USAID FAMILY FARMING PROGRAM

TAJIKISTAN

BUILDING WUA SUPPORT CAPACITY IN TAJIKISTAN

DECEMBER 23, 2014

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ACRONYMS

ALRI	Agency for Land Reclamation and Irrigation
FAO	Food and Agriculture Organization of the UN
FFP	Family Farming Program
GDP	Gross Domestic Product
GoT	Government of Tajikistan
ISF	Irrigation Service Fee
MEWR	Ministry of Energy and Water Resources
MLRWR	Ministry of Land Reclamation and Water Resources
OF	On-farm
TjS	Tajik Somani
USAID	United States Agency for International Development
WB	World Bank
WUA	Water User Association
WUAF	Water User Association Federation
UWUA	Union of Water Users Associations

BUILDING WUA SUPPORT CAPACITY IN TAJIKISTAN

EXECUTIVE SUMMARY

Water User Associations (WUAs) are key elements of the new irrigation and drainage management set-up envisioned for Tajikistan. Although some 400 of these WUAs have been created in one form or another over the past 13 years, perhaps 100 remain active. This high failure rate is a result of (a) the inappropriate and sometimes cursory processes followed by some donors in establishing WUAs, (b) a flawed mechanism for financing WUAs, (c) heavy emphasis by the government on using WUAs as tax collectors, and (d) an absence of ongoing support and training for WUA boards, managers, and staff. The program proposed here addresses items (a) and (d), while policy changes by the GoT are needed to address the other two problems.

Most WUAs in the country were established under donor-financed support projects. Often these projects were infrastructure rehabilitation projects that had WUA-creation as a secondary component. These projects employed different methods in establishing WUAs – some using administrative boundaries as a basis for organization while others used more appropriate hydrologic boundaries; others working to create tiny organizations that are too small to be financially viable. Typically these projects provided training and support to the WUAs while the projects operated. However, once the projects were completed, this support vanished. An effort to create a central WUA support unit under the ministry in 2007 worked briefly, but it too withered once project funding ceased. An effective, committed, and sustainably-funded training and support facility for WUAs is needed if the national water management vision involving WUAs is to be realized.

Proposed here is a five-year $8.5M project to do the following.

- Create new WUAs where they have not previously been established
- Re-form and re-train previously-established-but-failed WUAs
- Develop and present new training modules for on-going capacity-building training for functioning WUAs
- Train ALRI field staff in joint system operation practices in cooperation with WUAs
- Establish a nation-wide union of WUAs (UWUA[1]) to provide a base for on-going training and support for its member WUAs

[1] Union, in this context is meant to distinguish from Federation of WUA, which have already been created, and are necessarily hydrologically connected to the same irrigation water source. Under

- Transfer training responsibilities to a program operated by the UWUA and financed by WUA contributions

The project would consist of two phases. The first of these would expand WUA coverage nation-wide by establishing as many as 300 new or reformed and revitalized WUAs, expand the pool of qualified WUA trainers, and create new in-service training programs for WUA boards, managers, and staff. During the second phase, training facilities and responsibilities would be handed over to the nation-wide UWUA for continuing operation.

Government action is required to address items (b) and (c) mentioned above. To do this GoT would need to develop a sharing mechanism for irrigation service fees collected from farmers and currently transferred entirely to the Agency for Land Reclamation and Irrigation (ALRI) and relieve the onerous tax burden currently imposed on both ALRI field units and WUAs.

Tajik Law, there is no defined organization type called “Federation”, so WUA wanting to create Federations have been registering under the “Union” as their legal label.

INTRODUCTION

The first Water User Associations (WUAs) in Tajikistan were set up under a World Bank project in 2001. Since that time, around 400 WUAs have been established with donor assistance, employing varying governance structures, boundary definitions, intervention modalities, training, and post-establishment support. Projects supporting these interventions had a combined budget of $150 to $200 million[2].

Global experience has shown that WUAs, once established, require continuing support and training for a number of years to achieve sustainability. Such support is currently conspicuously absent at a national or regional scale in Tajikistan. Individual WUAs might receive additional training and advice from the project that established them, or possibly from a follow-on project of the same donor, but donor support for an on-going support mechanism at a national or regional scale has thus far not been forthcoming. This has been a major contributing factor to the high failure rate experienced by the WUAs. A WUA support unit was established within the government in 2007, but it lacks skilled staff and an operating budget and has been inactive for the past several years.

The most coherent and consistent approach to WUA formation has come from a pair of USAID-supported projects – the WUA Support Project (WUASP) (2004-2010) and the Family Farming Project (FFP) (2010-2015). Together these two projects have created 108 WUAs, over the past 10 years, most of them in Khatlon Region. Recognizing the threat to the sustainable operation of these and other WUAs posed by the absence of an effective ongoing support system, the FFP[3] commissioned the present assessment of options for establishing a comprehensive nation-wide program for creating and supporting WUAs.

The report is based on a study conducted in November 2014 in Dushanbe in close collaboration with ALRI[4]. The plan of the report is as follows.

The section following this introduction provides background on the proposed project giving a brief history of WUA development in Tajikistan and the establishment and senescence of the WUA Support Unit (WUASU) within the Agency for Land Reclamation and Irrigation (ALRI) and highlights the need for an effective nationwide support and training facility for WUAs. The next section describes WUA support and training needs. That discussion is followed by a proposed two-phase development program for a WUA support capacity in Tajikistan, considering both current critical needs and past experience with WUA support in the country. The program description includes a tentative timeline and an illustrative budget. The final section highlights conclusions reached.

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[2] IWMI. 2014. Impact evaluation protocol: impact of WUAs on water and land productivity, equity and food security in Tajikistan. IWMI Central Asia Office, Tashkent.

[3] The FFP is a 5-year project funded by USAID and implemented by DAI.

[4] Authors were Dr. Mark Svendsen of DAI and Mr. Husniddin Sharofiddinov.

