

# DELIVERABLE 1.2.10 WATER USERS ASSOCIATIONS IN UZBEKISTAN:

# The Introduction of a New Institutional Arrangement for Local Water Management

Amu Darya Case Study – Uzbekistan

**University of BONN** 

Report of the NeWater project -New Approaches to Adaptive Water Management under Uncertainty www.newater.info

	D 1.2.10: Water Users Associations in Uzbekistan: The Introduction
Title	of a New Institutional Arrangement for Local Water Management.
Purpose	To analyse the institutional transformation of the Uzbek water resources
	administration at the local level since 1999.
Filename	D 1.2.10: Water Users Associations in Uzbekistan.NeWater.doc
Authors	Resul Yalcin and Peter P. Mollinga, Centre for Development Research
	(ZEF), University of Bonn
Document history	12 March 2007 - Draft
Current version.	Revised
Changes to previous	Conceptual arguments developed further; Introduction revised and re-
version.	structured; Further work of International donor organizations added;
	Appendices revised.
Date	7 October 2007
Status	Final
Target readership	
General readership	
Correct reference	Resul Yalcin and Peter P. Mollinga (2007). Water Users Associations in
	Uzbekistan: The Introduction of a new Institutional Arrangement for
	Local Water Management. Amu Darya Case Study – Uzbekistan,
	Deliverable WP 1.2.10 of the NeWater Project, Centre for Development
	Research, University of Bonn

Prepared under contract from the European Commission



Contract no 511179 (GOCE) Integrated Project in PRIORITY 6.3 Global Change and Ecosystems in the 6th EU framework programme

Deliverable title:	Water Users Associations in Uzbekistan: The Introduction of a New Institutional Arrangement for Local Water Management.
Deliverable no. :	D 1.2.10 (additional)
Actual submission date:	October 2007
Start of the project:	01.01.2005
Duration:	4 years

# **Policy Summary:**

In Uzbekistan, the State is too strong and its sphere of influence is felt at the very remote corners of the country. The dominant role of the government at all levels of the country's transformation precludes the emergence of other channels of information between the citizen and the state, and thereby direct and public 'social shaping' of the policy process by other than the state agencies and actors. 'Society-centric' analytical frameworks that emphasize the contestation of policy formulation and implementation by different societal interest groups thus seem to have their limitations in cases like Uzbekistan. The pressures of civil society on government or on political officials hardly exist. Initiatives for action, including policy change in Uzbekistan do not emerge from political parties, public opinion or other mechanisms in civil society. They emerge within the official bureaucracy and largely reflect the actions of elites within the government.

Change in Uzbekistan at present time is largely determined by a top-down approach and a bottom-up approach on its own has very little to contribute to change. Bottom-up approach can be useful only if the field results are prepared as policy recommendation papers and submitted to the government. The initiative for change can come from any levels of the government bureaucracy, but for a successful initiative there has to be right atmosphere, a window of opportunity and at the same time, a political will for change within the governance system. The political will in most cases is determined by the conditions in the country. However, sometimes a positive initiative for change also creates the political will among the political elites. Economic, political and social changes within the neighbouring countries in most cases also become important factors of negative or positive changes in Uzbekistan.

The Uzbekistan intra-government policy process is highly personalized, but its successful outcome depends very much on achieving a collective decision making support mechanism within the bureaucracy, that is a broad 'political alignment.' This, if used effectively, could have remarkable influence over the Cabinet of Ministers. At present, the Cabinet of Ministers headed by the President, is the main decision making political authority in the country.

**Leadership** is a very useful tool too in Uzbekistan. But a leader has to first believe in the idea of change, and then create mechanisms to sell it. In Uzbekistan a charismatic leader if he/she wishes, can very quickly find agents within the bureaucracy to mobilize support for his/her initiative. However, the successful outcome of this campaign largely depends on their relationship with the Cabinet of Ministers.

**New ideas** also play important roles in the reform initiatives in Uzbekistan, though they take time to materialize. They have to be absorbed first into the bureaucratic system and then explained in a "correct" language which fits political culture. Ideas for change enter into the system from outside via international organizations; through diplomatic channels; as a result of high level political actors' visits abroad as well as emerge from experiences gained through reforms within the country.

Depending on the type of the policy change, sometimes the idea for change comes directly from the presidential office and the cabinet of ministers are asked to approve it with little

discussion, and sometimes the ideas for change come from a government bureaucrat. An initiative for change that comes from the presidential office is rather influential and quick to be adopted. However, initiative that comes from a bureaucrat involves many internal discussions, diplomacy between various government departments, persuasions, and consensus building within the bureaucracy. The success and failure of the bureaucrat who initiates policy depends very much on his alliance with high level politicians who have extensive formal and informal power within the government bureaucracy

There are also occasions of **scientific research** conducted by the government through local research institutes. Sometimes, the government asks international organizations to provide policy recommendations based on pilot area studies within the country or based on international experience.

The filtration of the new ideas into the political system of Uzbekistan should be amplified. One useful tool for this can be the development of some training facilities for the government bureaucrats and local authorities both in Europe and in Uzbekistan to get them introduced with the ideas and ways of the modern governance systems, as well as make them more receptive to new ideas. This could be one of the most effective ways of sustaining and improving the conditions towards change in Uzbekistan. There is also a great need for human resources development in Uzbekistan especially within the policy-decision making circle and local authorities such as *hokimiyots* and *mahalla*. It is important to state that all the training work planed within Uzbekistan must be implemented with the agreement of the Uzbek government.

# CONTENTS

Abstract	2
1. Introduction	3
2. The Organizational Change Leading to Individual Farming	7
3. Establishing Water Users Associations	11
3.1 The Concept of WUAs in Uzbekistan	18
4. Conclusion	21
5. Appendix	25
6. References	35

## Water Users Associations in Uzbekistan: The Introduction of a New Institutional Arrangement for Local Water Management

**Resul Yalcin & Peter P. Mollinga<sup>1</sup>** 

#### Abstract

In spite of a gradual step by step approach on land reforms since 1992, Uzbek water management was kept unchanged until 1999. As a result of the reforms in agriculture, the first steps were taken by the government to create Water Users Associations (WUAs) to match the water institutions with the structural changes taken place in agriculture.

This study focuses on WUA as a policy concept in Uzbekistan and traces the history and the concept of Water Users Association in Uzbekistan and assesses the conditions which led to the creation of the WUAs in the country. The aim of the study is to trace the main directions and developments towards the restructuring of water management in Uzbekistan. The objective is to find out how the creation of WUA as a new institution for local water management came about.

The study shows that the initiative for establishing WUAs in Uzbekistan did not come from the farmers as the actual stakeholders, but were rather established and developed largely by the government as semi-governmental/semi-nongovernmental organizations to manage irrigation and drainage networks roughly at former *shirkat* (State agricultural cooperatives) level. The study also explains why all the organizational work for establishing WUAs was undertaken by the government and not the farmers, supposed to be the actual stakeholders and why the WUAs in Uzbekistan today work and operate under close supervision of the Ministry of Agriculture and Water Resources.

<sup>&</sup>lt;sup>1</sup> Resul Yalcin is Postdoctoral Researcher and Peter P. Mollinga is Senior Researcher at the Centre for Development Research (ZEF), University of Bonn. The field work for this paper was conducted in the context of the **NeWater**, an Integrated Project in the 6<sup>th</sup> EU Framework Programme Funded by the EU. Contract No: 511179 (GOCE).

The process of breaking up the *shirkats* as well as establishing WUAs during the first three years took place under close supervision of the regional and district *hokims* (governors). Although this close supervision by government officials was relaxed towards the end of 2004 and in 2005 the process became more transparent in comparison with the previous years, overall, government officials tried to dominate the dismemberment of *shirkats* and the establishment of WUAs. The study specifies the main reasons for the very close supervision of the government officials on the break-up of the *shirkats* and the establishment of WUAs.

The research reported in this paper also examines the dissemination of the ideas about WUAs in Uzbekistan and the international experience in local water management, especially that of Italy, and the fascination by an Uzbek MAWR bureaucrat for it, which played an important role in the introduction and the establishment of the first WUAs in Uzbekistan.

The theoretical focus of the paper is the analysis of leadership and ideas what Grindle calls 'the important determinants of policy decision making outcomes which play also essential roles in reform situations, but continue to be largely exogenous to the political economy traditions' (Grindle 1999). Leadership plays an important role in reform situation in Uzbekistan. Similarly ideas about the appropriate content of development policies emerge as important factors and establish important connections to power relationships within the Uzbek bureaucracy.

### **1. Introduction**

In contrast to the gradual step by step approach in land reforms, started in 1992, water management in Uzbekistan was kept unchanged until 1999. The first steps to create Water Users Associations (WUAs) were taken by the government to match water institutions with the structural changes taking place in agriculture.<sup>2</sup> The first few WUAs

<sup>&</sup>lt;sup>2</sup> The findings of this paper are based on the several secondary materials added to a number of interviews and discussions conducted for the field research in various parts of Uzbekistan. Several interviews and personal discussions were conducted with the officials of the Ministry of Agriculture and Water Resources and local authorities in Khorezm and Syrdarya provinces; Karakalpak Autonomous Republic, and Tashkent City. Ten interviews and personal discussions were conducted with the international donors and agencies in Tashkent. Field visits, personal observations, interviews and discussions were conducted with WUAs representatives

created and implemented in Uzbekistan during 2000-2002 were experimental cases. Then in 2003 and early 2006 more than one thousand of WUAs were simultaneously established roughly covering the territories of former *shirkats*. The new organizational form called Water Users Association is the main subject of this paper. The aim of this study is to trace the main directions and developments towards the restructuring of water management in Uzbekistan since 1991, when Uzbekistan became an independent country. The objective is to find out how the creation of WUA as a new institution for local water management came about. The central questions investigated in the study are: what is the nature and direction of changes in Uzbekistan's local water management? How were Water Users Associations in Uzbekistan designed and implemented? What role did the stakeholders play in the creation of WUAs?

