wants WUAs under the JVA umbrella where JVA can control the amount of activities assumed by WUAs in order to protect their jobs. WUAs recognize that JVA needs them yet at the same time wants to control them and thus limit the tasks they are allowed to assume.

This situation is complicated by the present arrangements of WUAs registered as for-profit cooperatives. This is not a good legal arrangement for WUAs, and both JVA and the WUAs recognize this. JVA wants to remove WUAs from the umbrella of JCC and bring them under its own control. In this regard JVA has drafted a series of amendments to the JVA Law to accomplish this. However WUAs do not necessarily see this as being in their best interest. A serious additional problem is that in the future WUAs will be signing contracts for bulk water supply with JVA and there will be a serious conflict of interest[ii] here under the arrangement proposed by JVA.

The proposed amendments tend to serve the interests of JVA but WUAs are not convinced that being under the direct supervision of JVA is best for them. They feel they need their own legal framework, one that clearly recognizes their rights and responsibilities as well as those of the bulk water supplier. This is in line with the legal bases of WUAs all over the world which usually involve registration under a WUA Law that clearly specifies the roles and responsibilities of the WUA leaders, members and hired employees. The key issue is that WUAs have a role that is halfway between the State and the private sector. They undertake a public service function yet are controlled in a democratic manner by their members. It is understood that the process of passing a WUA Law in Jordan is slow and cumbersome. An alternative suggested is to register WUAs in Jordan as non-profit companies under the Companies Law No. 22 of 1997. This appears to be a valid possibility although a lawyer needs to exam the law carefully to see the strengths and weaknesses of such a course.

Many countries have limited experience with WUA and, as a result, farmers as well as Government irrigation officials have little understanding of participatory irrigation management. Consequently, Government, donors, WUAs and WUA members have recognized that WUA capacity development requires an extensive training program. Given the lengthy involvement of GIZ it is rather surprising to see the relatively small amount of training that has been provided for WUAs in Jordan. To date there have only been 34 training exercises provided for WUAs in the JV. In addition, these activities have been focused primarily on management activities, with little training in governance, although this is an important element in a participatory association such as a WUA. A WUA capacity development program typically includes the following courses.

- WUA formation and registration
- WUA governance and leadership
- Irrigation service fee establishment
- WUA financial management and accounting
- Irrigation water allocation and system operation
- Responsibilities of representatives

- Irrigation system management
- Maintenance planning and implementation
- Pump operation and maintenance

In contrast to the training offerings provide for WUAs in the JV, these courses also concentrate on developing the leadership and governance skills and well as financial skills required for a socially, financially and technically viable WUA. Without the right to collect water fees and given the resistance to WUAs developing their own funding sources, there has thus far been little need for financial management skills. Yet clearly WUAs have to have income and the ability to manage in order to cover their management, operation and maintenance (MOM) costs as they grow and mature. As illustrated below, in order for WUAs to expand their responsibilities they require a training program that has a mix of training for hired employees, WUA leadership and WUA members. Training for WUA members is especially important as the main decisions in WUAs such as electing the Council members and establishing the annual WUA fees are made by the General or Representative Assembly which is made up of the members.

Table 1 - Estimated Training days needed for 30 WUAs Serving 30,000 Ha

Trainee	No. Per WUA	Per 30,000 ha	No. Course Days/ Trainee	Total Training Days
Council Members	7	210	2	420
Accountant	1	30	3	90
Engineer	1	30	3	90
Chairman	1	30	4	120
Maintenance	1	30	2	60
Ditch Riders	5	150	2	300
Members	100	3000	1	3000
Total	**116**	**3480**		**4080**

Note: Assumes the average WUA is 1,000 Ha.
Source: Sam H. Johnson III. Modified from table presented at World Bank Workshop: Lessons Learned in Developing Sustainable WUAs and Forming WUA Federations. Bishkek, Kyrgyzstan, October 1-6, 2007

WUAs in Jordan do not pay fees directly to JVA and therefore do not actually know how much their members have paid for irrigation services. Data from JVA for 2012 reports payments for irrigation water delivered in the JV to be 2.058 million JD for irrigating 300,000 du in the Valley. This is 5.88 JD/du or about $83/ha for all irrigation users in the JV. Based on data collected from JVA during 2012, water fee payments from members of 13 WUAs serving 133,476 du is 3.88 JD/du or about $55/ha.

At present WUAs are receiving almost all their MOM funding from TT Agreements. A number of the Chairmen believe the sustainable costs for MOM of their systems is around 6-7 JD/du or $85-$99/ha. As presented by Eng. Saad Abu Hammour, JVA Secretary General, at the 2010 Arab Water Week, water costs to WUAs, including MOM costs and payments to the bulk water supplier, are expected to be in the range of 12 to 14 JD/du or ($169-197/ha)[iii] in the near future. These costs are similar to costs paid by WUAs in South Texas, USA, where similar crops are grown. As reported in one JVA document, JVA's intention is that WUAs become self-sufficient within three years. This means that WUAs will have to cover all of their own MOM costs as well as paying for irrigation water provided to them by the JVA. For growers producing high value cash crops, especially for export, payments of around $200/ha for water supplies are just part of their production costs and are covered by their revenue from crop sales. However, for small growers and those producing for the domestic market, care will be needed to insure that the fees charge them are affordable.

1 INTRODUCTION

The Institutional Support and Strengthening Program (ISSP) is a three-year USAID-funded program to support and develop the water sector in Jordan. The project began with a comprehensive institutional assessment of the sector, which resulted in a broad-based reform and restructuring program being implemented and supported by ISSP, in close cooperation with the Government of Jordan. The main components of the program are:

- Activity 1: Support the newly-established National Water Policies Council
- Activity 2: Strengthen and consolidate authority for water resources planning and management in MWI
- Activity 3: Improve water delivery management through the following reform activities:
    - Reorganize WAJ to focus on bulk water source development and supply
    - Continue the process to more fully corporatize State-owned water utilities
    - Establish an independent water utility regulator
- Activity 4: Build and empower Jordan Valley Water Users Associations (WUAs)
- Activity 5: Enact a national water law

This report supports implementation of Activity 4: Build and empower Jordan Valley Water Users Associations (WUAs). The report has been developed in close cooperation with the ISSP Activity 4 Working Group.

ISSP has completed an *Existing Conditions Survey and Capacity Assessment of WUAs* during the period October-December 2012. The results have been analyzed and the report is being finalized. This survey provides a comprehensive set of baseline information for WUAs in the JV and serves as one base for a more comprehensive review of JVA and WUA operations and performance.

The consultant was asked to conduct a detailed analysis of WUAs in the JV to determine viable options for further development and expansion of WUA responsibilities. The analysis is based on visits to WUAs and meetings with Chairmen and WUA members, as well as discussions with involved JVA staff, both in the JV and in Amman. During these visits, the consultant was to analyze capacity building options, operational constraints and opportunities for transferring additional JVA services to WUAs in order to improve irrigation water management.

The output of the mission is this capacity assessment report that provides an in-depth review and assessment of existing capability of WUAs to assume increased responsibility. The report also provides detailed recommendations and options for long-term capacity building to prepare WUAs to assume additional services that are currently provided by JVA.

2 JVA AND WUAS

2.1 JORDAN VALLEY AUTHORITY (JVA)

The Jordan Valley encompasses the major surface water resources in Jordan and provides water for agriculture, industry, drinking and tourism. Recognizing the importance of these surface water resources, the Government's interest in developing the Jordan Valley started in the late fifties. The main objective was then to develop an agricultural base that would serve as the backbone for economic development of the Valley. The government established the East Ghor Canal Authority (EGCA) to undertake this task. The EGCA focused its activities on the development of agriculture in the Jordan Valley with the construction of the East Ghor Main Canal, now known as the King Abdullah Canal (KAC), in the northern part of the JV to utilize the free, unregulated flow of the Yarmouk River for irrigation.

In 1972, the government adopted the concept of integrated social and economic development in the Jordan Valley and established the Jordan Valley Commission (JVC) with a full mandate to enhance the economic and social revenues from the resources available in the Valley. JVC was an administratively and financially independent authority. JVC development efforts focused on water resource development through the construction of dams and irrigation networks and on the establishment of social and economic infrastructure, including electricity, telecommunication, agricultural roads, towns, schools, health centers, local government buildings, domestic water supply and other infrastructure.

In 1977, the Jordan Valley Authority (JVA) was established, replacing the JVC. The JVA was established according to the Jordan Valley Development Law No. 18 of 1977. The mandate was to carry out integrated social and economic development of the Jordan Valley, which was then defined as extending from the northern border of the Hashemite Kingdom of to the northern tip of the Dead Sea in the south, the Jordan River to the west, and all areas in the Yarmouk and Zarqa basins that lie below the 300m contour line to the east, in addition to any area the Cabinet of Ministers appropriates to JVA. In the same year, the government appropriated to JVA the remaining part of the Jordan Rift Valley extending from the northern part of the Dead Sea down to Aqaba.

The Jordan Valley Authority continued to implement the development programs assigned to the JVC. during the period 1972-1988, nearly 350,000 dunums (35,000 ha) of land was developed and

provided with irrigation infrastructure, six dams were constructed, all required physical infrastructure for public utilities were established, including three marketing centers and two tomato processing plants, as well a large number of schools, health centers and hospitals. Thus, during this period, JVA achieved optimal conformity with its goals. JVA became a model for integrated development in the region.

In 1988, according to Laws 18 and 19 of 1988, the Water Authority of Jordan (WAJ) and JVA came under the umbrella of the Ministry of Water and Irrigation (MWI). The new arrangement was intended to separate policy and regulatory functions from operational functions. The intention was that the duties of the three entities would become polarized in a way that JVA became responsible for irrigation water, WAJ responsible for urban water and MWI for policy, regulation and coordination.

JVA's mandate and responsibilities remained largely unchanged, however ultimate responsibility for developing the Jordan Valley economically and socially now rested with MWI. JVA remained the entity in charge of implementing the policies and decisions of the JVA Board. JVA's legal status, however, changed dramatically, from financial and administrative independence to incorporation into the civil service system, subject to mandated financial and administrative regulation and procedures overseen by MWI.

Having completed the original development work in the Valley, JVA began to relinquish some of its functions to specialized government organizations. By the end of the 1990's, JVA responsibilities were focused on bulk and retail water management and on distribution of land and land development and management.

In July 2001, Law 30 was ratified (Amended Jordan Valley Development Law No 30 for the year 2001) to reflect the transformation in JVA role and functions. The major amendments introduced removed social development from JVA's mandate, opened the way for private sector participation in projects developed or implemented by JVA, and removed constraints on land sale and ownership (within certain limit) to encourage investment in development projects with potential economic returns, and gave JVA more power to stop violation of water use regulations.

2.2 Water Users Associations (WUAs)

Although JVA was respected for its work in integrated development in the JV, there was tension between JVA and JV farmers. Many farmers found it hard to accept restrictions imposed by JVA

with respect to water use practices. Consequently, in 2001 JVA, in co-operation with GIZ, started the process of establishing WUAs in the Valley. As there was a very high degree of mistrust, this was a slow tedious process. Key issues and problems that had to be overcome through a long series of meetings among the project team, farmers and JVA included the following[iv].

- Unreliable supply of water, both in quality and quantity, due to lack of planning, stress on water supply, lack of proper management system, and lack of efficient maintenance
- Lack of efficiency of some JVA water distribution staff and support to farmers to meet their needs
- Competition among farmers for water, leading to bad practices like illegal connections and abstractions, thus affecting trust among farmers
- Competition and mistrust between small farmers and influential large farmers
- Demand for water from other users such as the tourism sector that compromised the allocation of water for agriculture

In order to overcome this mistrust, JVA and GIZ first persuaded farmers to form a Water Council with volunteers from the community. The next step was the formation of Water User Committees and finally, after five years, they were able to form the first actual WUA in the JV. As WUAs were formed, they were legally registered as cooperatives under the Jordan Cooperative Corporation under the Cooperation Law 18/1997. This form of registration was an expedient, resorted to in the absence of a more appropriate legal mechanism for legally registering WUAs.

Step by step, JVA and GIZ were able to form and register additional WUAs. They also benefited from the opportunity for farmers to make study tours to meet with WUAs in other countries, including Syria, Egypt, Turkey and Spain. Farmers paid their own costs for these tours. As of July 2012, 24 WUAs are operating in the JV. As can be seen in Table 1, there are 20 legally registered cooperatives, one water council and three WUAs under preparation. There are now 16 WUAs with TT Agreements, 12 of them "with cost" (payment) and "without cost" from JVA, with agreed tasks being carried out by volunteers.