BACKGROUND

FUTURE VISION OF WATER MANAGEMENT

In 2013 the government embarked on a restructuring of its water sector institutions. Government Decree 12, dated November 19, 2013, abolished the Ministry of Land Reclamation and Water Resources and divided its functions between two newly established governmental bodies – the Ministry of Energy and Water Resources (MEWR) and the Agency for Land Reclamation and Irrigation (ALRI). Functions for reclamation and irrigation and drainage were transferred to the newly established ALRI, while policy-making functions were lodged in the MEWR.

The main objective of the reform was to separate preparation of policies and guidelines from the functions of providing irrigation and drainage services by operating and maintaining irrigation and drainage systems. The overall policy framework for the new structure is described in *Water Sector Reform Strategy*, which is still in draft. A strategy for irrigation and drainage service provision is also currently in draft and is expected to be finalized in early 2015.

At the base of the irrigation water management system, a set of WUAs organized on the basis of hydrologic boundaries is envisioned, covering all irrigated areas of the country. These WUAs will operate and maintain local-level (on-farm) irrigation and drainage facilities and serve as water suppliers to individual farms. It is also envisioned that clusters of WUAs sharing a water supply (canal) would form federations which would provide a forum for exchanging experience, allow for joint purchase and operation of machinery and equipment, provide a unified voice in discussions with outside agencies, and possibly allow them to take on higher-level system management responsibilities in the future.

ALRI would serve as a bulk water supplier to these WUAs and would remove drainage water collected by on-farm drainage systems, using its network of larger canals and main drains. To interface effectively with WUAs, ALRI must reorganize its field units on the basis of hydrologic units (canal commands). At present, ALRI Districts operate on the basis of boundaries which coincide with the Regional (Oblast) and district (Rayon) boundaries of the civil administration, managing only the portions of canals and command areas within these boundaries. This creates two severe problems.

First, canals cut across District boundaries, making unified planning, budgeting, and management of these canals extremely difficult. Coordination mechanisms exist, but they are cumbersome and often ineffective. The 70 km long Vakhsh Canal in Khatlon, for example, cuts across four different Districts (Sarband, Vakhsh, Rumi, and Qumsangir) along its course. Moreover the command areas served by the canal lap over into still other Districts. Thus a request for water by a farmers' group in Jilikul would go to the ALRI District Office in Jilikul, and then be passed upwards to the Khatlon Regional Office before being relayed to the Rumi District which is actually controlling the water flow. A single ALRI office controlling the entire canal, from Sarband to the tail, could operate far more effectively, efficiently, and responsively.

Secondly, a District may be responsible for portions of a number of different canals which might pass through its area. Budgets for these canals are combined and there are no cost centers which would allow separate accounting for the costs and revenues associated with each canal. This severely limits accountability for performance and the information available to managers in making decisions.

At the water resource level, four basin organizations are to be created for the four major water basins in the country. The organizational home of these four basin organizations is still being discussed.

WUA ESTABLISHMENT

WUA establishment in Tajikistan began around 2000 in an effort to replace the management formerly provided by irrigation brigades on large Soviet-era state and collective farms. Land reform programs of the early 2000s exacerbated this challenge by greatly expanding the number of individual cultivators. WUAs were established using a variety of models and methods, resulting in great variation in sizes, boundary definitions, governance practices, and degrees of participation.

No reliable figures exist on the number of WUAs which have been established in Tajikistan, the area they cover, and most importantly, the number of WUAs which remain active today. A study prepared for the ADB[5] in 2012 reported that as of October of that year, 258 WUAs had been registered, but estimated that only about 50 of these remained active[6]. The ALRI WUA Support Unit currently reports that 412 WUAs have been established and that 389, covering 354,000 hectares, are active. This last report must be treated with abundant scepticism. Many registered WUAs were formed simply by administrative fiat and received no training of any sort. These are almost certainly inactive now. Other WUAs were formed on the basis of Jamoat (sub-district) boundaries, which would not allow them to be effective water managers and renders them unlikely to be operating. At most, there may be 200 WUAs in the country which are currently active, though the actual figure may be closer to 100. In addition to the WUAs formally registered with the Tax Commission[7], local water management is provided by a number of other types of organizations, including dehkan farms, associations of dehkan farms, Jamoats, and, in mountainous regions, indigenous water users associations.

The ADB report provides a fairly detailed analysis, based on the fragmentary records which existed, of the history of WUA establishment in the country and of the current strengths, weaknesses, opportunities, and threats which characterize WUAs. Among the problems faced are dilapidated local level infrastructure, weak management and technical skills, WUAs established without training and based on administrative boundaries, WUAs that were too small to be viable, low farm incomes, low fee collection rates, and shortages of operating funds. While many of these problems are interconnected, and a number are beyond easy remedy, other important problems reflect insufficient training and a lack of ongoing support.

WUA SUPPORT UNIT

While individual donor-assisted projects have provided support to the WUAs they helped to establish during the lifetime of the project, the sector lacks an effective mechanism for providing ongoing training, advice, and other support to already-established WUAs following the close of these projects. The Asian Development Bank attempted to address this gap in a technical assistance (TA) activity[8]

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[5] ADB TA8015-REG

[6] AHT. 2013. Developing Water Resources Sector Strategies in Central and West Asia: Republic of Tajikistan. ADB.

[7] Formerly, registration was with the Ministry of Justice.

[8] Support for Monitoring Policy Reforms and Improving Farm and Water Management (TA 4472-TAJ).

which was implemented between November 2005 and December 2007. One component of this TA aimed to establish a WUA Support Unit (SU) within the Ministry of Water Resources and Land Reclamation (MWRLR). This resulted in the issuance of a Ministerial Order in May 2007 establishing the Support Unit (Annex 1)[9]. The SU was established with 5 staff members in the central office and field personnel appointed in oblasts and ten districts in which donor-funded rehabilitation projects were then operating. The central positions were supported by Irrigation Service Fee (ISF) revenue while the 10 field offices were equipped and supported by various donor-assisted projects.

