WUA DEVELOPMENT AND STRENGTHENING IN THE KYRGYZ REPUBLIC

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ABSTRACT

Under the On-Farm Irrigation Project (OIP), the Department of Water Resources (DWR) of the Kyrgyz Republic is to rehabilitate tertiary irrigation infrastructure. Rehabilitation on infrastructure serving 50,000 ha is underway; infrastructure serving 160,000 ha is to be rehabilitated over the six-year life of the project. To replace the role of irrigation brigades on former state farms, the Government has promoted establishment of Water User Associations (WUAs) to take over on-farm irrigation O&M. Initially, WUAs were formed under a Presidential Decree but with project assistance, in 2002 the Republic passed a WUA Law that superseded the decree. Under the law 350 WUAs have been registered. As part of OIP, WUA Support Units at the central (1), provincial (7) and district (26) level have been formed to develop and strengthen WUAs. During the first three years of the project, these units have provided training to almost 11,000 trainees as well as assisting with WUA re-registration under the new law. Although still too low, fees paid by members to cover WUA O&M and administration as well as pay the DWR for water supplied have increased in every province since 2000. A resolution just passed by the Government now gives WUAs legal ownership of their on-farm irrigation infrastructure.

INTRODUCTION

After the breakup of the Soviet Union the economy of the Kyrgyz Republic went into a serious decline. As a result irrigation systems suffered from poor or no maintenance due to lack of financial resources. When the state and collective farms were disbanded, and land was distributed to individual growers, farms immediately faced a problem with on-farm irrigation[3] O&M. Without farm brigades there was no internal organization responsible for taking water from the farm head gate and delivering it to fields of thousands and thousands of small farmers. As a result of the decline in irrigation service, there was a significant decline in agricultural output in the first half of the 1990s.

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[3] On-farm irrigation is defined as the irrigation distribution system within the boundaries of the former state and collective farms.

Given that the majority of the population lives in the rural area, the Government has placed high priority on growth in the agricultural sector. Progress has been made in implementing agricultural reform such as price deregulation, trade liberalization, land reform, and privatization of agro-industrial enterprises. However, in order to ensure increased agricultural production the Government recognized it must address problems in the irrigation sub-sector.

With a lack of public funding the Government decided that the only way to sustain the irrigation infrastructure was for users of irrigation water to pay for water delivery services. As a result of the irrigation service fee introduced in 1995, water users are now contributing directly to the operational budget of the DWR. More importantly, the Government instituted a new policy to encourage the formation of WUAs to take responsibility for on-farm irrigation O&M, including collecting irrigation service fees for payment to the DWR. This included the passing of a strong WUA Law in 2002 as well as a recent resolution transferring ownership of on-farm infrastructure to WUAs.

WATER AND IRRIGATION IN THE KYRGYZ REPUBLIC

The Kyrgyz Republic is a landlocked country, surrounded by Kazakhstan, Uzbekistan, Tajikistan and China (see Figure 1). The Republic covers a total area of approximately 200,000 km^2, although mountains occupy more than 70% of the territory. The climate is continental with cold winters and hot dry summers. The frost-free season in the south is 8 months while the frost-free season in the mountainous provinces is less than 5 months. Annual precipitation in the north of the Republic fluctuates from 200 to 600 mm and in the south from 350 to 700 mm. During the potential growing season the mean precipitation in the south is around 170 mm while the mean reference crop ET during the same period is approximately 900 mm. Consequently, irrigation is critical for sustained agricultural production.

Dominated by high mountains, the majority of water resources in the Kyrgyz Republic originate from snow and glacier melt. Average annual runoff in the country is 47.4 billion m^3. Although, under international agreements the Republic can only use a maximum of 12 billion m^3, with the reminder flowing to neighboring states, especially the cotton producing countries of Uzbekistan and Turkmenistan. About 90% of this water is used for agriculture, 7% for industry, and 3% for other needs including municipal water supplies.

Figure 1. Map of the Kyrgyz Republic

Irrigation Development

Irrigation development, especially in the Ferghana Valley in the south, can be traced to primitive intake structures and canals developed by earliest inhabitants. In 1922 the area served by irrigation in the Kyrgyz Republic was 180,000 ha. This increased to 300,000 ha by the end of World War I and 530,000 ha in 1935. Just before World War II the irrigated area was approximately 740,000 ha. By 1990, prior to the collapse of the Soviet Union, there were 1.07 million ha of irrigated land, or 80% of the arable land in the country.