Table 2 - WUAs Registered and In-Process, July 2012

No.	WUA	Region	No. of Members	TT Agreement	Start Date	Form of Organization
1	Adaseya P.S. 2	North	25		2009	Water C
2	North Shouneh (DA 3, 4)	North	30	Jul-12	2010	Coop
3	North Shouneh (DA 5)	North	35	Jul-12	2010	Coop

No.	WUA	Region	No. of Members	TT Agreement	Start Date	Form of Organization
4	Manshiah P.S. 14	North	124	Nov-12	2007	Coop
5	Tell El-Arbein P.S. 22.2	North	35		2006	Coop
6	Azmaliya P.S. 24	North	25		2010	Under Prep
7	Sheik Hussein P.S. 28	North	195	Feb-09	2002	Coop
8	Mashare P. S. 33	North	205	Jun-08	2004	Coop
9	Wadi El-Rayyan P. S. 36	North	85		2009	Under Prep
10	Wadi El-Rayyan P. S. 41	North	104	Mar-10	2004	Coop
11	Abu-Sedo P.S. 50	Middle	45	Mar-10	2003	Coop
12	Kraimeh P.S. 55	Middle	110	Feb-09	2004	Coop
13	Deir Alla T.O. 22	Middle	30		2009	Under Prep
14	Ghor Kabed P.S. 78	Middle	39		2007	Coop
15	Ghor Kabed P.S. 81	S./AlKarama	35	Nov-12	2007	Coop
16	Ghor Kabed P.S. 91	S./AlKarama	26	Mar-10	2003	Coop
17	Ghor Kabed P.S. 95	S./AlKarama	68	Mar-10	2006	Coop
18	Wadi Sheib/S. Shouna	S./AlKarama	22		2007	Coop
19	Kafrein	S./AlKarama	43	Feb-09	2001	Coop
20	Rama	S./AlKarama	243	Jun-08	2001	Coop
21	Mazraa, Haditha	Southern	110	May-10	2003	Coop
22	Safi	Southern	125		2003	Coop
23	Feifa	Southern	85	Mar-10	2003	Coop
24	Khunezira	Southern	45	Feb-09	2008	Coop

Source: Annex 2. Water User Associations (WUA): The story of participatory irrigation management in the Jordan Valley-working with the farmers for efficient water management in the Jordan valley. Prepared by Dr. Bassam Hayek and revised by Ali Al Adwan. GIZ, November 2012.

3 WUA LEGAL STATUS

At present WUAs in Jordan are registered as for-profit cooperatives. This is the result of the fact that that there are no articles in the amended Jordan Valley Development Law under which a WUA could be registered, nor is there is a separate law designed for WUA establishment. In retrospect both the WUAs and JVA are unhappy with this arrangement and are now actively exploring other legal options.

3.1 JORDAN COOPERATIVE CORPORATION

WUAs in Jordan are registered as independent financial and administrative cooperatives under Law 18, 1997 (Cooperative Law) and Regulation 13, 1998 (Cooperative Bylaw). The Jordan Cooperative Corporation (JCC) registers cooperatives, including WUAs, and provides the legal umbrella and legitimacy. As cooperatives are for-profit organizations and WUAs are non-profit, JCC initially refused to register them, but after pressure from both farmers and JVA, they finally agreed.

JCC makes periodic visits to mentor WUAs and also monitors their General Assembly meetings. JCC provides auditing services (for a fee) and say also that they are able to provide training courses in such topics as management, accounting, computer skills and project management. However, JCC has a unique model of cooperative accounting and auditing that is not very useful for non-profit participatory associations such as WUAs, one that is not at all transparent to WUA members (see Table 3).

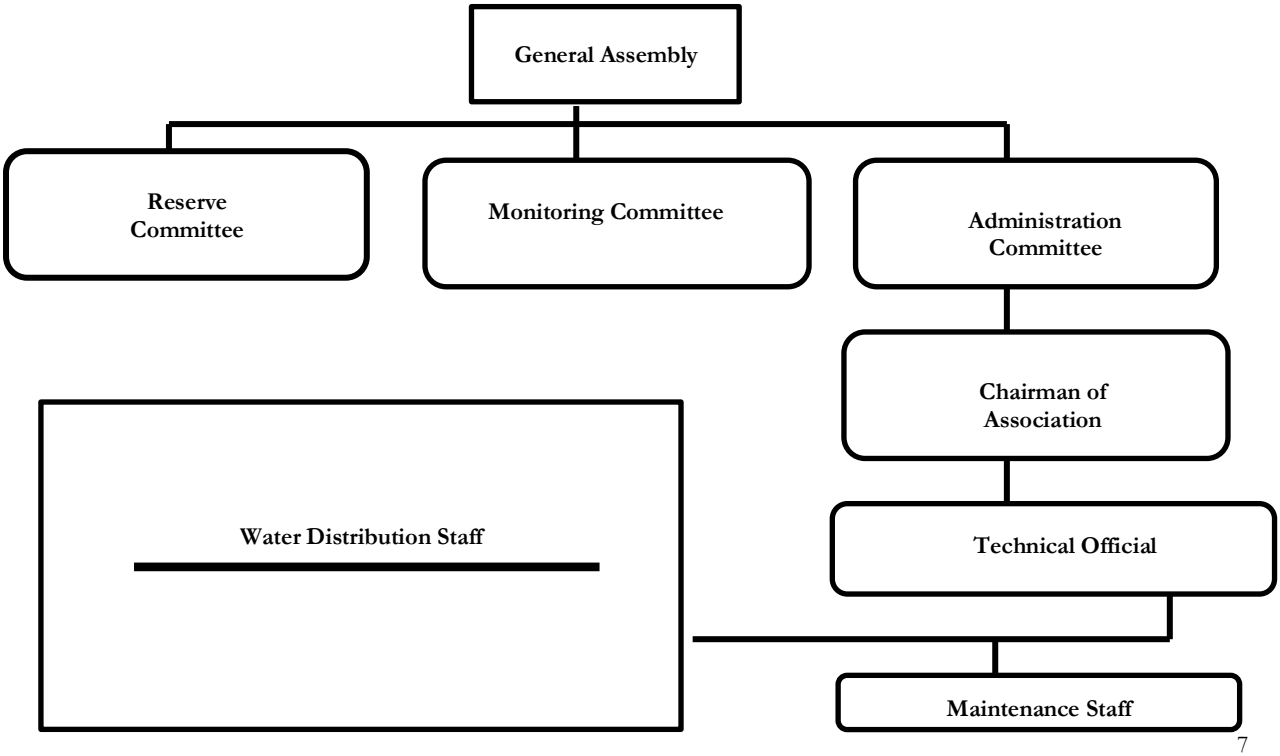
Table 3 - JCC Sample Audit for a JV WUAs

STATEMENT DESCRIPTION	TOTALS DEBIT	TOTALS CREDIT	DEBTOR BALANCE	CREDITOR BALANCE
Cash Box Account	JOD 16,508.165	JOD 16,467.000	JOD 41.165	
Bank Account	JOD 39,384.370	JOD 14,800.500	JOD 24,584.230	
Account Receivables	JOD 14,450.000	JOD 4,532.683	JOD 9,917.317	
Paid Shares Account	JOD 1,515.955	JOD 24,852.789		JOD 23,336.834
Stock Returns Account	JOD 4,265.467	JOD 4,265.467		
Furniture Account	JOD 533.000		JOD 533.000	
Furniture Depreciation Acct	JOD 14.000		JOD 14.000	
Depreciation Account		JOD 42.000		JOD 42.000
Accountant Receivables Acct	JOD 150.000	JOD 250.000		JOD 100.000

STATEMENT DESCRIPTION	TOTALS DEBIT	TOTALS CREDIT	DEBTOR BALANCE	CREDITOR BALANCE
Account Recording Fees	JOD 100.000		JOD 100.000	
Journal Viewer General Legal Account		JOD 2,159.093		JOD 2,159.093
Educational Box Account		JOD 212.543		JOD 212.543
Income Tax Payable Acct		JOD 2,010.425		JOD 2,010.425
Retained Losses Account	JOD 210.113		JOD 210.113	
Retained Surplus Account		JOD 3,505.300		JOD 3,505.300
Auditing Fees Account	JOD 75.000		JOD 75.000	
Auditing Fees due Account		JOD 300.000		JOD 300.000
Consulting Fees Account	JOD 110.000		JOD 110.000	
Consulting Fees due Acct		JOD 440.000		JOD 440.000
Maintenance Expense Acct	JOD 1,273.500		JOD 1,273.500	
General Admin Expense Account	JOD 10.000		JOD 10.000	
General Expense Account	JOD 73.000		JOD 73.000	
Hospitality Account	JOD 643.000		JOD 643.000	
Fees & Bonus Account	JOD 12,205.000		JOD 12,205.000	
Electricity Expense Account	JOD 36.000		JOD 36.000	
Renting Expense Account	JOD 600.000		JOD 600.000	
Banking Fees Account	JOD 0.500		JOD 0.500	
JVA Revenue Account		JOD 18,438.130		JOD 18,438.130
Membership Fees Account		JOD 15.000		JOD 15.000
TOTAL			**JOD 50,425.825**	**JOD 50,559.325**

As they are for-profit organizations, cooperatives tend to combine leadership and management in the organizational structure which is quite different from participatory irrigation management associations that clearly separate governance and management functions. Figure 4 presents the organizational structure of cooperative WUAs in Jordan, as represented in GIZ materials. As can be seen, the Chairman of the WUA provides overall leadership but is also the technical manager, a practice not normally allowed in WUAs but normal and acceptable in for-profit organizations. The "Administration Committee" in the chart serves as the board of directors of the WUA.

Figure 1 - Organizational Structure of Cooperative WUA



7

JCC has stated that WUAs "lack the cooperative culture" and also they lack knowledge of what is required from JCC. The process of registering them as cooperatives was forced. JCC recognizes that they are not profitable and need some profitable projects to ensure their sustainability, such as profit margins on the price of water. Given their lack of cooperative orientation, JCC would not be opposed to them being registered as a different type of legal organization.

3.2 Proposed JVA Law Amendments

Both JVA and the WUAs recognize that there is a problem with the present legal arrangement. In particular JVA wants to remove WUAs from the umbrella of JCC and bring them under the oversight of JVA. In this regard JVA has drafted a set of amendments to the JVA Law. Subsequent reviews have produced two additional sets of alternative amendments. The original law and the three sets of proposed amendments specific to WUAs are shown in Annex 1.

The key provisions of the initial set of proposed amendments would do the following.

- Create "non-profit civil committees" with a legal personality and financial and administrative independence.

- Assign "Committees of Water Users" the following tasks
    - Operate and maintain waterlines and networks
    - Distribute water to farmers
    - Collect water dues on behalf of the JVA
    - Other tasks as designated by the cabinet of the Government of Jordan
- Establish contracts as the mechanism linking JVA and the Committees of Water Users

A more specific set of regulations would be written to govern the operations of the Committees.

3.3 THE COMPANIES ACT

Another option currently under discussion is that of registering WUAs as non-profit companies under the Companies Law No. 22 of 1997 as amended. This appears to be a reasonable possibility, but it requires a thorough legal vetting before moving forward. An important positive aspect of registering WUAs under the Companies Law is that it is not forced under the umbrella of JVA which would involve a clear conflict of interest, since WUAs will be contracting directly with JVA for water services.

3.4 INTERNATIONAL EXPERIENCE WITH WUA LAWS

These proposed amendments tend to serve the interests of JVA but WUAs are not convinced that being under the supervision of JVA is best for them. They feel they need their own legal framework that clearly recognizes their rights and responsibilities as well as those of the bulk water supplier. This concern is reflected in the typical structure of WUAs all over the world, which are normally legally registered under a WUA law that clearly specifies the roles and responsibilities of the WUA leaders, members and hired employees. The WUA law also provides a legal basis of the relationship between the WUA and the bulk water supplier. WUA laws often specify the right of WUAs to federate with other WUAs to obtain economies of scale for operation and maintenance of the main irrigation infrastructure. They also state the legal basis for WUAs to form national associations of WUAs to promote and protect the rights of the irrigation sector. The following principles related to WUA laws are based on a broad range of international experience.