This SU operated relatively effectively for a couple of years while donor funding supported field operations. However from 2010, following the closure of these projects, it has been largely inactive. The SU presently has five authorized positions but only three of these are filled – a director and 2 staff members. Staff generally do not have specialized expertise in WUA operations and support. The unit lacks operating funds for training activities and travel and staff seldom undertake field visits. Its present budget consists entirely of salary lines, which total TJS 5,109 (US$ 1,022) per month or about US$12,200/year.

NEED FOR COMPREHENSIVE WUA SUPPORT PROGRAM

There is a critical need to re-establish a capable national-level WUA support capacity in Tajikistan for the following reasons.

- WUAs have emerged as a permanent and integral part of the irrigation and drainage system management structure in the country, and effective overall irrigation management now depends on their effective performance.
- International experience shows the critical need for WUAs to have access to periodic training and sound technical and administrative advice following their establishment.
- Over the past 13 years, initial training for WUAs and some follow-up training has been provided by a variety of donor-assisted projects; however when those projects ended, WUAs have been left on their own. Some have survived this cessation of support, while many others have not.
- WUA-establishment programs supported by the World Bank, USAID, ADB, SDC, EU, UNDP, Aga Khan, and others have used a variety of models and approaches in forming WUAs, resulting in WUAs organized and operating in a number of different ways. Over time, the bottom-up methodology pioneered and refined under successive USAID-funded projects[10] has emerged as the standard approach for organizing WUAs in Tajikistan. While allowing for regional variations, all WUAs need to be brought into overall conformity with this relatively successful approach.

The statement of work for this assignment calls for developing a plan for strengthening "the WUA Support Unit" probably envisioning the SU currently existing within ALRI. This mandate has been

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[9] Following the separation of ALRI and the Ministry, a decree designating ALRI as the "State Authorized Body for regulation and state support of WUAs" was prepared and currently awaits signature by the President.

[10] The WUA Support Program (WUASP) which operated from 2004 to 2011 and the Family Farming Project (FFP) which began in 2010 and concludes in early 2015.

interpreted broadly to encompass an examination of the support needs of WUAs across the country without prejudging how such support should be organized or where it should be housed. In developing such a nation-wide support capacity, full account needs to be taken of the disappointing experience with the WUA SU established within the Ministry of Water Resources and Land Reclamation (MWRLR), as well as the experience of the two USAID-supported projects which have shown initial success in forming sustainable WUAs in different regions of the country. The result is a recommendation for the functions, structure, funding, and governance of an effective WUA support service in the country.

WUA SUPPORT NEEDS

OVERVIEW

At the outset, it is critical to recognize that WUAs are independent member-controlled non-governmental organizations and are not local branches of any government department or agency. As such, no public agency has a legitimate right to influence internal decision-making by a WUA, as, for example, in selecting board members or a board chairman or hiring staff. The relationship between a WUA and a government agency, in turn, is governed by a contract between the two parties, usually specifying payment to be made in exchange for services. The usual service provided is the delivery of a bulk water supply by the public agency to the WUA.

At the same time, WUAs must be accountable to their members and to their board of directors. This requires annual membership meetings where proposed budgets and work plans for the year are reviewed and approved. Dealing with WUA finances in an open and honest manner is particularly important. This requires an annual review of the accounts of the WUA by either an outside accountant or an audit committee comprised of WUA members who are independent of the Board.

The ALRI WUASU has been assigned two separate tasks related to WUAs. One is "regulation" of WUAs, which, in light of their independent status, primarily involves monitoring of WUA activities and collecting data and processing statistics related to WUAs and irrigation. The second task is the "support" of WUAs, which involves provision of training, advice, and standardized practices. Support can also include provision of material goods such as office equipment, software, water measurement devices and the like. These two tasks are quite different from each other and need to be treated separately. In addition, certain kinds of training and support to WUAs may be better provided by outside agencies.

ESTABLISHING WUAS

The process of establishing a new WUA has been well developed, refined, and tested under a pair of USAID-funded projects, and is documented in a guide prepared by the FFP[11]. The *Guide* includes a set of 19 training activities, which are organized into 5 separate training modules employed during the WUA formation process (Annex 2). Two of these modules are provided prior to formal establishment of the WUA and the remaining three following establishment. All 5 modules are intended to be delivered in a planned sequence over a seven-month period. The *FFP Guide* also includes an additional training activity for training trainers (TOT) who will implement the training programs in the guide.

ONGOING WUA SUPPORT

While the procedure for establishing a WUA has been well developed, virtually no effort has gone into developing training activities and procedures to support WUAs after their establishment. There are a number of reasons why such follow-up training is important.

- Board members, board chairmen, and WUA staff such as managers, engineers, and accountants inevitably change from time to time. The new board and staff members require

[11] FFP. 2014. Guide for establishing strong water users associations in Tajikistan.

training in governance practices, conflict resolution, WUA accounting systems, water measurement, and the like.

- WUAs may acquire new responsibilities. For example, pumping stations may be turned over to them to operate, or responsibility for certain maintenance activities may be transferred to a WUA.
- WUAs may acquire new equipment, such as a backhoe or an excavator, which will require technical training in operation, maintenance, and repair.
- Changes in legislation, including the WUA Law itself, and changes in implementing regulations may lead to a need for additional training to re-orient WUAs to new practices.
- New technical or administrative management practices, such as volumetric measurement of water deliveries to WUAs, may become feasible which require new training to employ.
- ALRI may change its operating practices which will require changes in the way WUAs operate as well.

Training activities to address these needs will generally need to be tailored to changing and evolving needs. Hence the capacity to design effective new training activities is needed, along with the ability to deliver currently-existing training programs during the process of WUA formation.