This included a total of 631 irrigation systems, which varied from less than 100 to 50,000 ha in size. Of these systems 373 were government-owned and served approximately 765,000 ha. Another 156 systems under 100 ha and 102 systems over 100 ha had independent intake structures, often owned by former state and collective farms. The Government controls intake structures that serve main and inter-farm canals under the responsibility of the DWR while the other 258 systems have intakes managed by the users (Asian Development Bank, 1997).

Water used for irrigation over the period 1985-1992 averaged 10.5 billion m^3. However, after the breakup of the Soviet Union, and the financial crisis in the Kyrgyz Republic, water delivered to irrigation declined significantly. As a result of deterioration in the irrigation infrastructure and a reduction in area under cultivation, as well as farmers reducing their costs for irrigation water by reducing the quantity used, only 8.19 billion m^3 was delivered in 1995. This was further reduced to 7.19 billion m^3 by 2001, 6.5 billion m^3 in 2002, and 5.93 billion m^3 in 2003, although the last two years were relatively wet which partially explains the lower intake values.

Reservoirs and irrigation infrastructure that provided water for irrigated land within a province, but across more than one district, were the responsibility of the Provincial DWR (P-DWR), with all O&M costs paid for with state funds. Within a district all O&M of the main and secondary canals was also paid by the state budget through the District DWR (D-DWR) offices (Kostiuk, 1999). Although it is estimated that at least $11.5 million are required to operate the off-farm system under the management of the DWR, the budget for 1998 was only $7 million and for 1999 had declined to $3.2 million. The drastic decline in DWR budget means that the additional funds (in excess of $1 million) paid by WUAs for irrigation service fees are very important for O&M of the off-farm system.

During the Soviet period, tertiary irrigation networks belonged to former state and collective farms. D-DWRs were only responsible for providing water to the head gate of the state and collective farms. From this point on irrigation was the responsibility of state and collective farm irrigation brigades as they were expected to operate, maintain and repair the system using their own resources. With slightly more than 1 million irrigated ha, at the time of the breakup the average on-farm irrigation system was just less than 2,000 ha (Johnson III, Stoutjesdijk and Djailobayev, 2002).

AGRICULTURAL AND IRRIGATION REFORM

Following independence in August 1991 the Kyrgyz Republic was one of the first of the Central Asian Republics to opt for a market economy and adopt measures to privatize agriculture, including a comprehensive land reform program. Former state and collective farms were liquidated and the land and other assets were divided among the previous tenants. The amount of land allocated to each individual depended upon the number of people living in the village, the size of the farm and the years of experience of the farm workers. Throughout the Republic land holdings vary from 1 ha/person to 0.1 ha/person, with the smallest holdings being in the more densely populated Ferghana Valley in the south.

Ownership of the on-farm irrigation infrastructure on the former state farms was previously property of the state, while irrigation facilities on collective farms were owned by the members of the collective. The collapse of the USSR, and ensuing financial chaos, resulted in a lack of public funds to maintain the off-farm system while the breakup of the state and collective farms created a situation where no organization was clearly responsible for operating and maintaining the on-farm system. In 1995 the Government instituted an irrigation service fee (ISF) to be paid by the users to the water supplier (usually the D-DWR) with all funds to be used to cover costs of irrigation service to the farm head gate. The level of the fee is established by the Parliament and is a political decision rather than an economic one. This fee was increased by Parliament to 30 Kyrgyz Som (KS) per 1,000 m^3 in 1999 and it is still at that same level even though by legislation irrigation tariffs should be reviewed annually. Based on the exchange rate for April 2004 (43 KS =

US$1.00), the ISF is approximately 70 US cents per 1,000 m^3 of water. DWR continues to push for an increase in the ISF to at least 60 KS per 1,000 m^3 to reflect a more realistic cost of delivery, but that has been resisted by Parliament.

A decree on the establishment of WUAs was signed by the Prime Minister on August 13, 1997 (Presidential Decree, 1997). This resolution allows for the legal establishment of WUAs and stipulates the procedures for creating WUAs, their membership, activities, rights and duties, etc. Based on this resolution, on-farm irrigation infrastructure could be transferred to legally established WUAs. Yet, with no previous experience in independent participatory farmer organizations, the on-farm system irrigation users were uncertain how to form and operate a sustainable WUA.