The introduction of WUAs in Uzbekistan came about after the government officials found it necessary to break down the unprofitable *Shirkats* into individual farms in 1999. This led to simultaneous establishment of thousands of individual farmers. Thus individualization of farming practically constituted the need to devise some mechanism for distributing water over smaller units then before, when the *shirkat* was the unit to which government managers supplied water. The emergence of new ideas into Uzbek political system regarding inter-farm irrigation management systems became important factors on the introduction of WUAs as local water management institutions in the country. The individuals, groups, bureaucrats and political actors involved in the creation of WUAs in Uzbekistan though had preferences and sought to achieve them through the introduction of WUAs, the actual initiative to promote this institutional change emerged through the influence of new ideas and leadership. The successful outcome of the policy change was then achieved through the interaction of social and political networks within the government bureaucracy supported by the international donors and funding agencies. Then the country-wide creation of WUAs in Uzbekistan came about after the high level

and WUA members in these regions. In total seventy six interviews and discussions were conducted with WUA representatives and forty two interviews and discussions with WUA members in Khorezm. In Karakalpakistan forty five interviews and discussions were conducted with WUA representatives and twenty one WUA members. In total seven interviews and discussions were conducted with WUA representatives and five WUA members in Syrdarya and seven WUA representatives with twelve WUA members in Tashkent region during 2005 and 2006.

government officials were convinced about the positive performance of WUAs established as experimental cases.<sup>3</sup> During the drought years of 2000 and 2001 the individual farms and WUAs have done reasonably well in terms of water use and water distribution while the vast majority of *Shirkats* failed to distribute water and coordinate water allocation properly between the *pudrats* (groups of farmers in the shirkat). The WUAs have shown more flexibility in their work and thus performed reasonably well in the eyes of the regional and district departments that had monitored their work.

The theoretical question the paper explores is the analysis of what Grindle calls 'the important determinants of policy decision making outcomes which play significant roles in reform situations, but continue to be largely exogenous to the political economy traditions' (Grindle 1999). Two of these three factors that also play important roles in reform situations in Uzbekistan are: the leadership and ideas.

Grindle states that 'leadership matters in reform initiatives. It matters in terms of timing of reform initiatives, the content of reform proposals and the process of generating support and managing opposition to change'(Grindle 1999). Indeed reform leadership certainly matters in cases like Uzbekistan to use political resources more skilfully as well as having greater or lesser access to these resources to build coalition for successful policy and institutional change. Politics in Uzbekistan is highly state-centric due to its highly centralized and authoritarian political and administrative system, and reflects the actions of elites within government who have extensive formal and informal power. Policy decision making is carried out in relatively closed contexts. The policy process is highly personalized and often high level politicians who have extensive formal and informal power initiate policy, but its successful outcome depends very much on achieving collective decision making within the bureaucracy. The pressures of civil society on government or on political officials hardly exist. Initiatives for action, including policy and institutional change do not emerge from political parties, public opinion or other mechanisms in civil society. They emerge within the official bureaucracy and largely reflect the actions of elites within the government. The existing Uzbek political parties have not shown themselves, in terms of programme, ideology or leadership, as opposition

<sup>&</sup>lt;sup>3</sup> Interview notes at Hokimiyot, with the Chief Water Inspector for Khorezm 5 December 2005; Interview notes at the MAWR in Tashkent, with Olimjon Obidov, 26 November, 2005. This was also confirmed by several Water Users Associations heads, in Khiva, Urgench (Amir Timur), Kuskupir and also by the deputy head of the agricultural department of the MAWR in Khiva.

parties in the real sense<sup>4</sup>. They are 'government-friendly' parties which have been created on the president's initiative. They are mainly parties organized by groups of people holding similar views.<sup>5</sup> The party structures have been bypassed by the president and its power has shifted to the government agencies headed by his personal allies and staff. The dominant role of the government at all levels of the country's transformation precludes the emergence of other channels of information between the citizen and the state, and thereby direct and public 'social shaping' of the policy process by other than the state agencies and actors.

Society-centric analytical frameworks that emphasize the contestation of policy formulation and implementation by different societal interest groups thus seem to have their limitations in cases like Uzbekistan. In our view Grindle (1999) is correct in her criticism on this point. This raises the question of what mechanisms then do work in a state-centric policy regime like Uzbekistan. Our field research and interviews-based data collection in 2005-2006 on Uzbekistan's water governance and policy reform process, suggests the following tentative general observations. Within the government bureaucracy there are certainly interest groups, who are involved in extensive consultation, negotiation, consensus building and sometimes bargaining between elites and various government departments for policy or institutional change. This process can take place in the form of a commission set up by the government to legitimize the elite's decision or for consensus building among the political actors; they can be a group of bureaucrats using their social and political kinship to affect other elites within the government; or an interest group can be represented by a charismatic leader with close allies campaigning for a policy change.<sup>6</sup> A charismatic leader sometimes finds agents within the bureaucracy to mobilize support for his/her initiative. Depending on the type of the policy or institutional change, sometimes the idea for change comes directly from the presidential office and the cabinet of ministers is asked to approve it with little discussion, and sometimes the ideas for

<sup>&</sup>lt;sup>4</sup> Karimov himself has confirmed this view several times during his address to the Oliy Majlis complaining that the political parties in Uzbekistan has not achieved the work becoming as real parties/and or opposition parties in the real sense. On the XIV-th Session of the parliament (14 April, 1999) Karimov expressed his criticism on the lack of competition between parties and said that "they cannot so far find their place in political life, economic, cultural and spiritual spheres of our society". On the 9<sup>th</sup> session (29 August, 2002) he recognized that parties are amorphous and that they need to form the real multiparty system, which implies opposition. See also Karimov, (1997), pp. 167-168. It is not easy to fully fathom the exact need and significance of such presidential statements.

<sup>&</sup>lt;sup>5</sup> See Yalcin, R. (2002)

<sup>&</sup>lt;sup>6</sup> Grindle (1999) identifies 'leadership' as one of the neglected areas of the study in Western 'policy process' analytical approaches.

change come from a government bureaucrat. An initiative for change that comes from the presidential office is rather influential and quick to be adopted. However, initiative that comes from a bureaucrat involves many internal discussions, diplomacy between various government departments, persuasions, and consensus building within the bureaucracy. The success and failure of the bureaucrat who initiates policy change depends very much on his alliance with high level politicians who have extensive formal and informal power within the government bureaucracy. Also frequently policies are approved without the intention of putting them into practice.

Actors who were involved in the introduction of WUAs in Uzbekistan no doubt had personal preferences too but they invoked ideas as reasons for championing the reforms, while as ways of mobilizing support for them the actors used various political and social network ties to achieve their goals. Ideas matter in reform initiatives (Grindle 1999). Indeed ideas also play an important role in the reform initiatives in Uzbekistan, but they take time to materialize. They have to be absorbed first into the bureaucratic system and then explained in a "correct" language which fits political culture. Policy ideas enter into the system from outside via international organizations; through diplomatic channels; as a result of high level political actors' visits abroad as well as emerge from experiences gained through reforms within the country. There are also occasions of scientific research conducted by the government through local scientists and asks international organizations like WB, ADB UNDP and EU-TACIS to provide policy recommendations. The majority of Uzbek politicians and bureaucrats still interpret problems, select and assess the options to deal with those problems very much within the "Soviet way of thinking" of omnipresent state control in economy and society<sup>7</sup>. Some high level politicians and bureaucrats see new ideas as threat to their own interests, some actors reject new ideas simply because they don't support their policy preferences but others act upon new ideas both to 'solve particular problems out of conviction and out of some more self-interested motivation' (Grindle 1999). As the policy process in Uzbekistan is rather a closed process and most of the discussions occur outside of the public domain, it is always a puzzle and impossible to conclusively analyze how much individuals or groups are acting out of conviction or out of

<sup>&</sup>lt;sup>7</sup> For example despite strong policy announcements regarding the introduction of market economy principles by the government (there are more than 15 Presidential and Cabinet of Minister's decrees devoted to introducing market economy principles; Karimov has reminds these to his officials several times during his speeches to the parliament), yet the practice of economic policy remains heavily state dominated and transformation is very slow. (See also, Islom Karimov (1993a; 1994 and 1995). Also the issue of introducing market principles in water management through water pricing referred below is also an example of this.

self-interested motivation.<sup>8</sup> Thus ideas can explicitly become useful political resources in Uzbekistan when they fit the political culture and were filtered into the system through high level bureaucrats who have extensive formal and informal power within the government. Depending on the reform situations, path dependency is a major issue in Uzbekistan which also determines the policy decision making outcomes and institutional change. It influences not only informal institutions but also the formal ones. However, ideas can reshape power relationships in many policy decision making situations in Uzbekistan if they are promoted by highly skilled political actors and/or elites within the bureaucracy. Uzbek political actors often take on commitments to ideas when they emerge through social and political networks and as well as through a top-down initiative.

After this introductory sketch of the overall scope of the paper, we now move to a brief assessment of organizational change in Uzbek agriculture which led to the creation of WUAs in the country. Firstly we are going to give an overview account of the reform processes undertaken to restructure the *kolkhozes* (collective farms) and *sovkhozes* (State farms) and the *shirkats* (State agricultural cooperatives). Secondly we examine the process of expanding the 'private' individual farms. Section three is devoted to the establishment of WUAs in Uzbekistan. We conclude in section four by summarizing the analysis of the case study finings; revisiting the general issues outlined in this introduction and answering the main questions stated in the introduction. The conclusion also provides three possible scenarios for the future of WUAs in Uzbekistan as the government is working on a plan to restructure the WUAs in the very near future and

<sup>&</sup>lt;sup>8</sup> For example, we are unable to conclusively interpret the following cases. 1) Former deputy minister of Agriculture and Water Resources (in 2002-2004) who is known to be the father of the idea of creating the institutions of Irrigation Basin System Management Authorities in Uzbekistan was in the end appointed to a higher position (became the governor of Syrdarya region). 2) The Minister of Agriculture (in 1994-96) who initiated the idea of the merger between the Ministry of Agriculture and Ministry of Melioration and Water Resources, immediately after the merger, was appointed to a higher position too. 3) The then Minister of Water Resources, who had initially not been in favour of merging the Water Ministry with the Agriculture Ministry, but then allegedly at a later stage joined the idea of merging the two ministries was appointed as the Minister of the newly created larger Ministry of Agriculture and Water resources, but about four months latter was dismissed from his position. 4) The bureaucrat at the Ministry of Agriculture and Water Resources, who first initiated the idea of Water Users Associations within the Ministry's bureaucracy, was later dismissed from the Ministry though the Water Users Associations were successfully established country wide.