WUA Law Principles

- WUA-a non-commercial association of users
- Members must be users of water in the WUA area
- Each member has a single vote
- A WUA Council (Board) represents all members and forms the major policy making body of the WUA
- The Council (Board) is elected by the General Assembly
- Members of the WUA Council (Board) including the Chairman are not paid
- Large WUAs may have a Representative Assembly rather than a General Assembly
- The Chairman of the WUA Council is selected by the Council members – his/her power is subsidiary to the Council as a whole
- Management staff are hired by the WUA – salaries are established by the WUA Council and approved by the General Assembly
- Hired staff cannot be on the Council or serve as Council Chairman or on any of the standing committees
- Members pay an O&M fee to support the WUA as well as paying the required irrigation service fee to the bulk water supplier
- Non-members can be charged up to 1.5 times the rate charged members
- The WUA water contract is between the WUA and the bulk water supplier
- Fees are collected by the WUA from their members and used to pay the bulk were supplier as per terms of the contract between the two
- Members that do not pay can be fined and refused water if they refuse to pay their fees
- WUAs have the right to federate with other WUAs to achieve economies of scale in management
- WUAs can form an association of WUAs to represent their interests

In many developing countries early references to WUAs in legislation tend to be rather brief, if they existed at all. At best, water laws or irrigation laws made reference to the possibility of establishing 'water user associations' without any further description of their function or how they were to operate. For example, Article 24 (3) of the Azerbaijan Law on Amelioration of 1996 stated:

> *To organize operation and protection of amelioration [land improvement] and irrigation systems being in joint or individual ownership, to manage them, to collect water fees, to settle disputes arising during the use of water and to solve other issues, an association of water users could be established. These organization's activities shall be regulated by legislation of Azerbaijan Republic.*

Given the lack of substantive legislation, as is the case in Jordan, the first WUAs were invariably established using existing legal forms, including associations, companies and cooperatives. The problems with this approach were numerous and include the following.

a) **A lack of certainty as to the role/purpose** – companies and cooperatives typically seek to make profits. How could this be squared with the stated non-profit nature of WUAs? At the same time, though, the main task of WUAs can be characterized as buying water from a bulk water supplier and selling it to its members and other farmers. How could this be reconciled with the limitations on commercial activities being undertaken by associations?

b) **Inadequate provisions on establishment and governance** – in order to have a chance of success it is important to involve as many potential members as possible in the WUA formation process and to ensure that there is genuine support for WUA establishment. Societies, companies and cooperatives can typically be established by only a handful of people. Sometimes legal rules, for example those relating to capital contributions, further restricted the possibility for all potential WUA members to participate at the outset. Because the potential for disputes within WUAs is rather high, particularly clear and robust governance structures are needed that take account of the particular nature of WUAs. The limited provisions found in laws on companies, associations and cooperatives were not always up to this task.

c) **Restrictions on precisely who could participate as a WUA member or, in some cases, a WUA founder** – in some countries the legislation restricted who, or more specifically, which type, of person could be a WUA member or founder.

d) **Limited regulatory oversight** – using existing legal forms limited the possibility for regulatory oversight by the sponsor of WUA establishment, often the ministry responsible for irrigation but in some cases a separate regulatory authority.

e) **Tax problems** – uncertainty over the role/purpose of WUAs often also led to difficulties in assessing their potential tax liability.

Analysis of successful experiences in Western Europe and North America, where WUAs are long established, showed that WUAs were generally established, (a) as a specific type of legal form, i.e. as WUAs, (b) on the basis of specific and detailed legislation, such as a WUA law or an irrigation law, and (c) as public or quasi-public organizations as opposed to purely private corporations.

Responding to the need to find solutions to the issues outlined above, many countries have adopted special legislation to enable WUAs to be established as a particular type of public organization, even if this general public legal form was not a familiar one there. The critical point is that WUAs were established specifically as WUAs and they had, and continue to have, a role that is halfway between the state and the private sector. They undertake a public service function yet are controlled and

regulated in a democratic manner by their members. The adoption of specific legislation also permitted a number of important issues relating to the particular nature of WUAs to be taken into account. These included the following.

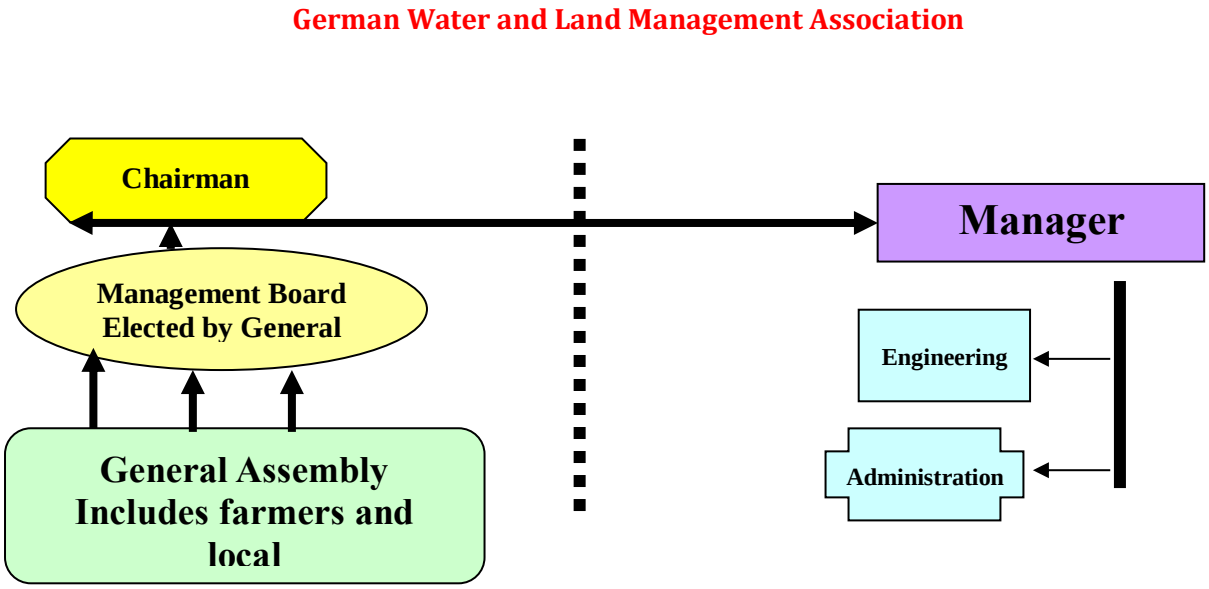
- Making explicit provision for a split fee structure based on the payment of an annual maintenance charge to cover a WUA's fixed costs and an irrigation service fee payable for each irrigation.
- Specifying that WUAs are to focus on irrigation and drainage and related activities.
- Conferring clear legal rights to membership on owners, or in some circumstances users, of land within the service area of a WUA.
- Clearly setting out the rights and duties of WUA members.

Furthermore in many countries the opportunity was taken to modify the internal organizational structure to replace the CEO role of the elected board chairman with a professional manager reporting to a collectively responsible management board.

In contrast to for-profit cooperatives, WUAs have an organizational structure that clearly separates governance and management. Policy decisions are made by the WUA Council and implemented by the hired manager and technical staff. Figure 5 illustrates the organizational structure of WUAs in Germany with clear separation between governance and management.

Given the long-term involvement of GIZ in formation of WUAs in Jordan, it is surprising that the organizational structure of WUAs in Jordan is not closer to the more globally accepted one depicted in Figure 5, rather than the quite different organizational structure presented in Figure 4. Possibly this is the result of the decision to register WUAs as for-profit cooperatives rather than engaging in the more cumbersome process of passing a WUA law specific to the situation of a non-profit participatory irrigation management association.

Figure 2 - Organizational Structure for German Resource Management Organizations

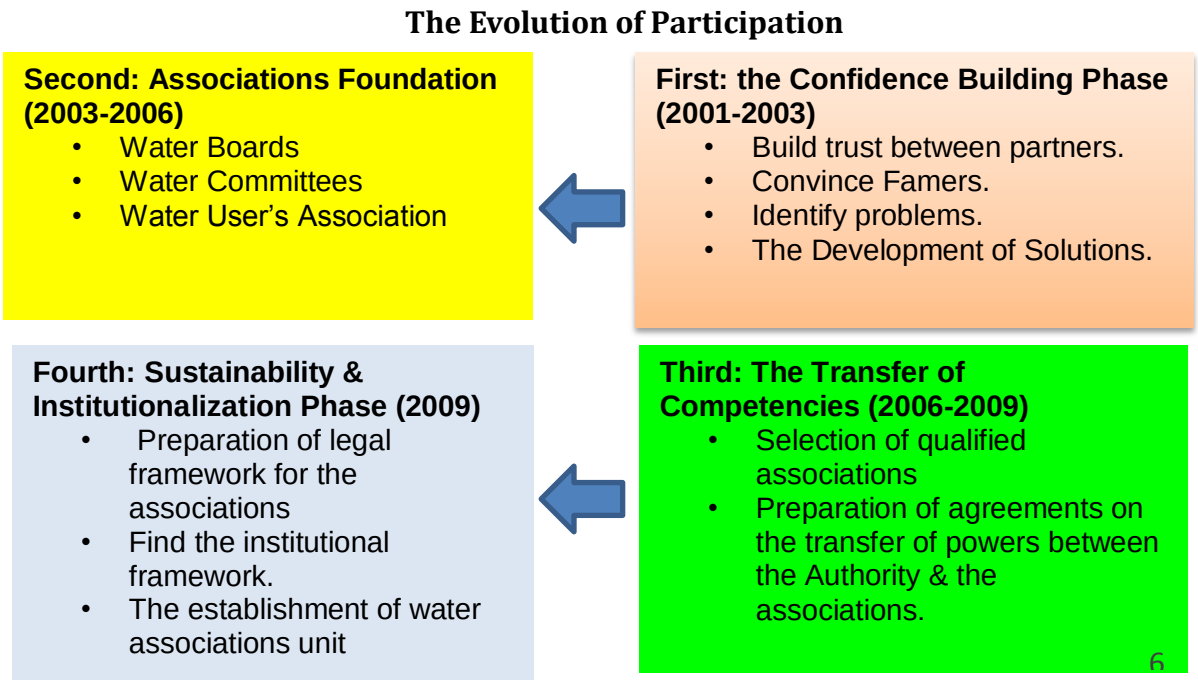


It seems certain that, as WUAs in Jordan change their legal organizational basis, they will need to revise their organizational structure to ensure separation between governance of the WUA and management.

4 CAPACITY DEVELOPMENT

Establishment and registrations of WUAs in Jordan was a slow, incremental process. As illustrated in Figure 6, JVA and GIZ followed an evolutionary process.

Figure 3 – Process of WUA Development in Jordan



In contrast to WUA development programs in other countries, the amount of capacity development (see Table 4) provided WUAs to date has been extremely limited.

Table 4 – Training Provided to WUAs in the Jordan Valley

No.	WUA	Region	Flow Meter Maintenance	Computer Software	Management	Operation	Pump O&M	Demand Management	Water Measurement
1	N. Shouneh (DA 3, 4)	North							
2	N. Shouneh (DA 5)	North		1	1				
3	Manshiah (PS 14)	North							
4	Tell El-Arbein (PS 22.2)	North							
5	Sheik Hussein (PS 28)	North							
6	Mashare (PS 33)	North				4			
7	Wadi El-Rayyan (PS 41)	North	1						
8	Abu-Sedo (PS 50)	Middle							
9	Kraimeh (PS 55)	Middle	2				6	1	
10	Ghor Kabed (PS 78)	Middle							
11	Ghor Kabed (PS 81)	South							
12	Ghor Kabed (PS 91)	South	2		1		4	2	
13	Ghor Kabed (PS 95)	South			2		2		
14	Kafrein	South							
15	Rama	South							
16	Mazraa, Haditha*	Southern							1
17	Safi	Southern							
18	Feifa	Southern	1			1			
19	Khunezira	Southern	1		1				
	TOTAL		**7**	**1**	**5**	**5**	**12**	**3**	**1**

Source: WUA Survey report
Note: WUAs highlighted in blue are ones with TT Agreements.

WUAs are a new phenomenon in many countries and farmers as well as government irrigation officials in them have little or no experience with participatory irrigation management. Consequently, government personnel, donors, WUAs, and WUA members have recognized that WUA capacity development requires an extensive training program. These programs usually include the following types of courses.

- WUA formation and registration
- WUA governance and leadership
- Irrigation service fee establishment
- WUA financial management and accounting
- Irrigation water allocation and system operation
- Responsibilities of representatives
- Irrigation system management
- Maintenance planning and implementation
- Pump operation and maintenance

In contrast to the limited training areas in Table 4, these courses also concentrate on developing leadership and governance skills, and well as the financial skills required to have a socially, financially and technically viable WUA. Without the right to collect water fees and resistance to WUAs developing their own sources of funding, there has been no need for financial management training in the JV. Yet clearly WUAs must have income and the ability to manage in order to cover their MOM costs.

Table 4 illustrates a suggested training program for new WUAs. Note the program includes a mix of training for hired employees, WUA leaders, and WUA members. Training for WUA members is important, as the main decisions in WUAs, such as electing the Council members and establishing the annual WUA fees, are made by the General or Representative Assembly which is made up of the members. Therefore it is important that members are aware of their duties as members of the General Assembly. This kind of serious training program is necessary to establish sustainable WUAs that are technically and financially viable.

Table 5 - Suggested Training Days for 30 WUAs Serving 30,000 Ha

Trainee	No. Per WUA	Number per 30,000 ha	No. of Course Days/Trainee	Total Training Days
Council Members	7	210	2	420
Accountant	1	30	3	90
Engineer	1	30	3	90
Chairman	1	30	4	120
Maintenance	1	30	2	60
Ditch Riders	5	150	2	300
Members	100	3000	1	3,000
Total	**116**	**3,480**		**4,080**

Note: Assumes the average WUA size is 1,000 Ha.
Source: Sam H. Johnson III. Modified from table presented at World Bank workshop: lessons learned in developing sustainable WUAs and forming WUA federations. Bishkek, Kyrgyzstan, October 1-6 2007.