CHANGING PATTERNS OF SUPPORT OVER TIME

Needs for these two different types of WUA support (establishment and in-service training) will shift over time (Figure 1). Initially, the need will be to establish new WUAs on the 40 to 50 percent of irrigated area where WUAs have not previously been organized (blue line) and to re-establish moribund WUAs. This will require a concerted effort across all of the basins in the country. As this effort is winding down, in-service training will ramp up. This follow-up training is needed to bring all WUAs in the country into the same general mode of operation (rising part of red line) and to provide on-going training and support going forward (continuing part of red line), as outlined above.

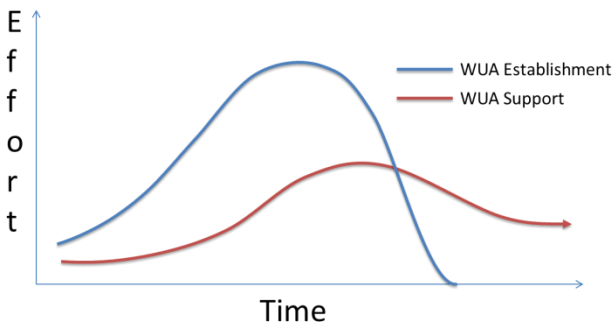

Figure 1. Shift in WUA support needs over time

OTHER TRAINING NEEDS

AGENCY STAFF TRAINING

ALRI district staff responsible for delivering water to WUAs also require orientation to WUA roles and responsibilities and training in developing and implanting water service contracts with WUAs. Of

the total ALRI complement of about 7,500 employees, perhaps 5,000 would have regular contact with WUA staff members when all irrigated areas are covered by WUAs.

Moreover, as volumetric water contracting based on actual measured amounts (rather than estimated amounts) becomes the norm, it will require training in water measurement, water measurement device calibration, volumetric water calculations, and record keeping. This important ALRI staff training needs has so far been unaddressed, but is an equally important component of a successful water management program based on local level management by WUAs.

Additionally, most senior ALRI managers at the central and Raivodkhoz levels do not have experience with the modern systems of irrigation water management which involve management by WUAs at the local level and management by a public agency at the main system level. Participation in study tours, in countries like Turkey, where such management is well-developed could be very beneficial.

ENGINEERING EDUCATION

Most engineers employed by ALRI, as well as those employed by WUAs, receive their education at the Hydromelioration Faculty of the National Agricultural University. However, the curriculum employed in the university generally does not take into account the new system of joint water management which is replacing the old unified top-down system of water control. There is a need to develop a special course at the university level that will orient young engineers to modern management approaches and techniques. The same is true of the two-year course of study at the Technical University, where technicians are trained.

OTHER SUPPORT NEEDS

WUAs have other support needs that are often beyond their financial capability. These include constructing small offices for themselves and selective improvements to the irrigation distribution network such as the installation on control gates and installation of water measurement devices. While the provision of these items is beyond the scope of this proposal, external support in supplying additional investment funding for such items would greatly strengthen the entire WUA organization and development process. The FFP included a grant funding pool to support both office construction and installation of control gates in the WUAs which it assisted in Khatlon province. Under the proposed nation-wide WUA support project, such support would have to be secured from other funding sources, but this is a fertile area for cooperation with other donor-assisted projects.

DEVELOPING WUA SUPPORT CAPACITY

PAST EXPERIENCE

The traditional approach to the problem of providing the kind of WUA support discussed above would be to create and staff a unit within the national irrigation agency. Typically such a unit would be supported by donor funding initially and then would revert to government financing after the donor assistance project ended.

This is exactly the approach that was employed in 2007, when an ADB Technical Assistance activity[12] recommended the creation of a WUA Support Unit (WUASU) within the Ministry of Land Reclamation and Irrigation (MLRI). A support unit was established in response to that recommendation and provided with about US$ 500,000 in assistance in 2006 and 2007. In addition, three other donor-funded irrigation rehabilitation projects then operating in the country[13] equipped and supported field officers in selected oblasts and Raions to organize farmers within the service areas of the projects being rehabilitated with project assistance.

During this period, between 2007 and 2010, capable WUA mobilizers were employed with donor support and a number of WUAs were established. Following the termination of project funding for these positions and for field expenses however, funding levels dropped drastically and qualified staff left for other employment. From this point onward, without significant funding, and very limited staff resources, the WUASU became largely inactive, and it has provided little or no support to existing WUAs since that time. This experience highlights several critically important drawbacks of this traditional approach.

First, donors are far more willing to allocate financial resources to WUA support than are government administrators. This is not necessarily a criticism, given the limited overall budgets that Government of Tajikistan (GoT) managers have to work with and the many pressing demands on those budgets. In fact, the Government Order establishing the WUASU in 2007 specifically indicated that the support of the "unit, sub-unit, and positions" should be funded from irrigation service fee (ISF) revenue collected from farmers (see Annex 1). However ISF revenue also has many demands on it[14] and the share of ISF allocated to the ALRI WUASU by the agency has been insufficient to do more than keep a director and a skeleton staff in place.

Second, even if sufficient operating funds were made available, specialists and trainers hired by the ALRI WUASU would be paid according to the civil service salary schedule. At present, this would remunerate them at between TjS 634 to TjS 945 per month (US$ 121 to US$ 180). At the same time,

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12 ADB TA 4472-TAJ.

13 These were the Agricultural Rehabilitation Project (ADB), the Irrigation Rehabilitation Project (ADB), and the Ferghana Valley Water Resources Management Project (World Bank).

14 The largest single claim on these funds is often the payment of VAT and accumulated interest on unpaid VAT to the Tax Commission by the vodkhozes. This fundamental problem is discussed in more detail later in the report.

the going rates for such professionals with assistance projects or NGOs is between US$ 500 and US$ 800 per month. It seems extremely unlikely that capable professional trainers and mobilizers would be willing to sign on at these low rates.