## 2. The Organizational Change Leading to Individual Farming

At the time of independence the republic's agriculture was organised into kolkhozes and *sovkhozes* with a very small proportion of the total sown land allocated to workers as personal plots. By the end of the 1994 almost all the sovkhozes were abolished and transformed into kolkhozes.<sup>9</sup> The kolkhoz has entered into contract with individual kolkhozniks (kolkhoz members) under which production was managed and organised by individual farmers while the kolkhoz provided certain services and inputs and received a share of revenues.<sup>10</sup> The director (*Rais*) of kolkhoz was responsible for overall management. The average kolkhoz had 2138 ha irrigated land which was divided in 14-17 brigades<sup>11</sup> each of them thus possessing around 140-150 ha of irrigated land.<sup>12</sup> A Mirab was responsible for the overall water management and distribution in each kolkhoz, but within each brigade there was a Suvchi (an irrigator) who was dealing with on-farm irrigation, while the Mirab was dealing with inter-farm water distribution. Later these brigades were formed into cooperatives of family farms, all of which then, in 1998 were transformed into *Shirkats*.<sup>13</sup> The existing water management administrative structure was maintained. The work and the responsibilities of the Mirab and the Suvchi remained the same.

The reforms were directed towards reducing the role of the state in the agricultural management, but to establish a system that would maintain the state ordered quotas for cotton production while at the same time trying to achieve self-sufficiency in grain production. The established system however, hardly reduced state control. Besides it increased the interference of local *hokims* into *shirkats* internal affairs. For the most part, a *shirkat* had the same limited rights and was managed much in the same way as the old *kolkhoz*. The only difference was that the *shirkat* director (*Rais*) was appointed and/or replaced more frequently by the district *hokim* without even a consultation with *shirkat* 

<sup>&</sup>lt;sup>9</sup> ADB & Uzbek Ministry of Economy Draft Report, March 2005.

<sup>&</sup>lt;sup>10</sup> See, WB, 1993c; ADB, 1996

<sup>&</sup>lt;sup>11</sup> A *brigade* within the *kolkhoz* is typically an extended family, or a group of families used to working together. A *brigadier* (a manager) was responsible for each *brigade*. During the *shirkat* system the brigades were also reformed and became *pudrats*, which was a group of about 3-5 workers, sometime a leader and his extended family, responsible for about 10 ha. of wheat or about 1-5 ha. of cotton. There were about 220 *pudrats* on a 1,000 ha. of land under irrigation

<sup>&</sup>lt;sup>12</sup> Interview notes, 02.05.2006 at the SIR of ICWC, Tashkent and discussions held in Gulistan City, Syrdarya Region.

<sup>&</sup>lt;sup>13</sup> See Presidential Decree N0: 299, 15 July 1998.

members.<sup>14</sup> In some case, the *hokim* changed the *shirkat* director every year, or even a couple of times within a year. The district *hokim* controlled the annual planning; he was rationing the inputs and outputs of production as well as services including water distribution. The unit of planning under the *shirkat* system was the *Rais* plus his/her team with district *hokims* becoming more influential on the planning.

As per the law *shirkats*' assets were held by its members as shares. Members were supposed to get dividends depending on their share and their annual financial results, but, only few of the *shirkat* members received a dividend regularly.<sup>15</sup> Since the cooperative principles remained mostly on paper, there was little initiative for the members to be motivated to gain a profit for their *shirkat*. Soon, the government was disappointed by the poor performance of the *shirkats*. Despite substantial financial assistance in the form of debt write-offs and debt-rescheduling by the government *shirkats* continued to remain loss making enterprises.<sup>16</sup> Government's financial assistance only encouraged more debt. To solve the problem, this time the government chose to break up loss making *shirkats* into individual farms. There were about 1,733 *shirkats* in Uzbekistan.<sup>17</sup> Over 600 *shirkats* were broken up during 1999 – 2004. Further break ups continued in 2005 and by early 2006 the remaining *shirkats* were also abolished.

The elimination of all the remaining *Shirkats* in January 2006 marked the end of collective farming in Uzbekistan, and has given way to the full introduction of individual farming system throughout the country.<sup>18</sup> Individual farms now dominate Uzbek agriculture. Their numbers have increased rapidly from about 23,000 in 2003 to 141, 795 in January 2006.<sup>19</sup> They cultivate about 3.2 million ha, or about 74.4% of irrigated land.

<sup>&</sup>lt;sup>14</sup> ADB & Uzbek Ministry of Economy Draft Report, March 2005

<sup>&</sup>lt;sup>15</sup> Interview notes: at the Khiva district hokimiyot 19 May, 2006 & at the MAWR's district office in Khiva.

<sup>&</sup>lt;sup>16</sup> Interview notes: Hokimiyots regional office, Urgench, 6 December 2005; Agricultural Science Production Centre, Tashkent, 22November 2005; at SIR for ICWC, Tashkent, 22 June 2005; at the Hydromet, Central Asia Natural Resources Management Programme, Tashkent, 25 May 2005 & 24 May 2005.

<sup>&</sup>lt;sup>17</sup> Data obtained from the MAWR in Tashkent, 6 November 2006.

<sup>&</sup>lt;sup>18</sup> There were several reasons why the government decided to do so. Firstly the increasing difficulty of policing cotton and wheat production has been the main reason for a vigorous government initiative of breaking up loss making *shirkats* into individual farms. *ADB & Uzbek Ministry of Economy Draft Report, March 2005.* Secondly official estimates suggested the production cost on individual farms was 20% or even 30% less than on *shirkats. Interview notes, Agricultural Science Production Centre, Tashkent 22 November 2005;* MAWR's department responsible for WUAs, Tashkent *24 November 2005.* Several *shirkats* had been broken up into individual farms in 1999-2002 at various parts of the country for experimentation, and this produced positive results. This became one of the main reasons why the government was so enthusiastic about the latest phase of *shirkat* restructuring. *Interview notes, Uzbekistan Farmers Association, Khorezm, 18 October 2006.* Thirdly, it seemed that the government had also overcome its earlier reluctance and ideological opposition to individual farms. *ADB & Uzbek Ministry of Economy Draft Report March 2005.* <sup>19</sup> Data provided by MAWR, 26 December 2006

Most individual farms are small, with an average size of 26 hectares but some are as large as 150-250 ha. By law, the minimum size of an individual farm is 10 ha. Land tenure rights are based on 30 to 50 year leases, which under latest legislation became inheritable.<sup>20</sup> Just like the old *shirkats*, most individual farms grow cotton and wheat on 80% of their land. Farmers are mandated to plant a specific area of cotton and wheat. Most production decisions are made for farmers by the government. A small number of individual farms are exempt from cotton and wheat production. Some of these farms specialize in livestock, others in growing fruits and vegetables. Most of them are located near urban centres.<sup>21</sup> The main difference with the *shirkat* system is that an individual farmer has more freedom over what to produce on the remaining 20% or so of his/her land. Today, there are two main issues of particular concern to the farmers in conducting their farming: 1) the need for proper agricultural machinery (tractors and combines), at the right place, at the right time, and for the right price. 2) Water delivery to their farms.

The first issue is undertaken by a national monopoly and a network of government controlled machinery service system - the Joint Stock Machinery and Tractor Parks (JS MTPs), which have also gone through a sequence of reforms. The job of transforming the JS MTPs is certainly not over and they will go through further transformations. As long as there is the state order for agricultural production there will be MTPs. In the long run however, their existence will very much depend on the ability of their managers to adapt to changing conditions and providing good quality services to their clients.

As far as the second issue is concerned, the Water Users Associations (WUAs) have recently assumed the responsibility for local water management in areas dominated by individual farms.

#### **3. Establishing Water Users Associations**

During the *kolkhoz and shirkat* systems the *Rais* (the head) appointed a *Mirab* to oversee and control on-farm water distribution. Based on the type of crop production, the Water Department of the Ministry in Tashkent would set the final water allowances (referred to as 'limits' in Uzbekistan) for each region and the region would set the allowances for each district. The district based water department (*Rayselvodkhoz*) of the Agriculture and Water Ministry was responsible for the water management up to the

<sup>&</sup>lt;sup>20</sup> Cabinet of Ministers Decree N0: 476, 30 October 2003

<sup>&</sup>lt;sup>21</sup> ADB & Uzbek Ministry of Economy Draft Report, March 2005.

*kolkhoz/shirkat* level. Whenever the *kolkhoz/shirkat* required water the *Rais* requested it from the *Rayselvodkhoz*, this organization requested it from the *Obselvodkhoz* (regional water Department of the MAWR). Then *Obselvodkhoz* asked *UPRADIK* (canal management authority) to give water based on the allowances to the *kolkhoz/shirkat*, which requested the water. Then the *Mirab*, with the help of the *Agronom* (the kolkhoz and shirkat employee looking after agricultural production) distributed the allowances between the *Brigades/Pudrats* (groups of farmers in the kolkhoz and shirkat). This system has been replaced by the introduction of WUAs, though there is also continuity in that replacement, as we will see in the following sections.

A Water Users Association (WUA) by definition is 'a voluntary non-commercial entity established and managed by the group of water users located along one or several watercourse canals. Water users are the farmers, peasants and backyard owners who combine their financial, materials and technical resources to improve the productivity of irrigated farming within the territory of the association through equitable distribution of water and efficient use of irrigation and drainage systems.<sup>22</sup> A WUA becomes necessary when the unorganized water-users encounter a wide range of problems such as repeated conflicts over water distribution among users due to the lack of a single system of equitable water resources distribution, degradation of irrigation and drainage systems due to the lack of funds allocated by the government to ensure regular operation and maintenance of the system and threat of irrigation shortages due to inefficient use of water that in the future can contribute to the environmental problems.<sup>23</sup> According to a manual on WUA formation published by donor organizations in Uzbekistan, ideally a motivated group of farmers as the future members of the WUA prepares a package of required documents to establish a WUA. This group also conducts explanatory work among the potential members of the association in order to take into consideration all suggestions of the water users when developing the package for the Founder's agreement and the Charter of the WUA.<sup>24</sup> The Founder's agreement becomes the preliminary document establishing the WUA with its official name and juridical status, the list of founders and a brief description of the objectives and tasks of the WUA. The Founder's agreement then is

<sup>&</sup>lt;sup>22</sup> WUASP Information Bulletin, No.1, November 2004. WB, *Manual on Formation and Empowerment of WUA*, Uzbekistan Rural Enterprise Support Project, 2003. IWMI & SIC for ICWC (2003).