IRRIGATION REHABILITATION

Recognizing the critical need to rehabilitate the off-farm irrigation systems as well as major storage and diversion works, in 1997 the Government requested financial assistance from the World Bank to address the immediate problems in the off-farm system. As a result the Irrigation Rehabilitation Project (IRP) was designed to provide low-cost rehabilitation of off-farm irrigation infrastructure in order to ensure irrigation systems can supply adequate quantities of irrigation water to the head gates of the on-farm irrigation systems. This $46.8 million ($35 million from IDA) project was initiated in mid-1998 and will, by the end of 2005, eventually rehabilitate off-farm irrigation infrastructure serving about 270,000 ha as well as four dams commanding over 400,000 ha.

On-Farm Irrigation Project (OIP)

When completed IRP will ensure a more dependable supply of water. However, it is equally important to rehabilitate on-farm irrigation infrastructure in order to ensure that the water can be used more efficiently on the agricultural land to improve production. Yet, this rehabilitation is only justified if there is a management system responsible for on-farm water distribution and deliveries and the maintenance of the system under the management of WUAs. In order to achieve this, the Government has recognized the importance of developing and strengthening WUAs as the central organization responsible for on-farm O&M. Given the need to form in excess of 500 WUAs in the Kyrgz Republic, the ability to train and strengthen WUAs is not just a short-term project activity but instead is a permanent requirement if effective WUAs are to be a part of a sustainable irrigation delivery system.

The OIP, effective since December 2000, is a $29 million project ($20 million from IDA) with two main components: (1) rehabilitation of on-farm irrigation infrastructure serving a minimum of 160,000 ha; and (2) development and strengthening of the associated WUAs to ensure the on-farm system is operated

properly and maintained (World Bank, 2000). In order to ensure WUAs accept responsibility for the on-farm irrigation system they are expected to repay 25% of the rehabilitation costs, spread over 7 years with interest not to exceed inflation as well as a four year grace period. In addition to collecting service fees from their members to cover the costs of O&M of the on-farm irrigation infrastructure and the WUAs share of repayment for rehabilitation, WUAs are expected to collect the ISF that is to be paid to the water service provider.

Since it is unlikely that all WUAs will mature at the same rate, it was recognized that the project would have to work with more than 160 WUAs to ensure that at least 80 WUAs (responsible for 160,000 ha) are ready for rehabilitation activities.

WUA Support Units

There will continue to be a need to form and sustain additional WUAs in the Kyrgyz Republic after OIP is completed. In order to establish the institutional capability to develop and register in excess of 500 WUAs, as well as to ensure that the Government has the long-term technical capacity to support these WUAs, the project was designed to form WUA Support Units (WSUs) in the central office of DWR (C-WSU) and all seven Provincial Water Resources Departments (P-WSUs) as well as 17 District Water Resources Departments (D-WSUs) that serve the project area. In 2002, reflecting the success of WSU activities the Government decided to increase to 26 D-WSUs. At the request of the Government the project plans to further increase to 34 D-WSUs.

C-WSU. Since 2001 the C-WSU has been operational and is staffed with a WUA Specialist, an Engineer, a Training Specialist, a Lawyer and an Economist-Financial Management Specialist. In addition, international consultants have provided technical assistance with the formation and strengthening of this unit. Under OIP the C-WSU has responsibility to ensure sustainable WUAs are created and strengthened. More importantly, it is the responsibility of the C-WSU to develop institutional capacity within the DWR in order to form additional WUAs as required as well as support the existing WUAs. Staff members have developed training materials needed to strengthen the WUAs and, working with local trainers, established courses needed to strengthen WUAs.

P-WSUs. Seven P-WSUs have been established to provide strong political and technical support within Provincial DWR offices. P-WSUs are working to develop a strategy for WUA development as well as a program for helping WUAs to determine their system improvement requirements. These units are also responsible for formulating a long-term program to strengthen WUAs and are working with the C-WSU as well as the D-WSUs to ensure sustainable WUAs. Each P-WSU has a small team comprised of a WUA Support Specialist, Water Management Specialist, and an Engineer.