Third, significant parts of ALRI have yet to embrace the concept of WUAs as independent organizations, instead perceiving WUAs as simply dependent extensions of the local vodkhoz office whose principal function is to collector the irrigation tariff. While this attitude will certainly evolve into one that is more accepting and supportive of independent WUAs, this will take time, and over the shorter term this attitude is likely to compromise the ability of ALRI to act as a constructive and supportive partner in building WUA capabilities.

AN ALTERNATIVE APPROACH

OVERVIEW

Given the fundamental problems embedded deeply within the traditional approach described above, it makes sense to search for an alternative approach that would address these difficulties. Such a model should:

a. Make it possible to hire and retain high-quality staff,

b. Provide for concentrating staff into basin-level units rather that dispersing them among a large number of districts,

c. Allow flexibility in hiring and releasing staff and in shifting staff to appropriate locations in response to changing needs,

d. Have a good chance of being sustainably funded over the long run, and

e. Incorporate a deep commitment to the principle of WUAs as independent organizations accountable to their members.

Based on a consideration of the ineffective past performance of the ALRI WUASU and the positive recent experience with WUA organization under projects supported by USAID and the WB, a two-part strategy is recommended.

The **first phase** would be an effort to do the following.

- Create new WUAs where they have not previously been established
- Re-form and re-train previously-established-but-failed WUAs
- Develop and present new training modules for on-going capacity-building training for functioning WUAs
- Train ALRI field staff in joint system operation practices in cooperation with WUAs
- Establish a nation-wide union of WUAs to provide a base for on-going training and support for its member WUAs

The creation of a nation-wide union of WUAs (UWUA) is a key element of this strategy[15]. The Union would be expected to have 300 to 400 member WUAs and would act as a legal entity with the ability to hire trainers, operate training centers, and provide training for WUA board members and staff. The training centers could also be used by other parties, including ALRI, for staff training; by universities to give students field experience; and for agricultural training for farmers.

The UWUA could also organize regional and national conferences where WUA Board members and staff could meet to exchange ideas and experiences. By joining the new Tajik National Committee of the International Commission on Irrigation and Drainage (ICID), UWUA representatives would be able to interact with irrigation officials, academics, consultants and other irrigation professionals, both nationally and internationally.

The UWUA would be supported by a small annual per-hectare fee paid by each member WUA. It could also receive grants from international organizations interested in supporting irrigation the development in Tajikistan and from the GoT. It would be governed by a board of directors elected by its member WUAs. The board would approve the annual operational plan and budget of the Union at the beginning of each year. It would be required to hire a chartered accounting firm to conduct an annual financial audit of is expenditures. At the end of each year, the board would examine the performance of the UWUA and review its accounts and the financial report of the auditors.

The **second phase** would be a transition to a sustainable longer-term program supported by water users. It would consist of consist of the following steps.

- Finalize materials and methods for on-going training and support
- Progressive handing over of the four regional NGO-run training centers established during phase 1 to the UWUA
- On-the-job training for new personnel of the training centers
- Implement sharing of ISF between ALRI and WUAs
- Payment of a small per-hectare fee annually by each WUA member of the UWUA to support the regional training centers

IMPLEMENTATION

Given the limitations on GoT funding, donor support for the program outlined above would be necessary. The major advantages of such an integrated national program over previous donor-funded efforts are the following.

- Application of a standard proven approach to WUA formation and WUA structure and practices in all areas of the country, rather than implementing a gaggle of disparate project-specific approaches
- Geographic scope that includes both rehabilitation project areas and non-project areas
- A mandate to work with both existing and new WUAs

[15] Note that the UWUA is different from a federation of WUAs. A WUA Federation is an association of several WUAs which share the same water source and are hydrologically connected, while the UWUA is a nation-wide organization whose membership is open to any WUA in the country.

- A singular focus on WUAs rather than being a secondary effort piggy-backed onto much larger rehabilitation construction projects
- A realistic strategy for transitioning from a project-funded mode to a sustainable self-supporting mode in which WUAs support their own on-going training

Program Management

In practice, the program could be operated in one of two ways. In the first option, a **Project Management Unit** (PMU) would be set up within ALRI, with a director and staff employed by ALRI but funded by the project. The PMU would contract with one or more NGOs with capacity to establish and support local level organizations to work with WUAs in six sub-basins of the country. The NGOs would receive training from PMU consultants in establishing WUAs, employing the methodology currently used by the USAID FFP and the WB PAMP-II projects. The PMU would hire local and international consultants, as needed, to train NGO organizers and trainers.

The PMU, working through its consultants, would also assist the sub-contracted NGOs to develop and then implement training programs for ALRI field staff to orient them to modern methods of joint system operation. PMU consultants would work with the Agricultural University and the Technical University in Dushanbe to develop and teach one or more university-level special courses in WUA operation and joint system management to orient young engineers to modern irrigation system management practices.

An alternative to the PMU model would be for the donor to contract with an international consulting firm to provide the services described above through a **Project Office**, working in cooperation with the ALRI WUASU. The PMU model is one generally favored by the multi-lateral development banks, while USAID typically employs a consulting firm to implement its technical assistance projects through a project office. Either mode could be effective.

Use of NGOs

A key feature of both models would be the use of local NGOs to deliver the organizing and training services. The use of NGOs (a) allows greater flexibility in hiring, firing, reassignment and relocation of staff, (b) allows the payment of market-based wages to attract and retain high-quality staff (c), helps expand the pool of experienced organizers and trainers which should, over time, push the down the price of these services, and (d) allows for an easy shift in overall responsibility from the PMU to the nation-wide UWUA.