<sup>&</sup>lt;sup>23</sup> Hassan & Khodjaeva, 2002; IWMI & SIC 2003;

<sup>&</sup>lt;sup>24</sup> WUASP, Information Bulletin, No.1, November 2004.

accepted and signed by all founders. The Charter of the WUA is the basic internal regulating document for the WUA, which describes the rights and obligations of the WUA members, management structure and its coordinating mechanisms. The Charter is signed by the Chairman of the Founder's Assembly. Then the initial start-up group arranges the first General Assembly meeting with the participation of all potential members forming the WUA. The initial start-up meeting discusses and approves the founder's agreement and charter. Upon approval of the basic documents, the WUA members or representatives of the water-users' groups determine the list of potential candidates to the WUA Council and Audit Commission. After the election of the Council and the Audit Commission, the Council would employ a WUA manager on behalf of all the members. Based on democratic principles (for example, either with full participation in day-to-day decisionmaking or delegating power to their representatives through the elections), the members of the WUA manage the activities of the association directly or through their representatives. WUA funds are the membership fees, irrigation services fees from its members and nonmembers who pay for water being delivered on a contractual basis, as well as grants from the state and other donors. The size of the irrigation service fee is set by the General Assembly to ensure the full coverage of irrigation and drainage systems maintenance costs. The WUA is the owner of all assets and property acquired, including irrigation and drainage infrastructure within its territory as well as all engineering structures installed on it.<sup>25</sup>

A "member" of the WUA is 'a physical or juridical person possessing or entitled to agricultural land located within the territory of the WUA'.<sup>26</sup> Membership in a WUA enables a member to play an active role in the democratic management and distribution of water in the irrigation system. The direct participation of the water user in establishing and maintaining the transparent financial operation of the WUA helps to ensure the sustainable development of the WUA's activity. The development of the WUA through the union of agricultural producers is meant to assist various farmers jointly solving both, water and common agricultural problems, increase in crop yields through more efficient water use,

<sup>&</sup>lt;sup>25</sup> WUASP *ibid*. See also, the Manual prepared by IWMI, ADB, WB, (2005)

<sup>&</sup>lt;sup>26</sup> WUASP *ibid*, p.2. See also WB Manual (2003).

which can provide the farmers with more confidence in their future agricultural production activities.<sup>27</sup>

In Uzbekistan, the initiative for establishing WUA did not come from the farmers; it was an official initiative. The WUAs were established and developed largely by the government as semi-governmental/semi-nongovernmental organizations to manage irrigation and drainage networks in units roughly matching the former *shirkat* level. All the organizational work for establishing WUAs was undertaken by the government and the farmers were asked to become the members within their existing boundaries. The WUAs leaders and their technical staff were selected under close supervision of either local authorities or regional and district departments of the Ministry of Agriculture and Water Resources (MAWR). The process of breaking up the shirkats as well as establishing WUAs during the first three years took place under close supervision of the regional and district hokims.<sup>28</sup> Although this close supervision by government officials was relaxed towards the end of 2004, and in 2005 the process became more representative<sup>29</sup> in comparison with the previous years, overall government officials tried to dominate the dismemberment of shirkats and establishment of WUAs. The very close supervision of the government officials should not be understood as necessarily being motivated by the local authorities having a specific aim of influencing who gets what and how much. It stems rather from the fact that the State in general puts itself forward as the guardian of every reform that takes place in the country. That is, it reflects the authoritarian nature of the state in general, and that "reform" does not necessarily mean reduced state control. Having said this, the process does leave room for state officials to determine who gets what and how much. But rather than identifying that 'discretion' as the main problem in state functioning, it is the omnipresence of State control that is the main issue.

The Uzbek model of establishing WUAs is a clear example of a top-down creation of a new organization at local level. Nevertheless, the WUAs do not remain paper

<sup>&</sup>lt;sup>27</sup> These ideas were discussed by Asror Nazirov, a Water User Association expert from the USAID Water User Association Support Programme, and Ashikmamut Ibraimov, former deputy head of on-farm irrigation management at the MAWR, during the workshop on "Education and Training for Water Users' Associations and Effective Use of Irrigation Water in Uzbekistan" organized by JICA at SANIIRI in Tashkent on 21 September 2005.

<sup>&</sup>lt;sup>28</sup> This issue came up often during the interviews we have conducted in Khorezm, Karakalpakistan, Tashkent and Syrdarya.

<sup>&</sup>lt;sup>29</sup> In comparison with the previous years, in 2005-2006 bids from qualified contenders dominated the process of selecting prospective individual farmers. Also the commission overseeing the allocation of land for leasing was also diversified, bringing in new members from different agencies and organizations.

organizations like in some of the cases of top-down WUA establishment.<sup>30</sup> Slowly they are beginning to perform certain tasks. Besides the majority of the Uzbek farmers, who initially had little faith in the WUAs, are just beginning to understand the idea, the need, and the benefits of working with a WUA.<sup>31</sup> However, due to their staff and equipment constraints, WUAs limit their activities to on-farm water supply and distribution. Following the Cabinet Ministers decree No. 8 adopted on 5 January 2002, the Government has transferred all irrigation and drainage infrastructure of the abolished shirkats to WUAs free of charge. The typical area covered by a WUA ranges from 1,500 to 3000 ha., but they often lack qualified staff, have a weak organizational set up and only about 30 % have some equipment inherited from shirkats. Whatever equipment they have is almost worn out. Some WUAs have heavy-duty reclamation machinery such as excavators, bulldozers, truck crane, drainage and washing units, but operation of heavy equipments is rather costly for WUAs and it is not feasible for a single WUA to maintain such heavy-duty machinery.<sup>32</sup> Moreover, a single WUA is not able to provide enough work for the above mentioned machinery for the entire year. Now we turn to the emergence of the idea of WUA in Uzbekistan.

#### 3.1 The Concept of WUAs in Uzbekistan

The process of establishing the first ever WUAs in Uzbekistan began in Khorezm. In 1999 the *hokim* (regional governor) of Khorezm asked the government to break up the unprofitable State Agricultural Cooperatives (*shirkats*) in the region. Following the permission from the government the *hokim* ordered the break up of the seven most unprofitable *shirkats* in Khorezm in 1999.<sup>33</sup> This created hundreds of individual farms in place of a single *shirkat*. No change was done in on-farm water, canal and drainage management in the areas where the *shirkats* had been abolished. As far as inter-farm water management was concerned there was hardly any experience of WUAs in the country. The

<sup>&</sup>lt;sup>30</sup> Mollinga, 2003

<sup>&</sup>lt;sup>31</sup> We have witnessed this throughout our field research in Uzbekistan for the last two years, especially in Khorezm, Karakalpakistan, also through our frequent contacts with the local partners working with the international donors, such as SWISS CO, USAID and JICA similar experiences were confirmed in Fergana, Syrdarya and Tashkent regions.

<sup>&</sup>lt;sup>32</sup> ADB & Uzbek Ministry of Economy Draft Report, March 2005

<sup>&</sup>lt;sup>33</sup> Interview notes at the Khorezm Regional Hokimiyot, 11 November 2006. See also MAWR, *Suvdan Foidalanuvchilar Uyushmasini Tavsis Etishning Tashkiyli Va Xukukiy Masalalariga Oid Kullanma*, "Mirob-A" Ishlab Chikarish Boskarmasi, (Toshkent: Ukituvchi 2000). In three districts seven abolished *shirkats* were *Ogakhi, Turkiston, Khorezm, Dekhanobod, and Alisher Navoi* in Bogot; *Amir Temur* in Urgench and *B. Nurillaev* in Khiva. These lead to the creation of over one thousand of individual farms.

authorities continued to supply water to these enterprises via regional and/or district water departments of the MAWR whose jurisdictions were based on administrative principles. However, these water departments were only responsible for water management up to *shirkat* level. This created a gap from the former *shirkat* level down to the farm level. Individual farms could not handle inter-farm water management.<sup>34</sup> It increased frictions and conflicts over water distribution between farmers. The district based water departments were asked to extend their responsibilities up to farm level, but they found it difficult to cope with the operation and maintenance of the water distribution to individual farms, *Shirkats, dekhans* and other small fish ponds at the same time.<sup>35</sup> Soon, the authorities realized the problem and also in their view the situation with inter-farm irrigation and drainage in the areas where individual farms had been created was getting worse.<sup>36</sup> The department responsible for on-farm water management in Uzbekistan at the Ministry was working to improve the situation as there was a trend towards the creation of more individual farms.

In 1998 the deputy head of the on-farm water management department at the MAWR, went to Italy as part of some excursions organized by the Ministry to several countries to collect international experience in inter-farm irrigation management, while others were sent to Armenia, Kazakhstan, Kyrgyzstan, Russia and Turkey.<sup>37</sup> In Italy, the deputy head was inspired by the idea and the work of WUAs. On his return to Uzbekistan he brought with him some materials about WUAs and tried to introduce both the materials and ideas on the WUAs within the Ministry, but he found very little support for his ideas within the bureaucracy in Tashkent.<sup>38</sup> Most of his managers simply ignored him and they thought that the idea of WUA was a silly idea.

<sup>&</sup>lt;sup>34</sup> Interview notes, Ashikmamut Ibraimov, Former head of on-farm irrigation management department, MAWR, 16 September 2006; Group of farmers at Amir Timur district of Urgench, 21 July 2006; Khiva district department of MAWR 7 June 2006; Hokimiyots regional office, Urgench, 6 December 2005.

<sup>&</sup>lt;sup>35</sup> Interview notes, Agricultural Science Production Centre, Tashkent, 22 November 2005. Also Interview notes, IWMI, 20 June 2005; Chairman of the Amir Temur Water Users Association, Amir Temur district of Urgench, 21 July 2006; Water Inspectorate department from Hokimiyot for Khorezm region, Urgench, 19 September 2005.

<sup>&</sup>lt;sup>36</sup> Interview notes, Ashikmamut Ibraimov, former head of on-farm irrigation management department, MAWR, 16 September 2006; MAWR's department responsible for WUAs, Tashkent 26 August 2006; Shavot-Qulovot Irrigation Basin System Authority, Urgench, 12 May 2006; Lower Amudarya Irrigation Basin System Management Authority, 13 September 2006.