D-WSUs. D-DWRs have become bulk sellers of water and drainage services with the WUAs as their primary clients. With this type of relationship it is very important that D-DWRs have the technical and institutional ability to support their WUAs to ensure they are viable customers. Therefore, with support from OIP, D-DWRs in the project have established 26 D-WSUs to provide assistance with the formation of WUAs, including helping them become legally registered under the new WUA Law. D-WSUs have a support team with the same technical composition as the P-WSUs. D-WSUs schedule training courses so that WUA staff gain skills needed to properly operate and maintain their irrigation system. Technical capabilities of D-WSUs' staff members and their ability to transfer those technical skills to WUAs are critical to long-term sustainability of WUAs.

WATER USER ASSOCIATIONS

Soon after the state and collective farms were dissolved the fact that there was no organization responsible for on-farm irrigation became obvious to the farmers. In some locations spontaneous unions of water users called hydro-services were formed. In other locations unofficial WUAs were formed to try to solve the problems farmers faced with on-farm irrigation O&M. Most of these WUAs were formed without any technical assistance and had no real idea how a participatory farmer organization actually functioned. As a result many of the associations simply selected the former chairman of the state or collective farm as Chairman of the WUA and he managed the WUA in the same manner in which he had managed the state or collective farm before.

Over time WUAs recognized problems associated with this Chairman-dominated approach. Consequently, WUAs have responded to guidance from D-WSUs to help WUAs reorganize (and reregister) under the new WUA Law to a more participatory WUA model. The speed with which WUAs have been formed and registered under the law in the Kyrgyz Republic, is illustrated in Table 1.

Table 1. Trend of WUA Establishment, 1999-2003

Province	Registered 1999	Registered 2000	Registered 2001	Registered Dec 2002	Registered Dec 2003
Osh	26	26	26	46	63
Batken	16	16	17	21	23
Jalal-A.	11	18	27	41	50
Talas	5	13	30	47	52
Issyk-K.	7	10	11	21	28
Naryn	1	3	5	20	42
Chui	9	24	53	68	79
Totals	75	115	169	264	337

Source: Field data collected by OIP staff

Given the difficulties faced by other Central Asian Republics, the speed of formation of WUAs in the Kyrgyz Republic is a positive sign as it clearly

indicates farmers have recognized the need for farm-level water users associations.

Table 2 illustrates that already 60% of the total irrigated land in the country is served by WUAs with over 70% of the irrigated area having assistance provided through WSUs. Now the important task is for the WSUs to help these WUAs become financially viable associations that can provide reliable irrigation O&M for their members.

Table 2. Number Registered WUAs and Service Area (ha)

Province	No. of Districts	No. of WUAs	Reg. WUAs	Re-Reg. WUA	District Irrig. Area (ha)	WUA Irrig. Area (ha)	WSU Area (ha)
Batken	4	24	23	21	57,489	41,339	40,454
Jalal-Abad	8	53	50	45	127,933	81,147	90,933
Issyk-Kul	5	31	28	25	163,398	59,243	99,176
Naryn	5	44	42	38	120,241	58,886	76,982
Osh	6	64	63	60	134,393	91,405	112,913
Talas	4	54	52	41	114,900	89,468	56,656
Chui	8	80	79	70	328,875	182,580	253,122
TOTAL	**40**	**350**	**337**	**325**	**1,047,229**	**604,063**	**730,236**

WUA Training

Given that farmers in the Kyrgyz Republic have not had previous experience with participatory farmer associations, training is a critical factor. Working with international consultants and staff from the C-WSU, training courses have been organized for P-WSUs and D-WSUs. In turn, all of the WSUs have taken the responsibility for organizing and conducting training courses for WUAs. To date training has been provided for approximately 11,000 trainees (see Table 3). Success of the WUA development program is directly related to OIP training activities.

Table 3. C-WSU, DWR, P-WSU and D-WSU Staff trained 2001-2003

Level	Staff	Plan (2001)	Done (2001)	Plan (2002)	Done (2002)	Plan (2003)	Done (2003)
DWR	PIU-DWR			4			
Provinces	P-WSUs		266		100	63	119
Districts	D-WSUs			633	569	1,013	710
WUAs	WUA				4,052	9,086	10,126
TOTAL			266	637	4,726	10,162	10,955

Training materials for six core courses have been developed and regularly refined. These courses include: (i) WUA formation and development; (ii) general

administration and financial management; (iii) monitoring and evaluation (M&E); (iv) engineering; (v) legal aspects; and (vi) water management. Courses on training methods, and environmental management have also been developed during the past year. For 2004 the C-WSU has organized a training course along with the Kyrgyz Association of Accountants for WUA bookkeepers. The project has also developed two excellent training videos along with a large supply of handouts and training materials.