Transition

During the second phase of the project, the UWUA which was formed during phase 1 would progressively take on the responsibility for on-going training and support for its member WUAs. The project would support this transition through the transfer of furniture, computers and equipment from the NGO offices to the UWUA and through a start-up grant to allow initial hiring of staff and the staging of initial training programs. The UWUA would most likely take over the four regional training centers used by the NGOs and continue to operate training programs from these centers. Alternatively, they might choose to share existing facilities with other organizations, where available, to reduce costs. The NGOs operating the training programs would be downsizing during this process and would eventually withdraw completely. However the UWUA would very likely choose to hire some of the organizers and trainers formerly employed by the NGOs.

Funding for operating the training centers would come from a small assessment on the WUA-members of the WUAU. For example, an annual assessment of TJS 1 per hectare would yield $100,000 annually if assessed on 500,000 hectares[16].

As an alternative to a single UWUA operating all four basin-based training centers, it would be possible to create four separate unions – one in each basin. Each of the four would then be supported by contributions from the WUAs in that basin and would provide training services within the basin.

WUAs to be established

According to ALRI estimates, about 400,000 hectares of irrigated land remains to be covered by WUAs. The distribution of this land by basin or sub-basin, the area covered by active WUAs, and the area remaining to be covered are shown in Table 1[17]. It is proposed that training centers be established initially in six locations, with NGO offices located in four cities (Khujand, Dushanbe, Qurghonteppa, and Kulob), one in each of the four major basins in the country. Two of the training centers, Sharitus and Rasht, would be sub-locations, established because of long distances within the basin, managed from one of the four basin centers.

16 A similar union of WUAs in Mexico currently assesses 3 Pesos (US$ 0.22) per hectare for such a supporting function.

17 The numbers in this table are provided by ALRI and are somewhat speculative, since reliable figures are not presently available.

Table 1. Irrigated area and WUA coverage, by basin

		Area ('000 ha)			
Basin	**Office**	**Irrigated**	**WUA**	**Remaining**	
Syr Darya	Khujand	288	180	108	
Kofarnihon	Dushanbe	79	12	67	
	Shahritus	57	13	44	sub-office
Vakhsh	Qurghonteppa	191	102	89	
	Rasht	27	0	27	sub-office
Panj	Kulob	109	47	62	
Total		751	354	397	

The area remaining to be covered, around 400,000 hectares, would imply that between 200 and 400 WUAs are needed to complete coverage of the entire irrigated area of the country. While larger WUAs of say 2,000 hectares each are preferred because of the economies of scale to be achieved, their boundaries must also conform to hydrologic boundaries within the irrigated area which may constrain their size. International experience has shown, though, that smaller WUAs adjacent to each other sometimes choose to share staff, an accountant, for example to reduce their costs. In addition, smaller WUAs sometimes choose to merge to form a larger unit that is more economical to operate. This could tend to increase the size of WUAs over time, even where smaller ones might be necessary initially.

ALRI WUASU

The ALRI WUASU would play an important monitoring role. Its tasks would include collecting and reviewing annual reports from WUAs nationwide and creating and maintaining a consolidated database of information on WUA operations, water supplies, irrigated area, and expenditure patterns. It would also track irrigation-related technical assistance projects. The WUASU would facilitate relationships between WUAs and ALRI O&M staff, assist with registration of WUAs with the Tax Committee, and help facilitate WUA interactions with other government agencies. It would also work with the PMU during the project to plan and schedule work and advise the project on all phases of project activity.

To perform this role, the ALRI WUASU would require an experienced water data analyst, database and data entry specialists, modern computer equipment, and vehicles and an expense budget for making field visits. These specialists would need to be appointed by ALRI at the outset of the project, and could receive on-the-job training from the project over the course of its implementation.

One key WUASU activity would be the establishment in each basin of a “demonstration WUA” completely equipped with water measurement devices. These demonstration WUAs would serve as field training sites for both WUA and ALRI staff in water measurement practices, calibration of measurement devices, and data recording and management. These demonstration sites could also be sites for other kinds of training; for example in water management, system maintenance, or agricultural practices; for both ALRI and WUA staff .

Duration

The program would be designed to operate for five years, with the first three years devoted to expansion of WUA coverage and the fourth year devoted to developing materials and methods for on-

going training and support and establishing a nation-wide union of WUAs. The final year would be devoted to carrying out the transition from the project and its NGO sub-contractors to the UWUA, or regional WUA unions.

UNION OF WATER USERS ASSOCIATIONS

The UWUA would have as its objectives, (a) to provide continuing training and advice to the directors, staff and member of WUAs belonging to the Union, and (b) to represent the interests of member WUAs in discussions with government agencies and authorities.

The Union would be governed by a board consisting of between 7 and 11 members, elected by the governing board chairmen of all WUAs who are members to the UWUAs from among their own ranks. Its staff would consist of an executive director, an accountant, and an administrative assistant, plus a set of experienced trainers. The exact compliment of training staff would depend on the configuration chosen for the UWUA training centers, the volume of training anticipated, and the budget available. Depending on these factors, there might be only one national training center, probably located in Dushanbe, or several centers located in areas in which irrigated area, and therefore WUAs, are concentrated.

Trainers would be drawn from the ranks of the NGO trainers who gained skills and experience under the (donor-funded) project prior to the establishment of the UWUA training centers. They could be hired directly by the UWUA, or if the training programs only took place occasionally, training could be outsourced to the NGOs. The latter model would have the advantage of not needing to keep a permanent contingent of trainers on the payroll at all times. Hiring training services through an NGO only when a training program was to be conducted would have the advantage of lower annual salary costs. The disadvantage of this arrangement would be the higher overhead costs involved in undertaking periodic contracts with an NGO, which would offset, to some extent the savings afforded by the “as-needed” arrangement.

Costs of the arrangement would depend on the factors outlined above. A preliminary estimate of costs is shown in Table 2. For the purposes of the estimated budget, it is assumed that the UWUA would maintain 4 training centers nation-wide and a central office in Dushanbe, and would train 500 people annually in 25 training courses. If permanent training centers were not maintained and training courses held in ALRI facilities or other donated facilities, costs would be lower. It is assumed that many unit costs under a self-financed mode would be somewhat lower than under an externally-funded project mode.