<sup>&</sup>lt;sup>37</sup> Interview notes, Ashikmamut Ibraimov, Former head of on-farm irrigation management department, MAWR, 16 September 2006; Asror Nazirov, Project Manager for USAID Water User Association Support Programme (WUASP- USAID), Tashkent 8 October 2005.

<sup>&</sup>lt;sup>38</sup> These points were confirmed during a discussion with Ashikmamut Ibraimov in Tashkent in 2006.

The deputy head of on-farm water management was well committed to the idea of WUAs. According to him, to improve the situation with the inter-farm water management in Khorezm there was a need to bring together or unite the large numbers of individual farmers created as a result of break up of the *Shirkats*, under an umbrella organization. For him the idea of WUAs fitted well to this. As he realized that he could not convince the bureaucrats at the Ministry to support him for introducing the concept of WUAs, the deputy head looked for support elsewhere using some of his social-network ties, while there was a window of opportunity. First he approached Timur Kavalov in Karakalpakistan.

Kavalov was the first Deputy Minister of MAWR in 1997. Ibraimov was working under him as the deputy head of on-farm water management department at the Ministry. He became the speaker of Jokorgi Kengash (the parliament of Karakalpak Autonomous Republic) in 1998-2002. After his appointment as the speaker of the Jokorgi Kengash, Islom Babajanov became the First Deputy Minister of the MAWR. In 1999 however, Babajanov was appointed the *hokim* of Khorezm region. The deputy head of on-farm water management who had worked hard but with no luck to convince the Ministry to establish WUAs to take over water management functions of the abolished *Shirkats*, approached Kavalov for support and then through him Babajanov, to test his idea of WUAs in Khorezm. Babajanov also saw the need to establish something in place of abolished Shirkats for inter-farm irrigation management. Thus following his discussions with Kavalov, the regional hokim of Khorezm assisted the deputy head of on-farm water management and the regional department of MAWR, to establish the first Uzbek WUAs in Khorezm in 2000. Before doing so, the hokim of Khorezm used his political ties to get the government permission to start the work of establishing WUAs in the region. Following his request presidential advisory department for Agriculture and Water Resources issued a special decree valid only for Khorezm allowing the local authorities to establish WUAs in the region.<sup>39</sup> After receiving approval from Tashkent, the *hokim* of Khorezm issued his own decree towards establishing WUAs in the areas of the former seven shirkats in the three districts. This decree assigned the responsibility for establishing the WUAs to district hokims, regional department of MAWR in Khorezm and to the Uzbekistan Farmers and

<sup>&</sup>lt;sup>39</sup> See Cabinet of Ministers Decree No. 243, 13 May 1999; Khorezm Hokims's decree in July 1999. See for an example also Presidential Advisor on Water and Agriculture, I. Jurabekov's declaration of 28 January 2002.

Dekhans Association's regional representative, but held one of his deputies responsible to oversee the implementation of the decree. Based on the decree of the regional *hokim*, the district *hokims* concerned, also issued their own decrees specifying the principles of how the very first Uzbek WUAs should be established. The district *hokims* appointed the first deputy of the district department of MAWR, who was responsible for water management at the district level, to work the group appointed by the regional *hokim* to establish WUAs in the districts and deal with their registration process at the regional department of the Justice Ministry. The district *hokims* also held one of their deputies responsible to oversee the execution of the order. The MAWR in Tashkent also issued its own order to ask the regional and district departments to cooperate with the local *hokims*.<sup>40</sup> These people and the departments appointed to undertake the work to establish the WUAs formed the initial WUA founders group that called for a gathering to establish WUAs in Uzbekistan.

Accordingly, the first seven WUAs in Uzbekistan were established and implemented in Khorezm and standardized by orders and other necessary documents such as contracts for water supply provided by the local authorities.<sup>41</sup> The WUAs managers and their technical staff were selected under the close governmental supervision and their charters or manuals were organized by the MAWR.<sup>42</sup> The following year a few WUAs were also established in Karakalpakistan and one in Syrdarya. All these WUAs were however, established as experimental cases and therefore were not based on hydrological boundaries, but followed the boundaries of the agricultural *shirkats* which were administrative foundations. Even so, the initial results appeared positive.<sup>43</sup> The individual farms survived better and demonstrated more efficiency in crop production as well as water use in comparison with *shirkats*. During the drought years of 2000 and 2001 the

<sup>&</sup>lt;sup>40</sup> See for an example, Khorezm regional hokim's decree No. 229, 11 November 2005; Yangibozor district hokim's decree No. 306a, 20 March 2003 and MAWR Order No. 231, 14 November 2005. We have checked the decrees of the regional and some of the district hokims as well as those of the MAWR for the last five years, the texts of the orders for every year are very identical. The only differences in the texts are the subjects in question and the names of the persons who had either been dismissed or re-appointed to a different district.

<sup>&</sup>lt;sup>41</sup> See MAWR Manuals, 2000 & 2002. See Also Zavgorodnyaya, 2006

<sup>&</sup>lt;sup>42</sup> See for example the final declaration of the commission establishing the "Oyak Durman" WUA in Yangibozor district. 14 March 2003; The Shamakulum WUA's establishment declaration, 7 January 2005; The application letter of the "Buston" WUA to Justice Ministry department in Khorazm requesting registration of WUA from the Ministry, August 2003; Also Agricultural regional department's annual report on establishing WUAs in Khorazm in 2004, January 2005.

<sup>&</sup>lt;sup>43</sup> Interview notes at Hokimiyot, with the Chief Water Inspector for Khorezm 5 December 2005; Interview notes at the MAWR in Tashkent, with Olimjon Obidov, 26 November, 2005. This was also confirmed by several Water Users Associations heads, in Khiva, Urgench (Amir Timur), Kuskupir and also by the deputy head of the agricultural department of the MAWR in Khiva.

individual farms and WUAs have done reasonably well in terms of water use and water distribution while the vast majority of *Shirkats* failed to distribute water and coordinate water allocation properly between the *pudrats*. The WUAs have shown more flexibility in their work and thus performed reasonably well in the eyes of the regional and district departments that had monitored their work.<sup>44</sup>

These experimental cases created an agricultural model for further developments in the sector all over Uzbekistan. Following the bad performance of the Shirkats, in both production and inter-farm water allocation and distribution, but positive contribution of the WUAs during the drought year and as well as based on the study conducted by the MAWR on WUAs in the neighbouring countries, the Ministry of Agriculture and Water Resources submitted a proposal to the Cabinet of Ministers in late 2001 for further break up of the shirkats and introducing further WUA experimental cases in Uzbekistan. Thus on 5 January 2002 the cabinet of ministers adopted decree No: 8 extending the scope of the break up of the *shirkats* as experimental cases and establishment of WUAs country wide.<sup>45</sup> The decree also included the WUAs among the primary water users along side the *shirkats*. However, this decree did not specify the work and the status of WUAs. It only issued instructions about further expansion of WUAs and for what purpose they should be. The decree was more about the break up of the unprofitable *shirkats*, then specifying the structures on which the WUAs should be established, but the positive side for WUAs was that it legitimized the existence of WUAs in the country. However, as there was little experience of WUAs in other parts of the country, Uzbek government initially requested the European Union Technical Assistance to the Commonwealth of Independent States (EU TACIS), the Asian Development Bank, and later the World Bank to assist local authorities to establish more experimental cases within Uzbekistan while studying the next steps to be taken.<sup>46</sup> This led to the break up of several more *shirkats* and establishment of

<sup>&</sup>lt;sup>44</sup> Interview notes, regional department of MAWR, Urgench 18 October 2006; Turo-Vekil Water Users Association, Khorezm 30.June 2006; Bekabad Water Users Association, Khorezm, 26 June 2006; BVO, Khorezm 19 May 2006; Hokimiyots regional office, Urgench, 6 December 2005; IWMI, Tashkent 20 June 2005; An Environmental Specialist, State Committee for Nature Protection, Cabinet of Ministers, Tashkent 8 October 2005. Water Inspectorate department from Hokimiyot for Khorezm region, Urgench, 19 September 2005.

<sup>&</sup>lt;sup>45</sup> Cabinet Ministers Decree N0: 8, 5 January 2002.

<sup>&</sup>lt;sup>46</sup> Interview notes, UNDP, Tashkent 18 October 2006; Agricultural Science Production Centre, 22 November 2005; Water Task Leader: Central Asia Natural Resources Management Programme, Hydromet, Tashkent, 24 May 2005; Water Users Association Task Leader: Central Asia Natural Resources Management, Hydromet, Tashkent 25 May 2005; Asror Nazirov, WUASP-USAID Project, 8 October 2005; IWMI, 20 June 2005.

WUAs roughly at the abolished *shirkat* level in Karakalpakistan, Syrdarya, Bukhara and Fergana. In some regions international donors expanded their activities in the irrigation sector in the form of pilot projects, while in others the government supported the establishment of WUAs based on the dismemberment of unprofitable *shirkats*. The dynamics of farm restructuring implied continued changes in the farm organizations in the Republic. The number of small individual farms was likely to rise sharply as individual farms becoming more profitable compared to the *shirkats*. The existing water allocation and Operation and Maintenance (O&M) system needed change as many on-farm canals were becoming inter-farm facilities. The government agreed to take necessary actions for ensuring that WUAs can perform their functions.<sup>47</sup>

On 30 July 2001 ABD approved a pilot project to improve agricultural performance and increase farm incomes in the Ak Altin district with focus on cotton and wheat production. A secondary objective of this project was to protect and enhance the environment by improving water management practices and land quality. The project sought to strengthen local institutions to support agricultural sector reform in Ak Altin, focusing on strengthening the newly established Rural Business Advisory Centre (RBAC), supporting private farming and organizing and training WUAs. The establishments and organizational works of 11 WUAs in Ak Altin district and of 7 WUAs in Amu Zang, were undertaken by the ADB with close consultation with the MAWR while the legal department of the Ministry assisted in preparing model WUA articles of association. Five WUA manuals on legal, financial, operational, water assessment and water allocation aspects of WUA operation were developed. The WUAs were organized on the basis of canal command areas in the district. The project sought to strengthen WUAs to take charge of water allocation, collecting regular user fees to operate and maintain inter-farm water management and O&M activities. Awareness rising information campaign was initiated among the farmers about the need for WUAs and their functions. WUA staff has undergone training in the preparation of business plans, financial management, bookkeeping and procurement of goods and services necessary for maintaining the water management systems and eventually be capable of taking responsibility for O&M of the