5 FINANCING WUAS

5.1 WATER FEES

In Jordan WUAs do not have a water quantity agreement with JVA and do not pay fees for the water delivered to the WUA. Instead WUA members must pay service fees directly to JVA for the water supplied by JVA and the WUA. In most cases the flow meters installed at the Farm Turnout Assemblies (FTAs) do not work, and therefore the amount of water used is estimated. The tariff is based on estimated water consumption in cubic meters per farm unit per month. Table 6 shows the current tariffs.

Table 6 - JV Irrigation Water Tariffs

Water Consumption (m^3/farm unit/month)	Water Tariff (JD/m^3)
0-2500	0.008
2501-3500	0.015
3501-4500	0.020
Greater than 4500	0.035

WUA members pay JVA at the end of each month. As WUAs do not pay fees to JVA, they do not actually know how much their members have paid. Data from JVA for 2012 reports payments for irrigation water delivered in the JV to be 2.058 million JD for irrigating 350,000 du in the Valley. This is 5.88 JD/du or about $83/ha for all irrigation users in the JV. Based on data collected from JVA, Table 7 details water fee payments in 2012 from members of 13 WUAs with 133,476 irrigated dunams by JV region. As seen, the average for all the area is 3.88 JD/du, or about $55/ha.

Table 7 - Irrigation Tariff Payments by WUAs, 2012

JV Region	Billed (m^3)	Supplied (m^3)	Total Area (du)	Irrigated Area (du)	Water Used (m^3/du)	Amount Collected (JD/du)
North JV	7802714	8015180	52280	21879	366.3	3.56
Middle JV	6918224	6731457	40244	19600	343.4	3.77
South JV	18541326	20605030	46597	46597	442.2	4.25
Southern Ghors	36523065	36523065	45400	45400	804.5	3.71
Total/Average	69188709	71874732	184521	133476	538.5	3.88

Source: JVA O&M directorates

5.2 MOM Costs

At present WUAs are receiving almost all their MOM funding from JVA through TT Agreements. The amounts received vary from 2.63 JD/du to 9.42 JD/du with an average of 4.03 JD/du. Chairmen of the WUAs realize that these Agreements only cover salary costs with very little available for maintenance and any necessary repairs. A number of the Chairmen believe the sustainable costs for MOM of their systems is around 6 to 7 JD/du or $85 to $99/ha. These costs do not include pump operation and maintenance. When these are included, the costs will go up significantly. Table 8 presents the MOM costs for a set of irrigation associations in Turkey. These associations are quite similar to irrigation associations in Jordan and in fact the gravity costs are quite close to the 6-7 JD/du estimated by the JV WUA Chairmen. As can be seen in Table 7, when the Turkish systems include pumping costs, MOM costs more than double.

Table 8 - MOM Costs for Irrigation Associations in Turkey

Irrigation Assoc.	2005 Tariff	Total Area (ha)	Total Owed (TL)	MOM Fee ($/ha)
Sarkiz IA	120 TL/ha	11,500	1,391,657	$92/ha
Menemen	120 TL/ha	14,200	1,700,000	$92/ha
Daphan IA	4.5-12.5 TL/ha	14,000	230,000	$34.61/ha-$96.15/ha
Tercan IA	Grv 40-18.5 TL/ha Pmp 70-430 TL/ha	5,150 ha	244,911	Grav $30.77/ha-$118.64/ha Pump $53.85/ha-$330.77/ha
Erzincan	Grv 8.8.5-14.3.5 TL/ha Pmp 8.8.5-22.3.5 TL/ha	11,030	670,000	Grav $68.08/ha-$110.38/ha Pump $68.08/ha-$171.92/ha
Demirdoven	30-70 TL/ha	4,679	94,000	$23.08/ha-$53.85/ha

Data Source: Collected by the author on field visits; April 2-5, 2006 in Region II and April 10-13, 2006 in Region VIII.

5.3 Total Costs

Eventually, the Government is going to reduce the subsidies to WUAs and increase the irrigation water tariffs. Already in December 2010 the Secretary General of JVA has proposed a significant increase in irrigation water tariffs (see Table 9)[v].

Table 9 - Present Compared to Proposed Irrigation Water Tariffs

Water Consumption	Present Water Tariff	Proposed Water Tariff
(m^3/farm unit/month)	(JD/m^3)	(JD/m^3)
0-1,000	0.008	0.010
2,501-3,500	0.015	0.028
3,501-4,500	0.020	0.040
Greater than 4,500	0.035	0.060

Experience in other countries shows that farmers are much more willing to pay higher water fees if the funds collected stay in the area and are used to improve operation and maintenance of their system. On the other hand, if the funds all disappear in the capital city and farmers see no direct results of their payment, they are much more resistant to increases in irrigation fees.

In the near future it is expected that water costs to WUAs, including both MOM costs and payments to the bulk water supplier, will be in the range of 12-14 JD/du or ($169-197/ha). As can be seen in Table 10 that presents a set of irrigation associations in south Texas, these associations have very similar costs. These districts are quite similar to the systems in Jordan as they pump water off the river; produce a large percentage of vegetables, melons and fruits; and have to be concerned about water quality. They also often pump into small farm ponds to spread the availability of water as required by their vegetables and melons.

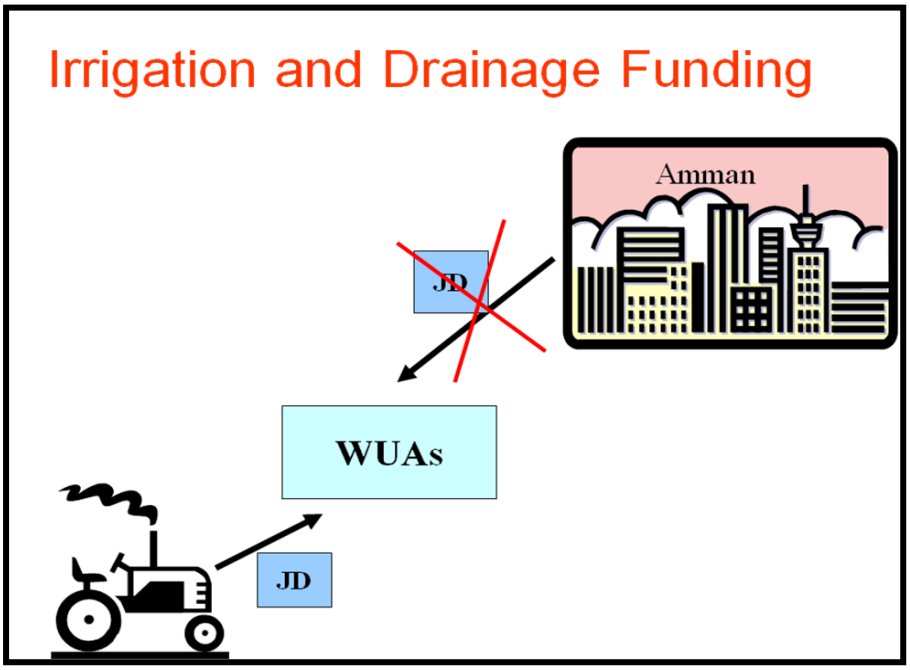
Table 10 - Water Charges for Irrigation Associations in Lower Rio Grande Valley, Texas, USA

	Fixed Charge ($/ha)	Per Irrigation Rate ($/irrigation)	Annual Irrigations (No.)	Costs per Year ($/ha)	Comments
CCID #2, summer 07	$20.99	$17.29	6	$124.73	Assumes 2 crops
DLID, summer 08	$24.70	$26.46	6	$183.46	Assumes 2 crops
HCID #1, summer 08	$44.46	$22.26	6	$178.02	Assumes 2 crops
UID, summer 08	$46.93	$24.60	6	$194.53	Assumes 2 crops
HCID#2, spring 08	$30.88	$18.42	6	$141.40	Assumes 2 crops
HCID #6, spring 08	$46.93	$32.11	6	$239.59	Assumes 2 crops
HCID #15, spring 08	$40.29	$29.40	6	$216.69	Assumes 2 crops

Source: Irrigation Districts in Rio Grande Valley, 2007 and 2008

Documents from the JVA indicate that they are planning for self-sufficiency of the WUAs in the JV within three years[vi]. This means that WUAs will have to cover all their WUA MOM costs as well as pay the costs of irrigation water provided by the JVA, including any increases in these costs instituted by the JVA. Figure 7 illustrates the long-term situation where more and more of the funding for irrigation water costs is expected to come from the users that are benefiting from the supply of irrigation water, rather than from Amman.

Figure 4 - Funding Flows for Sustainable Irrigation in the Jordan Valley



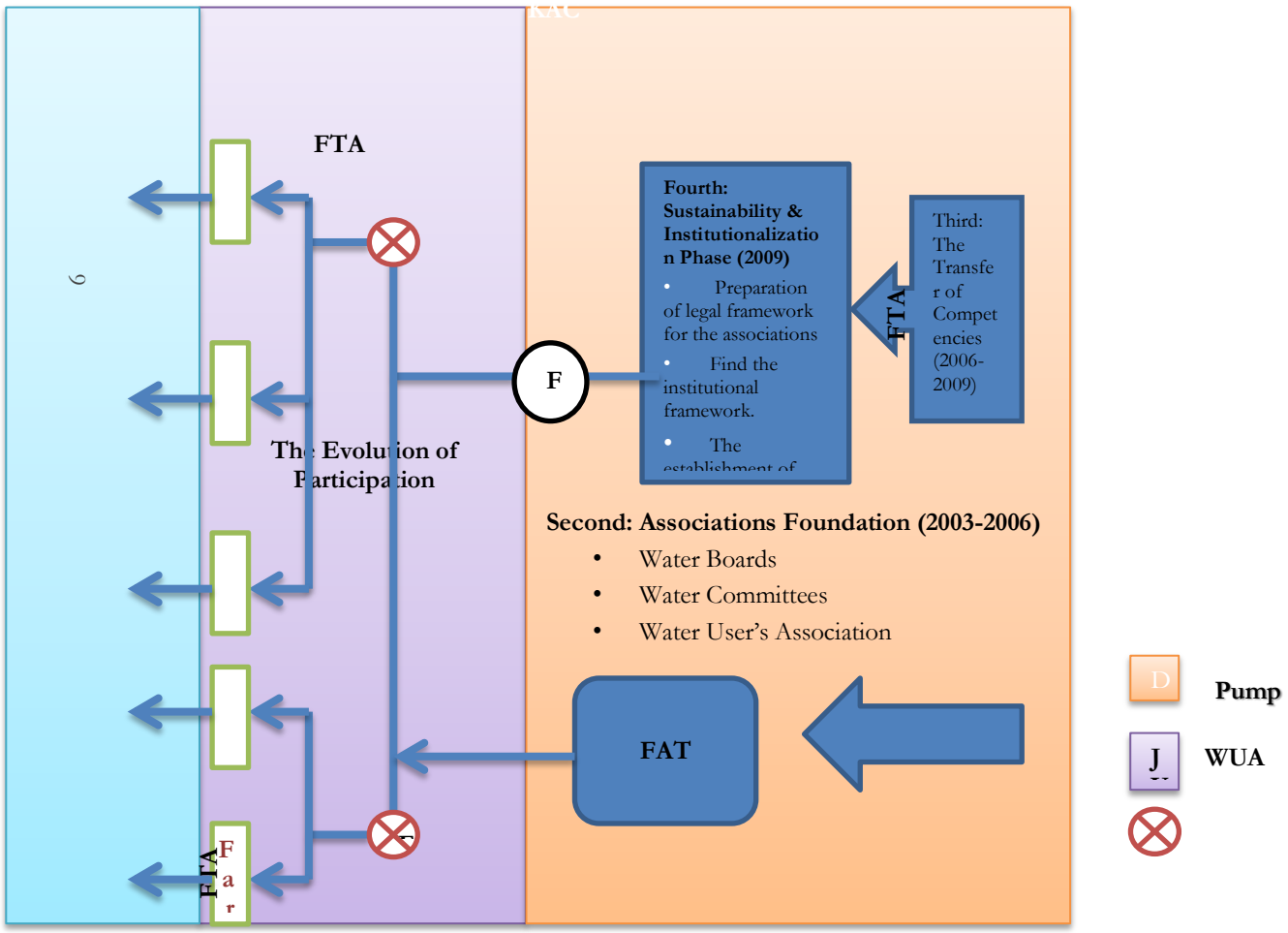
Without any income from TT Agreements and revised water costs from JVA, water costs for WUA members will be similar to the water costs detailed in Table 9. As indicated above, in the next few years it is expected water costs to WUAs, including MOM costs as well as payments to the bulk water supplier, will be in the range of 12-14 JD/du ($169-197/ha). For growers producing high value cash crops, especially for export, payments of around $200/ha for water supplies are just part of their production costs and are covered by their revenue from crop sales. However, for small growers and those producing for the domestic market, care will be needed to insure that the fees charge them are affordable.