[redacted]

REQUIRED POLICY CHANGES

Two important policy changes are necessary for this approach to succeed, both involving finances.

Sharing Irrigation Service Fees

The first change required is that the current irrigation service fee (ISF) structure, and the allocation of fees collected, be revised. The ISF currently assessed is 1.5 diram per cubic meter of water delivered (0.3 US cents/m^3 or US$ 3.00/1,000m^3). In practice the fee is somewhat higher, since an 18% VAT levy is added to this fee when billed to farmers. This fee, whether collected directly by the vodkhoz, or collected by a WUA and turned over to the vodkhoz, is taken entirely by the vodkhoz. The WUAs must finance local-level (on-farm) water management with a separate membership fee collected from farmers that is additional to the ISF assessed by ALRI.

Since irrigation services ares now provided by a combination of the vodkhoz and WUAs, however, it is no longer appropriate for the vodkhoz to retain the entire fee. Instead, an appropriate division of the fee receipts between the vodkhozes and WUAs is required, considering the extent of services being provided by WUAs (irrigation water delivery, canal and drain maintenance, fee collection) and the amount of water and other services supplied by the vodkhozes.

At the present time, the ALRI WUASU is funded from a portion of ISF received by the vodkhozes that is forwarded to ALRI in Dushanbe[18]. As noted earlier, the amount actually allocated to the ALRI WUASU is completely inadequate to provide useful WUA support.

As is the case presently, the approach proposed here also depends on ISF revenues to provide on-going support to WUAs. The difference, however, is that under the proposed set-up support services would be funded directly by WUAs from the share of the ISF allocated to them. The money would not pass through ALRI and its budgeting process first, mixing with other funds and often becoming diverted to other purposes. This would be a much more direct and efficient funding channel than the current set-up and would place decisions about the amount of training and support to be provided in the hands of the WUAs themselves, the ones who benefit directly from the capacity-building support. The Government could choose to augment those funds, if it desired, by making grants to the UWUA. The UWUA could also receive grant funding from outside donors earmarked for WUA support.

Eliminating VAT on Nonprofit Service Providers

The second required change relates to the practice of assessing a Value Added Tax (VAT) on ALRI District Offices (vodkhozes). The imposition of this tax has a highly pernicious effect on the entire process of irrigation system O&M. This problem is discussed in more detail in an earlier report[19]. The result of this unusual taxation policy is to divert about one-third of the annual budget of vodkhozes to the tax agency, and to force the vodkhozes to leave most system maintenance unfunded and undone. Vodkhozes are not profit-making entities and there is little justification for imposing such a tax on them. The need to cover this onerous tax burden also focusses most of the vodkhoz's attention on ISF collection rather than on managing water. All in all, the damage caused by the perverse set of incentives created by this tax far exceeds the value of the revenue generated. Removing it would free up as much as 10 million Somonis every year to address the huge system maintenance backlog which currently exists.

PROJECT ACTIVITIES AND TIMELINE

Important project activities and illustrative timing are shown in Figure 2.

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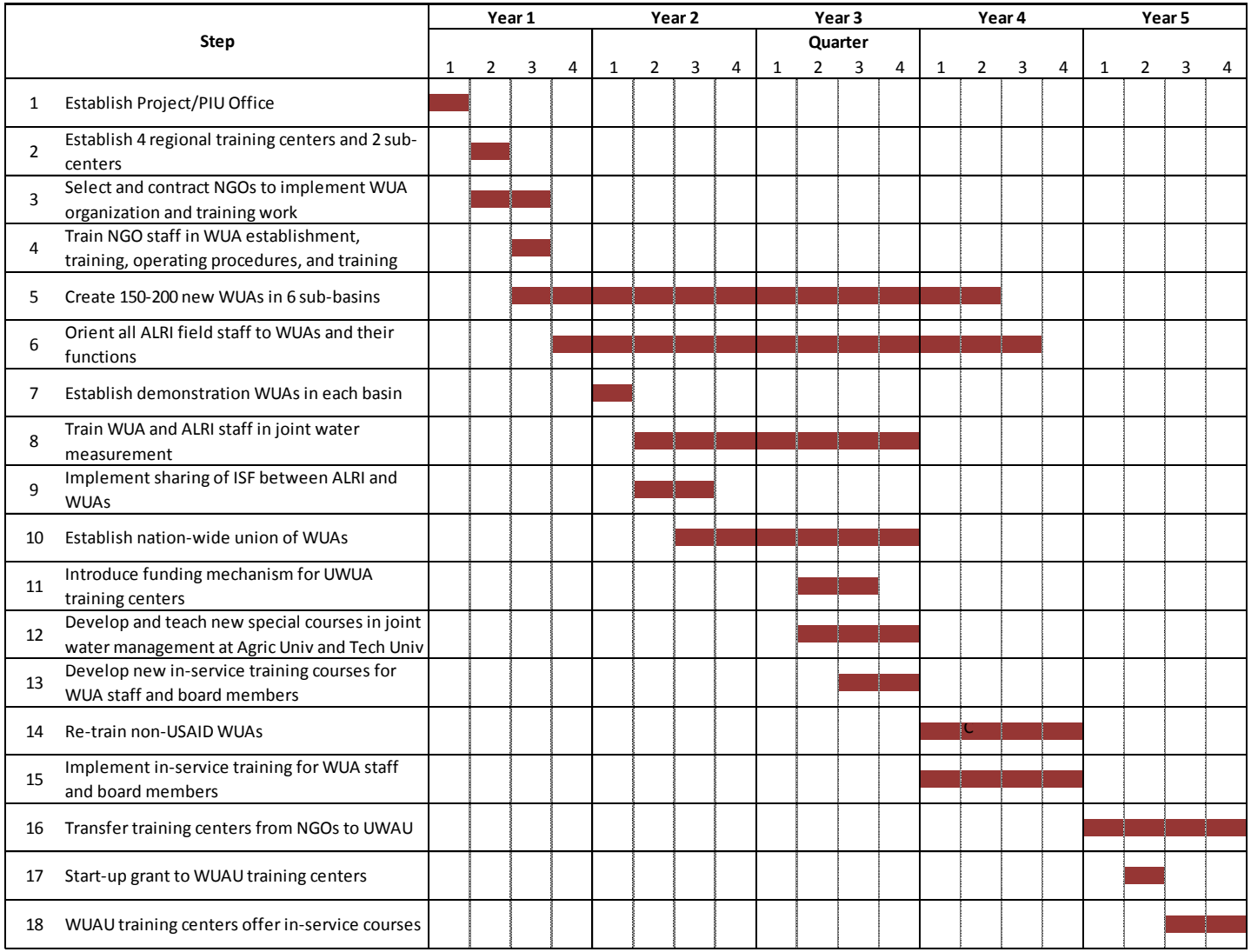
18 Officially, 10 percent of the total amount collected is to be forwarded. In practice the amount remitted is generally less than this.