<sup>&</sup>lt;sup>47</sup> These were listed in the MAWR Manual for WUAs as: organizing and training water users; developing communication between WUAs and farmers; signing contracts for water allocation and operation and maintenance services; collecting user fees from members for operation and maintenance activities; introducing water management measures and assuming responsibility for operation and maintenance of their irrigation and drainage systems.

inter-farm irrigation water supply and drainage systems. As part of the rehabilitation of the irrigation and drainage infrastructure on 24 June 2003 WB approved a project in the Autonomous Republic of Karakalpakistan to assist the MAWR establishing water users associations to operate and maintain the irrigation and drainage system within the *shirkats*. WB in cooperation with EU-TACIS and USAID has also financed the establishment and development of 50 WUAs in Akhangran district in Tashkent region, Ellikala region in Karakalpakistan and 6 WUAs in Upper Syr Darya basin. International donors such as USAID, JICA and the Swiss Agency for Development and Cooperation (SDC) also started assisting local authorities and the MAWR for further WUA establishments in the country.<sup>48</sup> There was also another important development in 2003 which played important role on the country-wide introduction of the WUAs in Uzbekistan. On 21 July 2003 government issued a decree to transform the region and district based *administrative* water management system, extended since the creation of the old Soviet system, into an irrigation basin water management system based on the hydrological principles. So the hydrological principles were applied at a higher level, that of the irrigation basin, however, at the lower level the former shirkats were admin units and so the creation of individual farmers. This created a gap between the higher and the lower levels to manage the interfarm water, canal and drainage systems. Thus the introduction of WUAs which almost coincided within the former shirkats as admin units and not hydrolic units considered by the government as ideal solution to connect groups of farmers with the newly established irrigation basin management authorities to deal with inter-farm water management.

On December 2-3, 2003 the USAID's Water Users Association Support Programme (WUASP) and the WB financed a Community Empowerment Network Project organized a joint field visit and roundtable on Water Users Associations development for fourteen community-based organization members from Fergana, Khorezm, Samarkand regions and the Autonomous Republic of Karakalpakistan. The aim of the event was to facilitate an information exchange among community members, local authorities, NGOs and other stakeholders involved into the implementation of development projects funded by international donor agencies.<sup>49</sup> The aim of these joint WB/USAID roundtable discussions on WUA development was to highlight the importance of developing WUAs

<sup>&</sup>lt;sup>48</sup> Several of these donor organizations have presented their work on WUAs in Uzbekistan at least during the last 5 International Donor's Coordination Meetings in Tashkent in 2005 and 2006. Further information can also be found on their web sites.

<sup>&</sup>lt;sup>49</sup> See NRMP News Letter, issue 3-15 December, 2003

based on democratic principles in the country and significance of community involvement into this process. Although issues such as community mobilization, project information dissemination, assistance from local authorities and project sustainability were discussed during the visits, the main aim was to initiate a community empowerment network through developing WUAs based on democratic principles in the country. On 4-5 December 2003, the MAWR of Uzbekistan jointly with the Central Asian Scientific and Research Institute (SANIIRI) and USAID's WUASP also organized a national conference dedicated to the problems of establishing Water Users Associations and the transition to hydrological approach in water resources management within the reforms conducted in the agricultural and water sectors of Uzbekistan. Over 100 participants gathered from different parts of Uzbekistan representing regional MAWR departments, SANIIRI, SIC-ICWC, IWMI, ICARDA, EU-TACIS, JICA, SDC, ADB, TIIAME, State Nature Protection Committee, Institute of Water Problems and several WUA representatives to discuss the issues concerning the WUAs and their sustainability in the country. As a result of the discussions the conference has produced more initiatives from the international donors towards assisting the Ministry for establishing further WUAs in the country and handing over responsibility of operation and maintenance of on-farm and inter-farm canals to WUAs. Among the international donors the USAID joint with the WB that saw the changes as dramatic and should be viewed as a rational approach to better water management, came out more enthusiastic about working to strengthen the WUAs in various parts of Uzbekistan. Among their propagating arguments, there were the ability of a WUA to influence irrigation deliveries; the need for a WUA to operate in a democratic and transparent manner and the necessity of a legal framework that permits WUAs to sanction and/or refuse water deliveries to members that do not follow rules put forth by the organization. However, in the heart of their project there was the issue of developing WUAs based on the democratic principles and significance of community empowerment and community mobilization by which they were hoping to introduce some sort of a bottom up "revolution" at the very local level to change the behaviour of the primary target groups: farmers, irrigation management staff and day-to-day policy implementers.<sup>50</sup> The WUASP group produced a variety of media "products" included: training bulletins, presentations, brochures, books and radio programs. These media products were

<sup>&</sup>lt;sup>50</sup> See NRMP News Letter, issue 3-15 December, 2003

distributed to farmers, WUAs members, partner organizations, policymakers, irrigation management officials and local education institutions. Written materials in the form of brochures, posters, bulletins billboards and programme websites have also been developed. Training sessions were organized on the WUA sites, public forums also continued to support the program's coordinated public awareness strategies. Although their work concentrated both in the Tashkent region and Tashkent city, the WUASP established six pilot WUAs in Uzbekistan: two in Bukhara, one in Samarkand, one in Namangan and two in Jizzak regions. Apart from the propagating the community empowerment and community mobilization, the USAID Water users Associations Support Programmes in its pilot areas organized WUAs and assisted them to be democratic, representative and transparent. Provided training to WUAs for business management, conflict management, and agricultural management. On-farm water management demonstrations, irrigation control, land levelling, siphon irrigation, salinity and drainage management. The WUASP group also tried to provide the government with legal advocacy work to change legal system to support WUAs, while promoting legal reform through various media programs including radio, print media and publications.

Considering the positive results of the first two years, in 2004 the Uzbek government also activated the process of reorganization in the agricultural enterprise towards the creation of individual farms with the Cabinet of Ministers decree No. 476 on "Concept of Development of Farms in 2004-2006 adopted on 30 November 2002; Presidential decree No. UP - 3342 on "Concept of Family Farms Developments for 2004-2006" issued on 27 October 2003; Cabinet of Ministers decree No. 607 on "Arrangements for Advanced Development of Family Farms in 2005-2007 adopted on 24 December 2004 and Cabinet of Ministers decree No. 486 on "Arrangements for Further Development of Leasing" adopted on 5 November 2003. In 2002, out of 1,733 total shirkats in Uzbekistan 86 were broken up. These figures were further increased to 178 in 2003. However, the practice of full transformation of *shirkats* into individual farms started in 2004 and ended in January 2006. In these two years some 1,555 shirkats were abolished and over 100,000 additional individual farms were created increasing the total number of all individual farms in Uzbekistan to 141,795. Similarly in 2002 the number of WUAs increased to about 86 while in 2004 the total number of WUAs created reached 562. These numbers further increased to 1398 WUAs in 2006 which completed the process of dismembering all the

shirkats in Uzbekistan.<sup>51</sup> The international donors' work on capacity building and strengthening WUAs as local institutions for inter-farm water and drainage management continued throughout 2005 with their close cooperation with the MAWR. Two of the international donors: a joint UK (Mott MacDonald) and Turkish (Temelsu) Drainage, Irrigation and Wetlands Improvement Project worked closely with the Ministry and provided training and capacity building for 21 WUAs staff and their members in Karakalpakistan. Japanese International Cooperation Agency (JICA) conducted training for WUAs staff and their members in Tashkent and Fergana regions and completed their work on WUAs in 2005. Swiss Development Cooperation Agency has contracted ICWC and IWMI to provide training for WUA staff and water users, raise farmers' awareness of the need for WUAs and their functions, training is provided for WUAs staff to prepare business plans, financial management, bookkeeping, goods and services necessary for maintaining the water management. Among all the international donors a more serious work on the WUAs development was undertaken by the USAID Water Users Associations Support group to strengthen them as local institutions to take responsibility for operation and maintenance of on-farm and inter-farm water management and operate in a democratic and transparent manner. Towards the mid 2005 this group has initiated a more active and independent work on WUAs, while the majority of other international donors and agencies worked rather closely in line with the official policies on WUAs. Soon USAID's WUASP ideas on community empowerment and community mobilization through WUA development and the issues of transparent decision making based on democratic principles in WUAs management clashed with the government policies which saw the WUAs as no more than an officially sanctioned entity designed by the government to oversee inter-farm water management roughly at the former shirkat level in line with the government requirements. Consequently Uzbek government which, on one hand, supported the establishment of WUAs in the country, on the other hand, closely monitored the activities of international donors on WUAs, stopped the USAID's work in Uzbekistan and closed its office in August 2006. The USAID was not only became the victim of its work on community empowerment and community mobilization through WUA development which in a way was in conflict with the official policy, but also became the victim of the deteriorating bilateral relations between the US and Uzbekistan. Uzbek government had

<sup>&</sup>lt;sup>51</sup> Data obtained from the MAWR in Tashkent, November 2006.

taken all the necessary measures to make sure that all the developments with WUAs take place under the state authority and no outside involvements should disturb this. Although the close supervision by the government officials over the break-up of the *shirkats* and the establishment of WUAs was relaxed towards the end of 2004, and later the process became more open in comparison with the first three years, overall, local authorities continued to dominate the selection processes of WUA members, the council (the executive board), the auditing commission and the dispute resolution commission with varying degree specific to regions, districts and the local authorities there. These with little modifications became the main principles on which WUAs have been established throughout Uzbekistan. Those international donors who were interested in starting a bottom-up campaign working towards stimulating political changes in Uzbekistan have soon realized the difficulties of the process and the limits of what they can achieve in the face of a strong state presence everywhere in the country. However, remaining between the state ideology and the politics of international donors, the Uzbek Water Users Associations continue to develop. The organizational structure and dynamics of WUA development in Uzbekistan are given in the appendices. The Water Users Associations development in Khorezm is shown in figure 1, that in Uzbekistan in figure 2, the basic parameters of WUAs in Uzbekistan in figure 3 and the organizational structure of an Uzbek WUA is given in figure 4.