6 TASK TRANSFERS

6.1 TT AGREEMENTS

Cooperatives in Jordan are actually organized as profit-making entities. Yet, JVA will not allow WUAs to collect water fees and, according to JCC staff as well as WUA staff, JVA does not allow WUAs to participate in other income generating activities. Therefore, the WUAs are in a very strange situation as they are formed to take a major role in operation and management of the irrigation system that serves their members (see Figure 1), and yet they have no revenue to use to pay salaries and other operating costs.

Figure 5 – Illustration of JVA and WUA Tasks Area



This is in sharp contrast to the situation of WUAs elsewhere in the world, as in most cases WUAs collect irrigation fees from their members. The fees paid by WUA members are typically separated into two parts, comprising (1) bulk water fees which are paid to the bulk water supplier for water delivered, and (2) MOM fees to the WUA to operate and maintain the irrigation system.

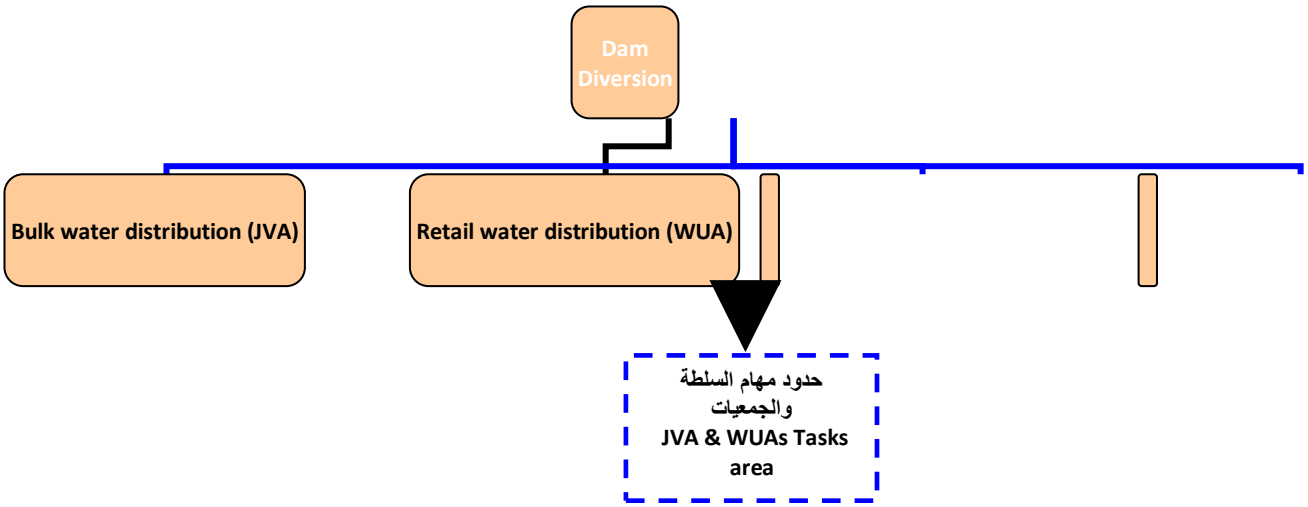
Instead of allowing WUAs to operate as independent legal entities that generate their own funds, JVA has established the TT Agreement system to shift partial responsibility for O&M of the irrigation infrastructure. Starting in 2008, JVA began to transfer water distribution functions to qualified WUAs. These transfers are based on the article on the transfer of authority in the Jordan Valley Development Law (Law No. 30) that gives JVA the authority to transfer to private organizations management responsibilities for project completed by JVA. The WUA TT Agreements include the following features[vii].

- The agreement is a yearly service contract under which JVA covers the cost of water distribution, based on the size of the WUA and the tasks to be transferred
- Tasks are transferred subject to existing laws and regulations
- There are certain tasks, such as collecting water fees that cannot be transferred for lack of legal authority[viii]

WUAs receive water distribution functions below the water source (pump station or diversion dam). WUAs are also involved, in a limited way, with JVA in water management above the water source, as in computing water balances.

As can be seen in Figure 2 there are 12 WUAs that have signed TT Agreements and are receiving payments from JVA to cover staff salaries as well as some operational costs. There are 4 WUAs that have signed TT Agreements with no costs to JVA, 3 WUAs that participate with no TT Agreement, and another 5 WUAs that are still in preparation.

Figure 6 - Status of WUAs with respect to TT Agreements



As can be seen in the figure, out of a total of 184,521 dunum of irrigated area under WUAs, 128,581 dunum are now under TT Agreements. WUAs that have signed TT Agreements with JVA carry out the following tasks. However, note that not all WUAs have assumed responsibility for all of these tasks.

- Distribution of irrigation water by watering program prepared in cooperation between the authority and the Association
- FTA maintenance
- Monitoring and control of illegal uses of water and damage to irrigation facilities
- Recording and documenting quantity of consumed and leaked water
- Agricultural production information
- Help with fee collection

Future TT Agreements may include the following[ix].

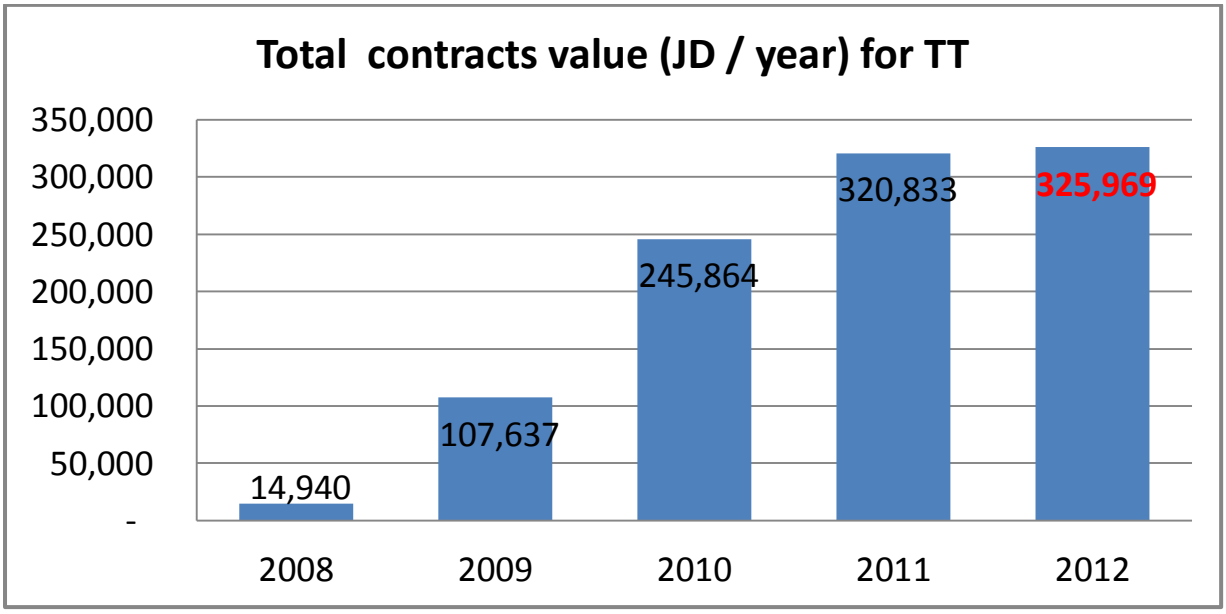
- Expanding areas of farmer's participation both horizontally and vertically (geographic coverage and expanding the tasks)
- Self-financing management of water through water prices, maintenance fees, and penalty revenues
- Review the rules and procedures of the Association relative to their responsibilities and functions
- Establishing a system for mandatory membership for all water users

The value of the TT Agreements with WUAs in 2012 ranged from 17,300 JD to 37,750 JD. In 2013 these were increased as JVA agreed to cover some of the inflation costs that affect WUAs. Figure 3 tracks the increases in the total TT funding from 2008 (14,940 JD) to 2012 (325,969). With 95,146 du covered by TT Agreements in 2012, the amount of TT funding to WUAs was 3.4 JD/du. The vast majority of the TT funds are used for salaries with only 10.9% used for administration and maintenance.

Although, in theory, TT Agreement funds are given to the WUAs to use as required, in fact they are very tightly controlled, along with the salaries to be paid specified in the agreement. In fact, the checks for salaries are written by JVA and given to the WUA Chairmen who then pay the employees. JVA actually stipulates how many employees with which skills are required and has a heavy influence on what salaries are paid. A major issue is that the amounts paid by JVA for staff salaries do not include the funds required to pay employees' pension and health insurance benefits. This would not be too bad if WUAs could raise their own funding from activities such as water fees and outside maintenance activities but under the present arrangements WUAs lacks the ability to generate additional funding.

This is very problematic as it is often stated that WUA budgets should be no more than 50% for salaries and the rest to cover operations and maintenance costs. As it is now WUAs can barely cover salaries with money from the TT Agreements and have almost no funds for maintenance.

Figure 7 - Total Budget in TT Agreements, 2008-2012



6.2 WUA Performance Indicators

Each TT Agreements contains a set of five performance indicators. The example below is taken from the 2010/2011 contract of Kafrein WUA with JVA. These indicators are unique to the present contractual arrangements of WUAs with JVA. In this regard they are relatively short-term, as JVA expects within three years that WUAs will be self-sufficient clients purchasing bulk water from the JVA.

First Indicator: **penalties**

Month	Number of vandalizing penalties	Number of illegal water openings	Change percentage	
			increase	decrease

Second Indicator: **Kafrein Dam budget**

Month	2008		2009		2010	
	storage	quantity released for irrigation	storage	quantity released for irrigation	storage	quantity released for irrigation

Third Indicator: **complaints**

Month	No. of complaints	Type of complaints			Change percentage	
		maintenance	quantity shortage	delay of supply	increase	decrease

Fourth Indicator: **maintenance**

Month	Type of maintenance			Change percentage	
	Farm turnout	Installation of reducers	valve	increase	decrease

Fifth Indicator: **distribution efficiency**

Year Month	Distribution efficiency (%)				
		2008	2009	2010	2011

The way these are written in the TT Agreement, it is difficult to tell if these pertain to activities of JVA or the specific WUA. However, as TT Agreements have little, if any, actual numerical targets, it is also difficult to tell exactly how these performance indicators are to be measured.

As the present situation in which WUAs hold operational contracts with JVA is expected to be a transitional one, it is better to develop performance indicators that are relevant to the future situation of independent, self-sustaining WUAs that contract with JVA for a clearly specified bulk water supply at an agreed upon price. In this regard it is necessary for the contract to contain very specific targets. For example, normally there is an annual signed contract between a bulk water supplier (such as JVA) and its clients (such as WUAs). With a signed contract between the two parties, it is very easy to determine performance such as quantity delivered (and in some cases water quality), delivery schedule, payment schedule, condition of irrigation system facilities, as verified by joint inspections, completion of rehabilitation work by expenditure and inspections, etc.

In addition to these contractual performance indicators, both WUAs and JVA should have internal performance indicators. These might include fee collection rates, staff per du, number of Council and General Assembly meetings, member satisfaction ratings, percentage of non-member users, per hectare MOM costs compared to other nearby WUAs, etc. Once WUAs become clients with signed legal contracts for bulk water purchase from JVA, internal performance indicators are the concern of the WUA and its members (as well as any external regulator) and not JVA. Similarly, JVA should have a set of internal performance indicators related to the quality of its bulk water service. These would be reviewed on an annual or quarterly basis by the JVA Board and the concerned unit within the MWI, as well as any Government auditing unit.

7 CONTRACT ISSUES

JVA has prepared a list of issues related to JVA contracts with WUAs that they feel should be addressed for the future (Annex 3). They presented this list to ISSP and asked for the consultant to review these issues and offer suggestions. Based on international experience, this section provides responses to the issues posed by JVA.

7.1 CLARIFY THE RELATIONSHIP

It is critical that the two parties clarify the relationship between the JVA and WUAs in a manner that the relationship preserves the rights of both parties. In order to have successful WUAs, irrigation officials have to deal with WUAs and their members as clients. Successful WUAs, and the members that use the water, are not beneficiaries but clients that are buying and paying for a service. Bulk water suppliers provide a service and farmers pay for that service in a business-like relationship. This fosters a climate of respect between WUAs and the supplier. In this regard both parties sit at the table as equals and negotiate a contract that is beneficial for both parties.

In contrast, at present JVA treats the WUAs as if they have a management contract with JVA, where JVA sets all the conditions. This means that the two parties are not seen as equals but instead the WUAs at present are treated if they are a poorly paid and poorly qualified sub-unit of JVA. The present relationship is not positive and is detrimental to the long-term sustainability of irrigation in the JV.

It is clear in the long-run that JVA cannot afford to continue the system of TT Agreements. Instead, over the next few years JVA expects WUAs to become self-sufficient water users that can pay their own MOM costs as well as pay a significant percentage of the costs JVA incurs to supply water to the WUAs. In order to achieve this type relationship, JVA needs to provide support and assistance to WUAs and, like any commercial supplier, help ensure their clients become a more dependable source of sales for the water supplied by JVA.