WUA MILESTONES AND SERVICE FEES

Under OIP a system of milestones were created to determine the progress WUAs were making toward sustainability. As WUAs were established and strengthened they were able to attain higher milestones. Only WUAs that reached the upper milestones were considered to be strong enough to take responsibility for their rehabilitated on-farm infrastructure.

In addition, one of the most critical indicators of WUA performance and sustainability is its ability to establish and collect an irrigation service fee that will cover all the necessary O&M costs, administrative costs and pay the required water service fees to the DWR.

Milestones for WUA Performance

Donor-supported irrigation projects often simply create paper WUAs in order to justify disbursement of rehabilitation funds. However, under OIP as a majority of members of WUAs have to sign an agreement to repay their 25% percent of the rehabilitation costs, WUAs must be actually formed and functioning. In order to ensure WUAs are more than paper entities, credits for rehabilitation will only be granted when they have passed a series of milestones. These include:

- **Milestone 1:** WUA establishment, including legal registration and bank account opened.
- **Milestone 2:** Recruitment of WUA staff and necessary training.
- **Milestone 3:** WUA Board has prepared a plan of O&M and the general assembly has approved this plan—this includes setting a sustainable fee to cover O&M and ISF costs.
- **Milestone 4:** WUA members have paid O&M costs and ISF payment to water supplier.
- **Milestone 5:** WUA and DWR have developed alternatives for rehabilitation and determined their costs with WUA members involved in these discussions.
- **Milestone 6:** WUA members have selected an alternative for rehabilitation.

- **Milestone 7:** A majority of water users in the WUA have agreed to borrow the credit for rehabilitation and to repayment under OIP terms and the WUA Board officially requests the credit and signs for repayment.

It has been demonstrated in the Kyrgyz Republic that WUAs can accomplish all milestones within a year. Obviously, some WUAs take longer and therefore under OIP the plan was to work with a larger set of WUAs (approximately 160) than was required to actually rehabilitate the 160,000 ha of on-farm irrigation area. As can be seen in Tables 1 and 2 the project has already exceeded 160 WUAs. Given such a large number of WUAs, milestones have proven a good way to track WUA performance. Table 4 shows the status of WUAs in the country with respect to reaching milestones as of 1 April 2004.

Table 4. Number of WUAs at Different Milestones-By Province

Mile-Stone	Batken	Chui	Issyk-Kul	Jalal-Abad	Osh	Naryn	Talas	Total
0	1	6	0	4	0	2	0	13
1	2	9	7	6	9	8	13	54
2	0	6	6	24	11	13	0	60
3	1	36	1	1	15	5	0	60
4	10	18	10	6	18	9	33	104
5	6	3	0	1	1	1	3	14
6	0	0	1	1	1	0	0	3
7	3	5	5	9	8	5	5	40
Total	23	77	31	52	63	43	54	344

Qualification for rehabilitation is first come-first served although there is some pressure to ensure funds will be spread around the seven provinces. As can be seen already there are more than enough qualified WUAs to utilize all the OIP rehabilitation funds. In fact, the project is already in the process of working with around 60 WUAs for rehabilitation and the project will identify the remaining WUAs for rehabilitation during 2004.

WUA Irrigation Service Fees

As can be seen in Table 5 irrigation service fees have been increasing in all the provinces, but are still too low to ensure sustainability. One of the main tasks of WUA leaders and P-WSUs and D-WSUs is to persuade WUA members that they need to increase their irrigation service fees. Of these fees, a percentage has to go to the D-DWR to pay for water services delivered to the WUA while the remainder of fees collected is used for O&M.

Table 5. Irrigation Fee Changes-2000, 2001, 2002, 2003 ($/1,000m^3)

Province	2000	2001	2002	2003
	($/1000m^3)	($/1000m^3)	($/1000m^3)	($/1000m^3)
Osh	.70	.86	.90	.97
Jalal-Abad	.86	.87	.87	.94
Naryn		.22	.26	.27
Talas		.77	.78	.80
Batken		.53	.60	.73
Isyk-kul		.48	.54	.86
Chui		.86	.90	1.03
AVERAGE	NA	.66	.70	.80

KS 43 = US$1.00

Table 6 illustrates the approved 2004 WUA budgets for O&M and repair costs by province.