## 4. Conclusion

The water sector in Uzbekistan has been organized primarily to facilitate agricultural production, and consequently any reforms in the water sector are determined by changes in agricultural sector. Water management as an organization is solely meant to serve agriculture and agricultural production through the massive irrigation infrastructure created during the Soviet period, which the government is committed to maintain and modernize for the State-agricultural requirements. Organizationally water management was shaped in accordance with the collective agricultural requirements during the Soviet times. Since independence it has gone through several reform processes, but the State order for crop production always remained and this has become the key element determining the nature and direction of institutional change in Uzbek water sector at the local level. As the State has put itself the main guardian of every change in the country and the main reformer, it determines also both the nature and direction of the institutional change in

water sector be it national or local level. Any institutional changes in the water sector as in all other cases, has to be approved first by the responsible State authority, after which the changes take place under the close State supervision.

The Uzbek model of establishing WUAs is a clear example of a top down institutional creation at local level. The emergence of WUAs came about after the government found it necessary to break down the State agricultural cooperatives (*Shirkats*) into individual farms. The initiative for establishing WUAs did not come from the farmers. It was rather an official initiative. WUAs were established and developed largely by the Ministry of Agriculture and Water Resources to manage inter-farm irrigation and drainage networks roughly at the former Shirkat level. All organizational work for establishing WUAs were undertaken by the government and farmers were only asked to become members. The WUA leaders and their technical staff were selected under close supervision of either local authorities or regional and district departments of the Agriculture and Water Resources Ministry. Farmers and other water users have not been involved in the initial procedure of the WUA establishment and, they were not so enthusiastic about the WUAs, because the farmers have less incentives then the government to take the initiative in the agricultural production. In Uzbekistan it is the State that owns the land and not the farmers. Farmers only lease the land and on the 80 to 85 % of any land leased to them, the farmers must plant State mandated crop. So this makes State concerned more than the farmers in case something goes wrong with the agricultural production. Therefore, after the government found it necessary to break down the Shirkats into individual farms which led to simultaneous establishment of thousands of private farmers that practically constituted the urgent need to devise some mechanism for distributing water over smaller units, the government officials had to act quickly to devise something for inter-farm water management. WUAs in Uzbekistan were, therefore, designed and implemented by the government officials with little involvement of the farmers supposed to be as the real stakeholders. But for decades the actual stakeholders in Uzbekistan have been the main government departments, which are still the dominant actors in the reform situations. The farmers and other water users have not been involved in the initial procedure of the WUA establishment and, thus they do not have enough information about WUA concept and objectives.

According to the standard WUA Charter, developed by the Ministry of Agriculture and Water Management, the WUA is considered as a non-governmental, non-commercial and non-profit making organization. However, the Cabinet Ministers Decree No. 290 issued on 29 June 2003 states that the water departments and on-farm hydro and reclamation organizations of the Ministry at the region and districts have the following functions: a) to make proposals on the WUA development and provide assistance in implementation of the development programs, b) to arrange the activities on the WUA establishment and operation and c) to monitor the WUA performance.

The creation of WUAs in Uzbekistan as institutions for local water management has been an ambitious reform process. The new institutions were created on the old structures with their staff and equipment constraints without proper financial arrangements and legal basis. At present, the government has frozen further developments on WUAs at least until the end of 2008. However, it is likely that WUAs in Uzbekistan will go through further reforms. Based on the research conducted for the study, we expect three possible scenarios for the future of WUAs in Uzbekistan. 1) WUAs may be transferred to the district departments of the Ministry based on the old administrative principles and not on the hydrological principles. 2) WUAs could be merged with the Irrigation Basin Management Authorities created in 2004 based on the hydrological principles. 3) There is the possibility that WUAs are going to remain not as associations, but as semi-commercial semi non-governmental management bodies providing on-farm irrigation and drainage services. Taking into account that all the tree scenarios have relatively equal chance to be realized, there are some indications that encourage us to play our cards in favour of the third scenario. Firstly, past experience has shown that the government cannot manage efficiently on-farm irrigation and drainage. Moreover, the government is not willing to take responsibility to manage on-farm water infrastructure (something it has never done before,) which is much bigger than the old collective farms and more expensive for the government to maintain. Secondly, government abolished the Shirkats and created 'private' individual farms to reduce the government costs in production. During the collective farms the government provided almost 100 % credit for cotton and 50 % for wheat production. Now this has been reduced to 50 % for cotton and about 25 % for wheat and there are plans to reduce it further. Thirdly, the government is planning to introduce water pricing for the water delivery services to reduce the existing government delivery costs in the near future. Fourthly, no matter how weak are the WUAs in the country they will continue to progress based mainly on increased experience and government is likely to introduce necessary legal and institutional initiative that will promote WUAs further development, but the state control is to continue.

The theoretical question this paper explored is the analysis of leadership and ideas what Grindle calls 'the important determinants of policy decision making outcomes which play also essential roles in reform situations, but continue to be largely exogenous to the political economy traditions' (Grindle 1999). Accordingly our conclusions in this respect are the following.

Policy initiatives in Uzbekistan indeed emerge within the official bureaucracy and largely reflect the actions and perceptions of elites within the government who have extensive formal and informal power. They do not emerge in the public domain, which is highly circumscribed to begin with. This means that analytical frameworks that implicitly or explicitly take 'society-centric politics' as their point of reference are of limited value only to understand Uzbekistan's policy dynamics. The Uzbekistan intra-government policy process is highly personalized, but its successful outcome depends very much on achieving collective decision making within the bureaucracy, that is a 'political alignment'. The methodological implication is that policy emergence, articulation and transformation is very difficult to investigate for outside researchers. It is also analytically difficult because 'structure' and 'agency' dimensions are highly intertwined, and maybe not discernable. Grindle's suggestion that there would be merit in putting larger emphasis in policy studies on the importance of 'leadership' and 'ideas' in policy processes seems very relevant to the Uzbekistan case. Within the Uzbek bureaucracy there are certainly interest groups, involved in extensive consultation, negotiation, consensus building and sometimes bargaining between elites and various government departments for a policy or an institutional change. In a very broad stroke, we suggest that further research on the political economy of land and water governance reform might fruitfully look at which sections of the government apparatus support and drive a 'modernization' agenda that attempts to isolate 'functional' governance from 'political' governance at the operational level, and how this relates to the maintenance of centralized political control of the society at large. Provisionally we conclude that there is 'more agency than meets the eye', that is, that statements about the 'basically' or 'fundamentally' authoritarian, centralized and hierarchical nature of Uzbek state governance may easily be too simplistic, and overlook how policy and reform dynamics plays out within the government structure. Such simplification may be as much a reflection of methodological difficulty to investigate that

internal dynamics, as of the posited absence of it. The international supporters of the reform process in the agriculture were hoping that the restructuring could lead to a decentralized water management system at the province and district levels. They were probably naive to think that it was possible to introduce a decentralized system at the local level in spite of a highly centralized national system, or they underestimated the 'adaptive capacity' of the Uzbekistan system, or were insufficiently aware of the 'society-centric' assumptions inherent in their proposals, for establishing Water Users Associations for instance, or they were aware of all this and more, and decided that this would be the best way to enhance reform.

5. Appendices



<u>Figure 1</u> Dynamics of WUA Development in Khorezm

(The axes indicate year and cumulative number of WUAs established). Source: Based on data collected from the MAWR regional department in Urgench, Khorezm <u>10 November 2006</u>

### Figure 2





Source: Based on data obtained from the MAWR in Tashkent, 6 November 2006

# Figure 3

Name of Regions	Total Irrigated Area. th.ha.	Total Irrigated Area under WUA ha.	Number of WUAs	Total Number of WUA Members	Number of Farmers (Fermers)	Total Number of Contracts made	Total Service charge for the contracts made thous. SYUM	Average WUA area th.ha
Republic Karakalpakstan	500.3	399,659	125	7739	7491	7739	220,482,1	3,197
Andijan	263.9	139,883	121	9187	9187	9187	136,730,0	1,155
Buhara	273.7	223,090	121	9371	9371	9371	263,929,9	1,843
Jizak	301.2	262,160	86	7359	7277	7359	115,405,0	3,048
Kashkadarya	505.4	465,925	166	22428	21221	22428	176,922,4	2,807
Navoi	127.2	113,432	51	4000	4000	4000	436,815	2,224
Namangan	279.5	179,028	113	11084	11031	11084	317,000	1,584
Samarkand	376.4	305,850	33	15897	15897	15897	161,341,0	9,267
Surhandarya	326.1	230,931	112	6674	6674	6674	998,896	2,062
Syrdarya	290.7	255,764	85	7400	7252	7400	684,000	3.008
Tashkent	382.2	231,907	141	13061	12497	13061	209,878,8	1,645
Fergana	358.7	210,985	130	13790	13790	13790	142,320,0	2,622
Khorezm	276.5	250,285	114	16107	16107	16107	204,035,8	2,195
Republic	4,261.8	3268,899	1,398	144,097	141,795	144,097	187,4716,1	36,657

## Information on total number of WUAs created in Uzbekistan as of 10 October 2006 and some of their activities

Source: Based on data obtained from MAWR in Tashkent, 6 November 2006.



Source: Based on information obtained from the MAWR in Tashkent, July 2005

# Figure 5

# List of all the *shirkats* dismembered and the Water User Associations officially registered in the Khorezm Region today.