The formation of an Associations of WUAs provides an excellent opportunity for JVA to improve its relationship with the WUAs. Once an Association is functioning, JVA may want to see if it can become a non-voting member of the Association Board. In addition, JVA would demonstrate its recognition of the importance of WUAs by inviting representatives from the Association of WUAs to sit on the JVA Board. Any actions taken by JVA that illustrates their recognition of WUAs as

important clients rather than treating them as beneficiaries looking for handouts will have a high payoff in terms of an improved relationship between the two parties.

7.2 Continuity of Work Performance

Based on the legal contract between the parties, it is important that the WUAs provide consistent performance in operating and maintaining the irrigation infrastructure. As long as the irrigation infrastructure belongs to the State and JVA is the representative of the State responsible to ensure it is properly operated and maintained, JVA has the duty to ensure that a WUA, or any other organization that is contracted to operate and maintain the system, performs properly. In a number of countries where WUAs are given the right to operate and maintain Government assets, the Irrigation or Water Resources Department has the responsibility to monitor the actions of the WUA that relate to care of its facilities. This monitoring often includes: (a) review of the annual WUA O&M budget to ensure that it is sufficient to carry out the required maintenance activities, (b) field inspections to ensure the irrigation infrastructure is being properly managed and maintained, (c) receipt of quarterly reports to track O&M activities including water used and paid for and any system maintenance and repairs carried out. In addition, to coordinate their activities, the two parties often hold joint pre-season meetings to discuss irrigation plans and schedules for the coming season, the responsibilities of each party, and any problems being experienced.

However, even if the irrigation infrastructure belongs to the State, there are limits to the Irrigation Department's authority over the WUA and functions that are not legitimate areas for Irrigation Department monitoring. These include (a) irrigation water allocation within the WUA, (b) irrigation practices, (c) water fee levels and collection procedures, (d) system of fines, (e) WUA elections, and (f) hiring of staff. Attempts by the Irrigation Department to control internal operation of the WUA result in a conflict of interest and threaten the viability of the Association as well as the sustainability of the irrigation infrastructure.

7.3 Legal Umbrella

All parties agree that the present arrangement where WUAs are organized as cooperatives under JCC is not appropriate. Participatory irrigation management associations are organized and operate much differently than cooperatives. In particular, cooperatives are organized as for-profit commercial entities with no separation between the Chief Executive Officer (CEO) and hired staff (since the CEO is also a paid staff member), while WUAs are non-profit entities with a clear separation between governance and management.

In contrast to corporations and cooperatives, where the CEO makes policy decisions and is also responsible for implementing them, in WUAs a governance body establishes policies and make decisions how the association is to operate, but hired management staff are responsible for carrying out these decisions. Usually, members of the governance body, including the chairman, are elected but not paid, while management staff are recruited and paid a salary. Governance body members are elected for a fixed period and can be voted out of that position if the general membership feels they are ineffective. Likewise, management staff are hired and can be fired by the governing body, but not by the membership, if they fail to carry out their assigned duties.

In order to legally form WUAs, countries all over the world have passed legislation to enable WUAs to be established as a specific type of legal form, even if the concept of public law, a legal form not known in many countries, was not specifically acknowledged. The importance of passing such legislation is that WUAs were established as WUAs and they had, and continue to have, a role that is halfway between the state and the private sector. They undertake a public service function yet are controlled in a democratic manner by their members.

Adopting specific legislation authorizing and governing WUAs permits a number of important issues relating to the public-private nature of these organizations to be taken into account. These included the following.

- Explicitly allowing a split fee structure based on the payment of an annual charge to cover a WUA's fixed costs and an irrigation service fee tied to the costs of water delivery
- Specifying that WUAs are explicitly designed to provide irrigation and/or drainage related services
- Providing a right of access to operate and maintain irrigation facilities, even on private land
- Conferring clear legal rights of membership of land owners, or in some circumstances users of land, within the service area of a WUA
- Allowing different fee rates between members and non-members
- Clearly specifying the non-profit, non-tax nature of the association
- Clearly setting out the rights and duties of WUA members as well as water suppliers

In contrast to cooperatives, WUAs have an organizational structure that clearly separates governance and management. Policy decisions are made by the WUA Board or Council and implemented by the hired manager and technical staff.

Given that it is a long and time-consuming process to pass a new law such as a WUA Law, Governments often search for quicker options. In Jordan organizers opted to register WUAs as cooperatives. However while this allowed a quick start-up, the cooperative model is not suitable for the continued growth and development of the WUAs.

In order to address the unique public-private aspects of WUAs, it will be necessary to prepare a specific by-law for WUAs, detailing governance, operations, supervision, audits, membership, taxation, contracting, and so on. It is important that this by-law, as well as the charter of the WUA, is tailored specifically to the roles and responsibility of the WUA and not to try to fit the WUA into a generic legal structure developed for other purposes.

The non-profit clause of the Companies Act provides another alternative as a basis for re-organizing WUAs. In this case as well, a by-law specific to WUAs, needs to be drafted and implemented.

7.4 Body Representing WUAs

In many countries, WUAs have formed an association of WUAs to represent WUA interests and help them attract additional funding. In particular, an association of WUAs interacts with member WUAs, lobbies for improvements in public irrigation infrastructure, and represents WUA interests in discussions with Government and bulk water suppliers. In light of the growing importance of WUAs, there is a recognized need to create such a unifying body for the 24 WUAs covering the Jordan Valley.

To address this need, the GIZ Water Program commissioned an independent study to identify and evaluate available options for such an entity. The study revealed 5 options. To discuss the options among involved stakeholders, a workshop was organized involving the WUAs, concerned members of the Jordan Valley Authority (JVA), and GIZ. Participants discussed the options and agreed on an interim solution in the form of a Council whose members would be elected by the WUAs to represent them vis a vis JVA and other parties. This option will be consolidated with a legal agreement among all concerned parties which will help sustain farmers' participation as well as advancing the position of WUAs as private partners for improving management of irrigation water.

The agreement on the Council is an important milestone in the march towards increased farmers' participation and self-reliance. In addition, JVA has signaled its interest in adding three farmer representatives to the JVA Board. However, because WUAs will be contracting with JVA for bulk water services, the usual arrangement would be that these farmer representatives would be non-voting Board members to avoid any conflict of interest.

JV WUAs have prepared, on their own initiative, a draft by-law/regulation for a Federation of the Jordan Valley Irrigation Water Users Associations (see the document in Annex 2). This draft by-law is quite similar to documents developed in other countries for forming an Association of WUAs and, assuming it is approved by the Cabinet, should provide the necessary legal basis for the Federation to operate. It should be noted that this is not a regional WUA grouping formed to operate and maintain the irrigation facilities, but an Association designed to help WUAs present and discuss their policy concerns and influence decisions that relate to irrigation development and water supply for irrigation.

7.5 REGULATOR MANDATE AND FUNCTIONS

WUAs are unique in that their legal structure forms an association with quasi-monopoly rights for provision of irrigation services. Given the potential power to exercise this monopoly right countries both in Asia and Europe usually form a regulatory authority to regulate the activities of the WUA. The three articles reproduced below are taken from a WUA Law in another country and briefly describe the role and functions of the WUA Regulatory Authority there.

CHAPTER V. STATE REGULATION AND CONTROL FOR WUA's ACTIVITY

Article 27. State regulation and control for a WUA's activity

State regulation of WUA and control for mentioned activity realized by state organ, which is authorised by the Government of XXXX to regulate and supervise WUA's activity in accordance with legislation of XXXX. The management staff of a WUA shall be responsible for the accurate and timely reporting of annual returns and other documentation in accordance with the legislation of XXXXX Republic.

Regulatory Authority for realization of its functions has right to:

- *Realize audits or invite independent auditors for conducting audits after written application of WUA members;*
- *Maintain the Register of WUA;*
- *Provide advice and assistance to WUA in respect of legal, accounting and technical issues;*
- *Mediate disputes between two WUAs or between WUAs and Irrigation Department;*
- *Replace WUA Council and Chairman in case of violation of the law or WUA By-Laws;*
- *Undertake other tasks specified in this law; and*
- *Review annual reports to determine financial status of WUA and identify any violations of WUA LAW or other laws.*

Article 49 Reorganization of the Association

Reorganization of the Association is realised on the basis of decision of the General Assembly on Agreement with Regulatory Authority in accordance with conclusions of an independent auditor.

Article 50 Liquidation of the Association

Liquidation of the Association is realised by the decision of the Representative Assembly agreed with Regulatory Authority on the basis and order foreseen by the legislation of XXXX Republic.

- *Following the liquidation of the Association, the powers to operate the Association are transferred to the liquidation commission created from members of the Association and representative of Regulatory Authority.*
- *Assets and financial means left after satisfaction of all liabilities following liquidation of the Association are subject to distribution among members of the Association, by the decision of liquidation commission.*
- *Liquidation is considered to be completed and the Association is considered to be liquidated at the moment of record about this in the organ undertaking the state registration of Associations (its removal from the state register).*

In some countries such as Georgia, irrigation is the responsibility of the Department of Water Resources while the WUA Regulatory Authority is in the Ministry of Agriculture. This provides a separation and thus avoids conflict of interest but often leads to a low level of interest and commitment by the Regulatory Authority. In other countries, the Regulatory Authority is in the same Department as the Irrigation Department and thus there is difficulty with potential conflicts of interest between two units in the Department. This would be the same case in Jordan if the Regulator for WUAs is in the JVA. In other countries, including many countries in Europe, there is an independent Utilities Board or Authority and WUAs are regulated by this body.

7.6 MEMBERSHIP REQUIREMENT

In order to encourage all water users in the WUA service area to become members of the association, several approaches are available. The simplest one is that used in a number of countries – if 51% of the users in a proposed WUA service area apply to be members, all potential users in the WUA service area automatically become members. A second approach is to give the WUA the right to bill non-members for water at significantly higher rates than members. If, for example, non-members have to pay two times what members have to pay for water, this is a strong economic incentive for users to become members.

As WUAs become better established and to ensure their sustainability, it is often important to confer stronger legal powers upon them. Such powers might include the following.

- The right to force compulsory membership on all of those who hold land located within the service area of a WUA, as is provided for in the legislation of France and Germany
- The right to force the compulsory payment of fees, particularly fees relating to the operation and maintenance costs, as happens in the USA, UK, Romania (through the relevant subsidy system) and Albania
- The right of access to operate, repair and maintain WUA irrigation infrastructure even if it is located on private land
- The recovery of outstanding fees through a variety of mechanisms including
    - The registration of outstanding charges for recovery by the court bailiff (e.g. UK, Albania)
    - The local land tax system (as happens in India);
    - Allowing a WUA to place a lien on the land of a person in arrears and to force the sale of that land in the event that the outstanding fee liability is not discharged (e.g. USA)
- The right to expropriate land (subject to the payment of compensation) where this is necessary for the operation of the WUA (e.g. UK, Germany, France, etc.)

Politically, the possibility of undertaking such types of reform become easier as the WUA concept is better understood by farmers, government officials and politicians and as WUAs establish a track record as responsible and effective service providers. As regards the internal structure of WUAs, another possible area for reform may be to require the rotation of management board members, while maintaining a degree of continuity. The legislation might require, say, one-third of the management board members to retire (and, as appropriate, stand for re-election) every two years rather than seeking to replace the entire management board at the same time.

7.7 Mechanism for Water Pricing

A major mistake of newly-established WUAs is water pricing based entirely on a type of crop, area irrigated, or volumetric basis. Such a system ignores the fact that a WUA has a set of fixed costs and well as variable ones. The fixed costs include office rent, utilities, communications, office supplies, vehicle maintenance, annual system maintenance, as well as permanent staff members such as the director/manager, accountant, senior engineer, and security guards. Variable costs include water fee payments to the bulk water supplier, energy for pumping, field transport, salaries of ditch riders and

temporary maintenance staff, emergency repairs, maintenance supplies, fuel, equipment operation and rentals, etc.

Even if WUA members do not irrigate their crop, they still need to pay their share of fixed costs to ensure the sustainability of the WUA and the irrigation system. In the case of a wet year when farmers do not need to irrigate, or a dry year when there is insufficient water to irrigate, the WUA still needs to cover its fixed costs. Consequently, WUAs often operate with an annual membership fee which everyone that can access irrigation water from the WUA irrigation system has to pay. This is usually based on the number of hectares held by a member in the WUA service area. If, for example, a member has four hectares of land that can be irrigated by the WUA but only irrigates two ha, he/she still must pay the membership fee on all four hectares.

The other part of the fee, the variable part, is usually based on the amount of water used. If a member does not irrigate his/her land he/she does not have to pay a variable fee. If one member uses 5,000 m3/ha and another member uses 10,000 m3/ha, the second member's variable fee is twice that of the member that uses less water. When a system does not have the ability to measure water accurately, many WUAs based charges on the number of irrigations provided per hectare. For example, each irrigation might be charged 15 JD/ha so a member that irrigates a hectare four times pays 60 JD/ha while a member that irrigates his crop six times pays 90 JD/ha.