Table 6. Planned WUA Budgets for O&M and Repairs-2004

No.	Province	Area Irrig	WUA Budget (US$)		O&M and Repairs (US$)		
		(ha)	Total	Per ha	O&M	Repairs	Repairs per ha
1	Osh	91,274	239,998	2.63	187,979	52,018	0.57
2	Jalal-Abad	79,437	213,798	2.69	137,228	76,570	0.96
3	Naryn	58,886	77,527	1.32	56,957	20,594	0.35
4	Talas	88,677	110,827	1.25	81,585	29,242	0.33
5	Batken	41,339	115,010	2.78	98,160	16,850	0.41
6	Isyk-kul	60,903	80,173	1.32	60,904	19,269	0.32
7	Chui	193,279	279,107	1.44	234,300	44,807	0.23
	TOTAL	613,795	1,116,439	1.82	857,090	259,349	0.42

Source: Data collected by District WSUs. KS 43 = $1.00

Osh, Jalal-Abad and Batken are planning on collecting around $3/ha for WUA O&M and repairs while the remaining provinces are collecting about half this amount. Over the next few years P-WSUs and D-WSUs need to work closely with WUA leaders to educate them on the need to provide sufficient resources to sustainably maintain and operate the irrigation infrastructure. This means that irrigation fees need to be about three times what they are at present in Osh, Jalal-Abad and Batken and around six times what they are in the other provinces.

An associated problem along with low payment is the tendency for members to pay in kind. This costs both WUAs and D-DWRs and is a continuing source of financial difficulty. Working with D-WSUs and WUA leaders, P-WSUs need to start a program for gradually weaning WUAs away from payment in kind. In

fact, D-DWRs have already issued a memo instructing WUAs to pay at least 70% of their irrigation service fees in cash.

WUA Debts to DWR

When the project started former collective and state farms as well as WUAs had very large debts to the DWR for irrigation service. This was a serious burden on D-DWRs as a significant percentage of their budget was to come from irrigation service fees. A sign of improvements in the situation, as well as a reflection in the maturation of WUAs, is the reduction in debts owed to D-DWRs. In January 1998, when OIP was being designed, debts to the D-DWRs were around $1.55 million. In contrast debts owed to D-DWRs by the WUAs in January 2004 are $0.54 million. Thus, over the life of the project to date not only have WUAs increased the percentage of payments to D-DWRs, they have also paid off more than 60% of their debt to D-DWRs.

OIP INFRASTRUCTURE REHABILITATION

Despite the slow start to rehabilitation activities, considerable progress has been accomplished during the past year and useful experience gained from initial rehabilitation contracts. A total of 80 WUAs have now been identified serving an irrigated area of about 155,000 ha, or 97 percent of the project target. Table 7 details the status of rehabilitation work under the project. One sub-project has been completed, 23 are under construction, and another 24 sub-projects are contracted. D-WSUs are working with another 20 WUAs that are moving into the rehabilitation phase.

Table 7. OIP Rehabilitation Status

Status	No. Sub-Proj's	Irrigated Area (ha)	Costs ($ '000)	Cost Increase	Cost/ha ($/ha)	Percent Complete
Complete	1	3,268	83	37%	25	100%
On-going	23	47,303	5,309	10%	112	35%
Design						
-complete	13	24,160	1,897			
-ongoing	23	41,397				
Proposed	20	38,939				
TOTAL	80	155,067				

FUTURE ACTIVITIES

After some confusion about legal ownership of on-farm irrigation infrastructure, the Government has now passed a resolution that clearly gives ownership to WUAs. Over the next year it is important that all WUAs inventory and register their infrastructure with the State Agency on Registrations of Rights for

Immovable Property. With assistance from the World Bank and USAID, the Kyrgyz Republic is in the process of passing a national Water Code. Water contracts and water rights established under the Code will have an impact on the way WUAs operate. In addition, authority to establish irrigation service fees will be moved from Parliament to a transparent process between the water provider (DWR) and WUAs.

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