No:	Districts	Abolished Shirkats	WUAs created	Cabinet of Ministers Decree no:	Registered authority's decisions at the region or district level.
1	Bogot	Ogakhi	Ogakhi	243,	14, 11.01.00
		T. 1. (	T 1: 4	13.05.1999	
		Turkiston	Turkiston		
		Khorazm	Khorazm		
		Dekhanobod A. Navoi	Dekhanobod A. Navoi		
				607 24 12 04	2/1
		Toshkent	Toshkent	607, 24.12.04	2/1, 07.02.05
		Galaba	Galaba		
		Uzbekiston	Uzbekistaon		
		N. Dusov	N. Dusov		
		Zarbdor	Zarbdor		
		M. Kuvakov	M. Kuvakov	215, 08.11.05	36/1, 27.12.05
		Total: 11	11		
2	Gurlan				
		Uzbekiston	Uzbekiston	38/6, 29.01.03	148 20.09.03
		I. Kholmetov	Sakhtiyan Suvchi	476, 30.10.03	98. 14.04.04
		A. Navoi	Khizir-Eli		
		K.Kalpakiston	Dusimby		
		Namina	Namuna	607, 24.12.04	2/3, 07.02.05
		Guliston	Guliston		
		Yangiobod	Yangiobod		
		Chinobod			
		Vazir	Vazir SFU		7/1, 06.04.05
		Dekhanobod	Dekhanobod	215, 08.11.05	21/3, 09.09.05
		Amudarya	Amudarya		36/1, 27.12.05
		Zarbdor	Olga	1	38/1, 16.01.06
		Total: 12	Total: 11		

3	Kushkupir				
	Kushkuph	Okhunbabayev	Shikh-yop	476, 30.10.03	02, 15.01.04
		Nezakhos	Khadra-yop	+70, 50.10.05	02, 15.01.04
		Toshkent	Kenegesh-yop	+	
		Mustakilik	Buglak-yop	1	
		Navruz	K.R.Kulobod		
		M. Rakhimov	K.R.Ayron-Kul	607, 24.12.04	2/9, 07.02.05
		Guliston	Gulomjon Uzbek-yop		16.03.06
		O. Kurbanov	K.R. Gozovat- Dovdan		
		Ittifok	K.Kupir Chukur- Kul		
		Ibragimov	K.Kupir Ashirmat		
		Obod	K.R. Tagalak- yop		
		I. Bekmanov	K.Kupir Kuna- Zeyi		
		O. Jumaniyazov	K.R. Khonobod Zeyi-yop		
		Khorazm	K.Kupir Shikhlar		
		Uzbekiston	K.Kupir Palvon-		
		Az-	yop K.Kupir		
		Zamakhshariy	Amirkum		
		Chorbador	Eski Khonobod SFU		16.03.2006
		Total: 17	Total: 17		
4	Urgench				
		A. Temur	A. Temur	243, 13.05.1999	71, 17.01.00
		S.Kalandarov	Gaibu	38/6 29.01.03	135, 26.05.03
		Begovot	Urganch Begovot	476, 30.10.03	166, 08.04.04
		Istiklol	Kulovot	<b>_</b>	
		Okhunbabayev	Koramon	607, 24.12.04	2/6, 07.02.05
		Pakhtakor	Chandirkiyot		
		Ok-Oltin	Yukaribor	ļ	
		Guliston	Urganch Guliston		
		Durman	Yukari Durman	1	
		Mangiberdi	Chakasholikor		
		Galaba	Urganch Galaba		

		Urgnach	Urganch-arna		
		Munis	Cholish		
		Khorazmi	Chonsh		
		Total: 14	Total: 13		
5	Vhaganage	10tal: 14	10(a). 15		
3	Khozarasp	V Cl		20/6 20 01 02	122
		Yu. Sherjanov	Obi-Khayot	38/6, 29.01.03	133, 23.05.03
		A. Yakubov	A. Yakubov	476, 30.10.03	641, 30.12.03
		Sh. Yulduzi	Islam Eshchanov		
		Erkin	S. Saidov		
		Khorazm	Mukhomon		
		Uzbekiston	Beshta		
		Obod	Otov	607, 24.12.04	2/6, 07.02.05
		Khazorasp	Atalik		
		Dustlik	Pichokchi		
		Uzbekiston (Pitnak)	Said-yop		
			Okolong		
		M. Ulugbek (Pitnak)	Yangi-Rab		
		Total: 11	Total: 12		
6	Khonqa				
		Sh. Rashidov	Olaja	476, 30.10.03	168, 08.04.04
		Khonqaobod	Jayhun-Lochin		228, 14.04.04
		Khorazm	Kirk-yop	607, 24.12.04	2/2, 07.02.05
		Yangi-Khayot	Madir-yop	]	
		A. Navoi	Navkhos		
		Galaba	Khusain Niyazmetov		
		Al-Khorazmi	Amu-Sokhil		
		Okhunbabaev	Sapalayan	215, 08.11.05	36/1, 27.12.05
		Oltin-Sokhil	Korakosh	]	
		Uzbekiston	Tomadurgandik		
		Dustlik	Katta-Jirmiz		
		Total: 11	Total: 11		
7	Khiva	ĺ			Ī
		B. Nurillaev	Mirob	243, 13.05.1999	104, 26.01.00
	1	Khiva	Khiva Buz-yop	476, 30.10.03	169,

					08.04.04
		Korakum	Khiva Gobuk- yop	476, 30.10.03	170, 08.04.04
		Uzbekiston	Shomokhulyum		
		P. Madaminov	P. Madaminov	607, 24.12.04	2/4, 07.02.05
		Ogakhiy	Khiva Obu- Khayot	•	
		Al-Khorazmi	Chinobod	•	
		Palvan Makhmoud	Palvan Makhmoud		
		Beruniy	Beruniy Polvon		
		Feruz	Irdimizyan-yop		
		Total: 10	Total: 10		
8	Shovot				
-		Shovot	Koldirgoch	38/6, 29.01.03	192, 23.05.03
		Guliston	Kiyot-Udachi	476, 30.10.03	177, 15.04.04
		Sokhibkor	Shovot-Udachi		171, 08.04.04
		O.Khidirov		607, 24.12.04	2/8, 07.02.05
		Risk, Oltin Boshok	Khitoy Dovdon		
		Beruni, K.Ataniyazov	Yarmish Khassa		
		Mekhnatobod	Shovot Beg-yab		
		K.Rakhmanov, Istikbal Makhtumkuli,	Sailkhon Mirob		
		Gavdasha			
		Khorazm Dustlik	Shomirat Mirob Shovot-Dustlik	215, 08.11.05	2/4, 07.02.05
		Uzbekiston	Kuranbay ollazar		0
		K.Otaniyazov	Pulat Matkarimov	+	
		O. Khidirov	Rajabboi Vodkhoz	1	
		Makhtumkuli	Nurjon Botir		
		Total: 19	Total: 13		
9	Yangiarik				
	0	Uzbekiston	Baramik	516, 29.12.01	60, 20.03.02
		OK-Machit	Chikirikchi- Angarik	476, 30.10.03	167, 08.04.04
		M. Matkarimov	Tura Vakil	607, 24.12.04	2/7,

					07.02.05
		Navruz	Savgan		
		Guliston	Kuriktom	215, 08.11.05	32/1, 02.12.05
		Khorazm	Karmish		36/1, 27.12.05
		Avaz Utar	Kattabog		32/1, 02.12.05
		Ostana	Ostana		32/1, 02.12.05
		Sh. Rashidov	Korakum		32/1, 02.12.05
		Total: 9	Total: 9		
10	Yangibozor				
		Sh. Kungirot	Sh. Kungirot	516, 29.12.01	176, 31.03.02
		Buston, Khamza, Madaniyot,	Buston	38/6, 29.01.03	142, 23.06.03
		Jayhun	Jayhun		147, 26.03.03
		Khorazm, Sh. Kung, Madaniyot	Daryolik-arna		143, 26.03.03
		Buskala, Bogolon	Eski-Daryolik		145, 26.03.03
		Khakobod	Oyok-Durman		144, 26.03.03
		Bogolon, Madaniyot	Kilichniyazboi		146, 26.03.03
		Total: 13	Total: 7		
	Total in Khorezm	127	114		

Based on information obtained from the MAWR regional department in Urgench, Khorezm 10 November 2006.

### 6. References

- Abdullaev, I. "Development of Water Management Institutions in the Environmental Sensitive Karakalpakistan Area of Central Asia", Internal Draft Document, (IWMI, 2005)
- Asian Development Bank & Ministry for Economy of the Republic of Uzbekistan. Agricultural Sector Review and Planning, Main Report (Draft); Current Status and Outlook for the Agricultural Sector, (Tashkent: An internal Report March 2005).
- **Boom Van Der, P.** *Manual on Formation and Empowerment of WUA*, World Bank, Uzbekistan Rural Enterprise Support Project, (2003).

Cabinet of Ministers Decree N0: 8, (5 January 2002).

\_\_\_\_\_, N0: 95, (24 March 1995).

\_\_\_\_\_, **N0: 438**, (10 November 2000).

\_\_\_\_\_, N0: 106, (10 March 1998).

\_\_\_\_\_, N0: 75, (11 February 1997).

\_\_\_\_\_, N0: 476, (30 October 2003).

**IWMI & SIC**. *How to establish a Water Users Association?: Practical Steps for Social Mobilization,* (Tashkent: IWMI-SIC, 2003).

**IWMI, ADB &WB.** New Training Manuals for Water Users Associations, (Tashkent: 2005)

Khan, Azizur Rahman, 'Transition to a Market Economy in Agriculture.' In: Keith Griffin (eds.), (1996). Social Policy and Economic Transformation in Uzbekistan (Geneva: International Labour Office)

**Mollinga, P. Peter,** On the Waterfront: Water Distribution, Technology and Agrarian Change in a South Indian Canal Irrigation System, (New Delhi: Baba Barkha Nath Printers)

Oliy Majlis. (the Supreme Council), The Law "on leasing", (2 November 2000).

- UL-Hasan, M. & Khodjaeva, N. N. Social Mobilization and Institutional Development; Approaches and Strategies, (Tashkent: IWMI-SIC, 2002).
- **USAID**, What is a Water Users Association?: Putting Practical Experience to Work for Irrigation Resources Management in Central Asia, Water Users Associations Support Program Information Bulletin N0: 1, (November 2004)

Uzbek Ministry of Agriculture and Water Resources, Uzbekiston Respublikasi Vazirlar Maxkamasining 2002 yil 5 Yanvadagi 8-sonli Karoriga Asosan Kaita Tashkil Etilayatgan Kishlak Xujaligi Korxonalari Xududlarida Cuvdan FoidalanuvchilarUyushmalarini Tuzish Buyicha Kullanma, (Cuy Resurslari Balansi va Suvni Tejash Texnologiyalari Boskarmasi, Toshkent, 2002)

\_\_\_, Suvdan Foidalanuvchilar Uyushmasini Tavsis Etishning Tashkiyli Va Xukukiy Masalalariga Oid **Kullanma**, "Mirob-A" Ishlab Chikarish Boskarmasi, (Toshkent: Ukituvchi 2000)

**World Bank.** Country Report; Uzbekistan Economic Memorandum: Subsidies and Transfers, (1994)

\_\_\_\_\_, Uzbekistan: An Agenda for Economic Reform, (1993)

**Zavgorodnyaya, D**. PhD thesis; "Water Users Association in Uzbekistan: theory and practice", (Germany: Cuvillier Göttingen, 2006)