The important aspect of having the water payment divided into two types of fees is that the WUA is financially sustainable no matter how much water is available in any season or year. By contrast, if the water fee is solely based on the volume of water delivered to members and it is a very dry year such that only 25% of the irrigated land can be irrigated, the WUA cannot collect enough income to pay its fixed costs as well as its variable costs and therefore often goes broke. In some countries, depending upon the legal structure of the WUA, fixed fees for WUAs are collected by the local government along with land taxes while the WUA only collects the variable irrigation fees. This both reduces the burden of fee collection on the WUA and also ensures a very high collection rate as the authority of local government enforces payment.

7.8 Review Financial Aspects of Contract

Existing contracts between JVA and WUAs in the JV are exactly opposite of what they should be. If, for example, one contracts to build a house, the contract specifies the size of the structure, the square meters of the various rooms, the interior and exterior construction materials, the number of floors, number of baths and bedrooms, number of garage bays, roof material, etc. However, the contract

does not attempt to specify the number of carpenters, electricians, plumbers, tile layers, carpet layers, and roofers that the contractor should hire or the salary to be paid to each of the workers. When one contracts to have a job done it is up to the contractor to determine the number and type of skilled workers as well as their salaries required to complete the contract. In other words, it is the contractor's responsibility to manage the job.

By contrast, in the JV the JVA attempts to specify the number of employees the WUA will require and the salaries to be paid to them. This breaks the chain of accountability and ties the hands of the WUAs in trying to do the job given them effectively and efficiently, and yet still does not ensure the job will be done correctly, as the contract focuses on the inputs rather than the outputs.

In entering into management contracts with the WUAs, JVA needs to decide what tasks it wants the WUAs to complete, spell these out clearly in the contract along with indicators to measure the degree of completion of the tasks, and pay the WUA for completing these tasks. It should not try to micro-manage how and with what staff the WUA will complete these tasks. However, in the longer run, the emphasis should be on shifting to a mode in which WUAs purchase bulk water from the JVA and then arrange with their clients to provide individual irrigation service to them, doing away with the management contract entirely.

7.9 PERFORMANCE INDICATORS

At present there are five performance indicators in the TT Agreements. These are (1) penalties, (2) budget, (3) complaints, (4) maintenance, and (5) distribution efficiency. The way these are written in the TT Agreement it is difficult to tell if they pertain to activities of Party One (JVA) or Party Two (WUA). Likewise, as the TT Agreement does not have clear numerical targets it is difficult to tell exactly how these performance indicators are to be measured. Two of the five are related to negative aspects of operation which are relatively subjective, since a complaint can be just someone unhappy with their neighbor, or can be related to a major issue.

In order to have a set of performance indicators that are clear and easy to measure it is necessary for the TT Agreements to have very specific targets. For example, normally there is an annual signed contract between a water supplier (such as JVA) and its clients (such as WUAs). With a signed contract between the two parties it becomes much easier to assess performance. If a WUA has a contract for 12 million m3 of irrigation water, but the supplier only provides 9.5 million m3, it is very easy to measure the gap (in this case 79.2% of contracted water is supplied). Similarly, the contract between the two parties should clearly detail the amount that is to be paid to Party One (JVA) by

Party Two (WUA) for supplied water. Again it is easy to measure this performance indicator by dividing the paid amount in JD by the contracted amount in JD and converting this to percent.

One of the few numerical targets in the TT Agreement reviewed (for Kafrain WUA) is an increase in the membership percentage to 85% by the first year of the contract. It would seem the this would be one of the performance indicators as it clearly quantified in the contract and is easy to measure. Other targets should also be set and then assessed to see if Party Two (WUA) has met them. With respect to rehabilitation in the TT Agreement, the First Party commits to irrigation network rehabilitation within the area that is irrigated by the Kafrein Dam (234 agricultural units) according to a set time frame as per an attached annex and as per agreement between both parties. In order to make this a performance indicator, Party One (JVA) should make this a numerical commitment such as JD 200,000 spent, or 234 farm units rehabilitated, making it a simple matter to determine performance by Party One.

In order to clearly indicate which Party's performance is being measured, there should be two sets of performance indicators, one for Party One (JVA) and another for Party Two (WUA). Thus if there is a performance indicator for maintenance, it is clear if this relates to maintenance by Party One or maintenance by Party Two.

7.10 Job Description and Staff Required

Instead of worrying about the number of WUA employees and their job descriptions, JVA needs to be concerned about the quality of the work done by the WUA and the Association's ability to properly maintain the irrigation infrastructure, especially if and when pump stations are transferred to WUAs to operate and maintain.

Countries that have faced the situation of transferring operation and maintenance responsibility of State-owned property to WUAs have used difference approaches. One of the most successful ways to address this issue was the approach taken by the National Water Committee (CNA) in Mexico. CNA transferred O&M responsibility to the WUA and then the two organizations, the WUA and CNA, jointly operated the system for another six months or so. CNA only turned operational responsibility over to a WUA when it was confident that the WUA knew exactly how to operate and maintain the infrastructure and that this responsibility could be transferred to the WUA without putting the State property at risk. CNA was not concerned about the years of education or technical certification of the staff, but the real world ability of the WUA staff members to operate and maintain the irrigation system.

In Mexico, as well as other countries such as Colombia and Romania, the process of transferring O&M responsibility meant that the State irrigation agency did not require as many employees. The majority of the operational activities had been transferred to WUAs and the State irrigation agency had more of a policy making role while WUAs had taken over the day-to-day operational tasks. However, as WUAs assume more responsibility and require more operational staff, they end up recruiting and hiring the former government operational staff members. These experienced individuals are usually recruited as engineers and maintenance supervisors. Table 11 illustrates the change in staffing at CNA as a result of creating 450 WUAs and transferring O&M responsibility for 3.3 million hectares to these WUAs.

Table 11 - Changes in CNA Staffing After Management Transfer to WUAs

Region	Staff Before Transfer (1990)	Staff Needed After Transfer	Staff Retired/ Reduced (1994)	Staff as of 12/2000
NW	3,467	1,023	1,660	1,107
N Central	1,881	525	696	635
NE	423	137	75	155
Lerma Balsa	1,587	363	682	405
Valley of Mexico	313	80	149	89
SE	137	16	30	27
Total	**7.808**	**2,134**	**3.292**	**2,418**

Source: Commission Nacional del Agua, Mexico

The same situation is slowly occurring in the JV as more and more field level irrigation O&M responsibility is taken over by WUAs, and JVA requires fewer field operational staff. Many of these redundant employees will retire, while in other cases WUAs will recruit these individuals as senior O&M staff. According to the ISSP Report, **Draft Final Existing Conditions Survey and Assessment of WUAs in the JV,** by signing TT Agreements with WUAs, JVA has experienced a potential staff cost saving of 40% by having WUAs take part in water distributionx. As the expansion of WUA Task Transfer covers a larger area and the number of tasks transferred increases, JVA staffing requirements will decline further.

7.11 Salary Scale for Association Staff

Normally, if you hire a worker privately in a rural area, the daily cost is less than if you hire a Government employee and are forced to pay civil service wages. Consequently, it is not clear why JVA is worried about rural salary scales. It is the responsibility of WUAs to negotiate employment contracts with their employees, just as JVA must negotiate contracts with their own employees. Again this is a situation where the existing contracts between JVA and WUAs confuse input and outputs.

For certain, JVA should not be confusing employees that work for JVA with employees that work for WUAs. Nor should they attempt to second their own employees to WUAs or to set salary scales for WUA employees. This impacts negatively on WUA budgets and distorts JV salary levels. If JVA expects to eliminate financial subsidies to WUAs in the next three years, it is very detrimental to the WUAs, and their members, to create artificially high salary expectations.

ANNEX 1: PROPOSED JVA LAW AMENDMENTS RELATED TO WUAS

Original Articles	Initial Amendments	Amendments Proposed by the Committee	Amendments Proposed by Mr. Anas Barakaat
Article 3: An Authority titled (the Jordan Valley Authority) will be established and shall carry out the social and economical development of the Valley in conjunction with fulfilling the objectives of this law. For this purpose the Authority will be mandated to implement the following in cooperation with any concerned entity: a. The development of the water resources of the Valley and utilizing them for purposes of irrigated farming, domestic and municipal uses, industry, generating hydroelectric power and other beneficial uses; also their protection and conservation and the carrying out of all the works related to the development, utilization, protection and conservation of these resources, including:	Article 3: Article 3 of the Original Law shall be amended as follows: First: Item (5) of Paragraph (A) shall be omitted. Second: The addition of Paragraph (F) as follows: (F)(1) Notwithstanding the provisions of any other legislation, taking into account the provisions of this Law, the Board may, upon the recommendation of the Secretary General's approval by formatting of non-profit civil committees called (Committees of Water Users in the Jordan Valley) and that have a legal personality with financial and administrative independence. 2. (Water Users Committees in the Jordan Valley) aim to take part in the management of irrigation in the valley and raise the efficiency of the distribution of water and to this end shall practice	Article 3: Article 3 of the Original Law shall be amended as follows: First: Item (5) of Paragraph (A) shall be omitted. Second: The addition of Paragraph (F) as follows: (F)(1) Notwithstanding the provisions of any other legislation, taking into account the provisions of this Law, the Board may, upon the recommendation of the Secretary General's approval by formatting on of non-profit civil committees called (Committees of Water Users in the Jordan Valley) and that have a legal personality with financial and administrative independence. 2. (Water Users Committees in the Jordan Valley) shall take part in the	A. Article (3) of the Original Law shall be amended by adding the following Paragraphs (E) and (F): E: Strengthening the role of the private sector to participate in the development of the region, including in the provision of infrastructure services and other public services F: The issuance of permits, approvals and certifications required to perform work, activities or projects in the valley. B. Renumbering item (E) of the Original Law to become item (J).

1. The carrying out of studies required for the evaluation of the water resources including hydrological, hydro-geological and geological studies, drilling of exploratory wells and the establishment of observational stations. 2. The planning, design, construction, operation and maintenance of irrigation projects and related structures and works of all types and purposes including dams and related works, hydropower stations and related works, wells, pumping stations, reservoirs and water delivery and distribution networks; also surface and subsurface drainage works, flood protection works, and roads and buildings, needed for operation and maintenance. 3. Soil surveys and classification, and the definition and reclamation of lands suitable for irrigated farming and dividing them into farm units. 4. Settlement of disputes arising from the use of water resources. 5. Organize and direct the construction of private and public wells. b. The development,	the following duties and responsibilities: - Operate and maintain water lines and irrigation network - Distribute water to farmers in accordance with the provisions of this Law - Collect water dues on behalf of the Authority for the service allowances is renewed under contract that is written with these committees depending on the efficiency of water delivery and service level. 3. The Cabinet may upon recommendation of the Board add any other functions and powers to the Water User Committees of the Jordan Valley. 4. The provisions and procedures relating to the formation of committees, terms of membership, assigned tasks, how to hold meetings, dissolution, devolution of funds and other matters related to the organization of their work shall be governed under a regulation issued for this purpose. 5. Governing the relationship between the Authority and commissions under contracts that are written for this purpose after obtaining the approval of the Board. 6. Water Users Associations of the Jordan	management of irrigation in the valley and raise the efficiency of the distribution of water and to this end shall practice duties and responsibilities entrusted to it under an agreement with the authority. 3. Provisions and procedures relating to the formation of committees, terms of membership, assigned tasks, how to hold meetings, dissolution, devolution of funds and other matters related to the organization of their work shall be governed under a regulation issued for this purpose. 4. Water Users Associations of the Jordan Valley shall become in compliance with the provisions of this law within a period not exceeding six months from the date of entry into force, otherwise it shall be considered legally void.	

protection and improvement of the Environment in the Valley and to perform necessary works to achieve this objective, to implement the preparation of plans both Master and Detailed Plans for the lands outside the planning boundaries of the municipalities. c. The study of agricultural roads networks in the valley, their design, construction and maintenance, and that the authority will continue following up the main roads which were started and have not been completed yet. d. Development of tourism in the Valley, delineation of areas having special features which can be developed for touristic and recreational purposes and the development of these areas and the construction of touristic and recreational facilities on these areas. e.1. With the exception of irrigation projects and water resources development projects, the Authority shall adopt commercial basis in managing any of the project which it have implemented or is implementing according to instructions issued by the Cabinet of Ministers upon recommendation	Valley shall become in compliance with the provisions of this law within a period not exceeding six months from the date of entry into force.		

of the (JVA) Board. 2. The Authority may by a decision of the Cabinet of Ministers upon recommendation from the (JVA) Board, entrust any of the projects it has implemented or implementing or is managing, to any entity from the private sector whether by leasing, management or operation, in accordance with the effective laws and regulations. As for property transfer, irrigation projects and water resources development projects are excluded from such transfer.			

ANNEX 2: DRAFT REGULATION FOR FEDERATION OF JV WUAS[11]

Issued pursuant to Article _____ of the _____ Law.

Article (1):

These Regulations are titled the (Regulations of the Federation of the Jordan Valley Irrigation Water Users Associations, for the year _____) and shall take effect from the date of its publication in the Official Gazette.

Article (2):

Wherever used in these Regulations, the following words and phrases shall have the following meanings unless the context indicates otherwise:

Ministry:	The Ministry of Water & Irrigation
Minister:	Minister of Water & Irrigation
Authority:	The Jordan Valley Authority
Secretary-General:	The Authority Secretary-General
Association/Associations:	The Association or Associations established under the Regulations of the Jordan Valley Irrigation Water Users Associations, issued pursuant to the provisions of the Jordan Valley Development Law in force, and the regulations issued thereunder.
Federation/Union:	Federation of the Jordan Valley Irrigation Water Users Associations under these Regulations
General Assembly:	The Federation General Assembly
Board:	The Federation Board of Directors
Chairman:	Board Chairman
Member:	The Association
The Jordan Valley/Valley:	The area defined in accordance with the provisions of the Jordan Valley Development Law

Article (3):

A federation/Union titled (Federation of the Jordan Valley Irrigation Water Users Associations) shall be established and shall enjoy a legal personality with financial and administrative independence. It shall have the right to own movable and immovable assets, and shall carry out all necessary legal actions to achieve its goals, including the conclusion of contracts, and accepting grants and donations. It shall have the right to litigate.

The Federation shall be located in the city of _____ and may open branches anywhere in the Kingdom.

Article (4):

Membership in the Federation shall be compulsory for all Associations.

Article (5):

The Federation goals include:

a) Maintaining the interests of the Associations, working on strengthening their capacities, increasing cooperation among them, and coordinating their efforts in carrying out their activities.
b) Promoting cooperation between the Associations, and between the Ministry and the Authority.

Article (6):

In order to achieve its goals and to maintain cooperate and coordinate with the Ministry and related entities, the Federation shall perform the following tasks:

a) Achieve the goals of the Associations by strengthening their role in optimizing the use of irrigation water in the Jordan Valley.
b) Provide Associations with technical, administrative and financial consultation. To achieve this goal, the Federation may refer to local, regional and international experts and specialists.
c) Representing the Associations with the Ministry and Authority in matters related to the irrigation sector in the Jordan Valley.
d) Conducting conferences on the goals of the Associations, and representing the Associations in local, Arab and international functions related to the objectives of the Federation.
e) Attend to other tasks related to achieving its goals.

Article (7):

a) The Federation shall be managed by a Board of Directors composed of members of the General Assemble, not fewer than nine and not more than fifteen. One of them shall be Board Chairman.
b) The General Assembly shall elect Board members by secret ballot for an election term of four years.

c) The Board shall elect from among its members a Chairman and a Deputy Chairman each for a term of two years.

Article (8):

A member of the Board shall be:

a) Jordanian national.
b) Not convicted of a felony involving moral turpitude, and not declared bankruptcy.
c) To be a member of an Association General Assembly throughout the period of his membership in the Federation Board.
d) To submit, prior to the first Board meeting, a financial clearance from the Federation stating that he has fulfilled his obligations towards the association to which he belongs.

Article (9):

The Board shall assume the following duties and responsibilities:

a) To develop policies of the Federation, and submit them to the General Assembly for approval, and providing the supervision when implementing the policies.
b) Managing administrative and financial affairs of the Federation, and developing the organizational and managerial structures, and the instructions necessary for this purpose.
c) Appointing the Federation staff, and determining the terms of their employment, salaries and termination.
d) Signing collective contracts on behalf of the Associations. This shall not eliminate the right of Associations to conclude agreements relating to their own affairs.
e) Forming committees to assist the Board in carrying out its tasks, including the jury committees.
f) Participating with relevant authorities in preparing draft regulations and instructions related to irrigation water use in the Jordan Valley.
g) Gathering local, regional, and international information and statistics related to irrigation water, and updating them regularly.
h) Issuing magazines and periodicals; with the approval of proper authorities.
i) Preparing the Annual Budget and presenting it to the General Assembly.
j) Preparing the Annual Report, Financial Statements and Final Accounts for the fiscal year and presenting them to the General Authority for approval.
k) Calling the General Assembly meeting, and following up the implementation of its decisions.
l) Other matters related to the functions of the Federation.

Article (10):

The Board shall meet upon the invitation of the Chairman, or, in his absence, the Deputy Chairman, at least once a month or whenever the need arises. The presence of the majority of Board members including the Chairman or his deputy shall constitute a quorum. Decisions shall be made by majority vote. Absent members shall document the causes of their absence.

Article (11):

a) The Board shall appoint a Director, and shall decide on his salary and other financial rights. The Director's termination takes place in the same manner.
b) Director functions and powers shall be in accordance with instructions laid down by the Board.
c) The Director shall be the Board rapporteur, and shall keep the Board's records. He shall prepare the invitation for meetings, take meeting minutes, document Board decisions and follow up their implementation.

Article (12):

The General Assembly shall consist of all Associations, each represented by its chairman, who may delegate another Association Board member to attend meetings on his behalf.

Article (13):

The General Assembly shall assume the following duties:

a) Approving the Federation General Policy upon the recommendation of the Board
b) Administrative and financial control over the Board's functions
c) Approving the Federation Draft Annual Budget
d) Approving the Annual Report, Financial Statements and Final Accounts for the ending fiscal year
e) Appointing a legal auditor to audit the accounts of the Federation, and determining the accountant's remuneration
f) (missing-empty)
g) Other matters presented to it by the Board

Article (14):

a) The General Assembly shall hold an ordinary meeting at least once a year. The presence of a majority of its members shall constitute a quorum. Decisions to be by majority vote of the present members.
b) If a quorum is not achieved within one hour of the scheduled meeting time, then the meeting shall be postponed to a future date not to be more than fifteen days later. The second meeting shall be official (legal) regardless of the number of attendees.

Article (15):

a) The General Assembly shall hold an extraordinary meeting by a decision of the Board or at the written request of one fourth members of the General Assembly submitted to the Board.
b) Attached to the invitation for the extraordinary meeting shall be an agenda. Items not included in the agenda shall not be discussed unless these matters are related to the agenda items.
c) Decisions during an extraordinary meeting shall be by two-thirds majority vote of the present members.

Article (16):

Invitations to ordinary and extraordinary meetings shall be sent to the Chairmen of the Boards of the Associations via registered mail to the Association address with the Federation.

Article (17):

a) The General Assembly shall meet under the chairmanship of the Chairman or, in his absence, his Deputy.
b) Voting in General Assembly meetings shall be by secret ballot.

Article (18):

If the General Assembly was unable to discuss all agenda items during its meeting, then the Chairman may, with the consent of those present, postpone these items to a future time to be determined during the meeting. To this end, all of those present shall be considered to have been informed.

Article (19):

The Federation shall have an independent budget. The fiscal year shall begin on the first day of January of each year, and end on the thirty first of December of the same year. The first fiscal year shall begin from the date of the establishment of the Federation and end on the thirty first of December of the same year.

Article (20):

Financial resources of the Federation shall consist of the following:

a) Membership Fee: A onetime fee of two hundred Jordanian dinars paid by each Association when submitting the membership forms to the Federation.
b) Annual Fee: One hundred Jordanian dinars paid by each Association, at least one week prior to the ordinary General Assembly Meeting. Associations that do not pay this fee shall be denied membership rights.
c) Donations and assistance from within the Hashemite Kingdom of Jordan, and other resources approved by the Board. The Ministry shall approve non-Jordanian sources.

Article (21):

a) The Federation shall be resolved by a decision of two-thirds of its members. The decision shall be made during an extraordinary meeting and presented to the Authority Secretary-General who shall recommend the dissolution to the Minister. The Minister's decision to dissolve the Federation shall be published at least once in two local newspapers, at the expense of the Federation.
b) If the Federation is proven to be in violation of its objectives, and after fifteen days of receiving a warning from the Authority, then the Federation shall be dissolved upon the Minister's decision and a recommendation of the Authority Secretary-General. Such recommendation is subject to appeal at the Supreme Court of Justice.
c) The Federation shall be considered dissolved if one-third of its constituent Associations are dissolved, in accordance with the Regulations of Irrigation Water Users Associations in the Jordan Valley.
d) If the Federation is dissolved for any reason, then its movable and immovable assets shall be transferred to a destination specified by the General Assembly and recommended by the Board.

Article (22):

a) The Minister shall issue, upon the recommendation of the Secretary, the instructions necessary to implement the provisions of this Regulation.
b) The Minister may delegate any of his powers mentioned in these Regulations to the Authority Secretary-General.

ANNEX 3. JVA CONTRACT ISSUES

WUAs CONTRACTS REVIEW ISSUES

Significant issues required to be reviewed in terms of the WUAs contracts with JVA

Clarify the relationship between the parties of the contracts (JVA and WUAs) and preserve the rights of the parties	توضيح العلاقة ما بين طرفي الاتفاقيه وحفظ حقوق الطرفين
Continuity of work performance and capacity of associations and qualifications	ديمومة عمل أداء الجمعيات وقدراتها ومؤهلاتها
Legal umbrella	المظلة القانونية
One body representing the WUAs	جسم واحد ممثل للجمعيات
Regulator, mandate and functions	هيئة تنظيم للجمعيات وتحديد مسؤولياتها
Find an acceptable legal formula for farmer's membership and stimulate mandatory membership for all farmers, Jordanians and non-Jordanians	إيجاد صيغة مقبولة قانونية لقبول العضوية وللتحفيز الاجباري لكافة المزارعين الاردنيين وغيرهم
Search for an initial ascendant acceptable mechanism to water pricing so that these pricing affordable and payable by farmers	البحث عن آلية مبدئية تصاعدية مقبولة لتسعير المياة بحيث تكون هذه التسعيرة قابلة للدفع من المزارعين
A mechanism for the application of self-financing of WUAs to avoid the JVA financial responsibilities in the future within three years of time	إيجاد آلية لموضوع التمويل الذاتي للجمعيات يجنب السلطة من مسؤولياتها المالية العقدية في المستقبل خلال ثلاث سنوات
Currently, reviewing the financial aspects of the contracts between the Jordan Valley Authority and associations and taking into account the annual inflation, health insurance and social security for the association's staff	حاليا مراجعة الجوانب المالية التعاقدية ما بين سلطة وادي الاردن والجمعيات والاخذ بنظر الاعتبار التضخم السنوي والتأمين الصحي والضمان الاجتماعي لموظفي الجمعيات
Review the current performance indicators and make adjustments to these indicators in line with the desire of the Jordan Valley Authority and the service provided to farmers	مراجعة مؤشرات الاداء الحالية وتعديلها بما يتناسب مع رغبة سلطة وادي الاردن والخدمة المقدمة للمزارع
Review job descriptions for association's staff and determine the typical required numbers	مراجعة الوصف الوظيفي لموظفي الجمعيات وتحديد الاعداد المطلوبة النموذجية
Review and analysis the salary scale for the association's staff	مراجعة وتحليل نظام وسلم الرواتب لموظفي الجمعيات

i. Draft Final Existing Conditions Survey and Assessment of Water User Associations in the Jordan Valley Report, ISSP.

ii. Note that a "conflict of interest" is not a conflict between two parties, but a case where a single organization is playing two different roles that conflict with each other. An example would be a case where referee in a match between two teams is a member of one of the teams.

iii. Impacts of applying the cost recovery policy on the socio-economic and marketing trends in Jordan Valley. Eng. Sa'ad Abu Hammour. Arab Water Week, Amman, Jordan. December 2010.

iv. Water User Associations (WUA): The story of participatory irrigation management in the Jordan Valley-working with the farmers for efficient water management in the Jordan valley. Prepared by Dr. Bassam Hayek and revised by Ali Al Adwan. GIZ, November 2012.

v. Impacts of Applying the Cost Recovery Policy on the Socio-Economic and marketing Trends in Jordan Valley. Eng. Saad Abu Hammour. Arab Water Week, Amman, Jordan. December 2010.

vi. Impacts of applying the cost recovery policy on the socio-economic and marketing trends in Jordan Valley. Eng. Sa'ad Abu Hammour. Arab Water Week, Amman, Jordan. December 2010.

vii. Eng. Qais Owais and Eng. Zeyad Ababneh. Workshop: Future Directions of the Jordan Valley Authority and the Future Role of Water User Associations, Aqaba 5-6 October 2012.

viii. This is JVA's current interpretation of the law; however a legal review is needed to determine if this is, in fact, the case.

ix. Eng. Qais Owais and Eng. Zeyad Ababneh. Workshop: Future Directions of the Jordan Valley Authority and the Future Role of Water User Associations, Aqaba 5-6 October 2012.

x. However, these potential savings are only realized if staff are released or reassigned to other productive tasks.

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