19 Svendsen, M. and H Sharofiddinov. 2014. Needs-based budgeting for irrigation system management in Tajikistan. FFP.

Figure 2. Project tasks and timeline

Building WUA Support Capacity in Tajikistan



FLEXIBILITY

It would be a mistake to design a program at this point that is too detailed. There are several major policy changes on the table that will affect the plan put forward, including the following.

- Shifting the ALRI field organization from administrative boundaries (oblast and raion) to hydrologic ones. This is an important and logical piece of the design of water management systems in the country and has been under discussion since at least 2006. It has been given new emphasis in the draft *Water Sector Strategy* currently being finalized. Implementing this change will shift, in many cases, the WUAs' point of contact with ALRI, simplify the management of water, and make water management more transparent and accountable.
- Introducing a revised irrigation service fee system which includes a sharing mechanism between ALRI and WUAs. This is an essential component of the future water management set-up envisioned in this report. Failure to implement such a revenue sharing scheme would create a significant risk of non-sustainability for the proposed program.
- The current system of taxation of water management bodies is opaque, unevenly applied, and damaging to the nation's irrigation water management and to its irrigation infrastructure. Its overall effect is to transfer a significant portion of the ISF collected from farmers for irrigation system operation and maintenance to the Tax Commission where it is used for purposes unrelated to irrigation and drainage. At the same time, massive deterioration of irrigation infrastructure continues, due to a scarcity of funds for maintenance. Modifying the taxation system as it applies to irrigation service providers would significantly enhance the chances for successful implementation of this program, and its sustainability. Retaining the present system will have the opposite effect.

WUAs should be closely involved in setting up these arrangements, since they will ultimately be funding them and their buy-in is essential. Once arrangements are in place, a guide outlining the services available from the support agency could be prepared and distributed to all WUAs in the country.

CONCLUSIONS

- WUAs in Tajikistan experience an unusually high rate of failure. There is an urgent need to create a competent and sustainable training and support program for them.
- The traditional approach of creating a hierarchical government unit to support WUAs has been tried and found ineffective and unsustainable; a new approach is required.
- WUAs need to be seen as self-governing, farmer-controlled organizations and not as local branches of the government irrigation agency.
- Increasingly, WUAs and ALRI will work in partnership to manage irrigation systems, linked by contracts and measured deliveries of water.
- As partners in managing irrigation water, ALRI and WUAs need to share the irrigation service fee (irrigation tariff) now collected entirely by ALRI to support water management at both main system and local levels.
- The assessment of a value added tax on not-for-profit irrigation service providers such as ALRI and WUAs creates perverse and destructive incentives that lead to underfunded maintenance, infrastructure deterioration, and a dominant focus on revenue collection, rather than on irrigation service delivery and agricultural production where it belongs.
- The challenge of creating a competent and sustainable support capability for WUAs should involve a two-step process.
    - First, a full complement of WUAs created covering the entire irrigated area of the country under a unified, large-scale, donor-financed program.
    - Second, a voluntary nation-wide Union of WUAs established to assume responsibility for continuing in-service training and support for WUAs.

ANNEX 1. ORDERS ESTABLISHING WUASU[20]

MINISTERIAL ORDER ESTABLISHING WUASU

MINISTRY OF MELIORATION AND WATER RESOURCES

OF THE REPUBLIC TAJIKISTAN

THE ORDER

Date: May 10, 2007

Ref. № 128

Dushanbe city

About establishment of Water Users Association Support Unit under Ministry of

Melioration and Water Resources of the Republic of Tajikistan

In the framework of implementation of the Law of the Republic of Tajikistan "About Water Users Associations" with the view of providing favorable conditions for realization of Projects for "Agricultures Rehabilitation in Tajikistan", "Irrigation Rehabilitation", "Management of Water Resources of Fergana Valley" and Technical Assistance of Asian Development Bank "Support for Monitoring Policy Reform and Improving Farm and Water Management" and on the basis of the letter of Ministry of Finance dated April 12, 2007 with Ref. №2-3-21/579.

I AM GIVING THE ORDER:

1. To establish Water Users Association Support Unit under Ministry of Melioration and Water Resources. Location of the unit is to determine in 5/1 Shamsi Street Dushanbe City.

2. To assign a task to heads of water resource department of Soghd oblast (Mr. Kh. Boirov), Khatlon oblast (Mr. Iskandarov) and Mountainous Autonomous Badakhshan oblast (Mr. Q. Ghulomshoev) to render necessary arrangements by Water Resources Departments of the oblasts regarding support of

20 Unofficial translation taken from the TA 4472-TAJ final report.

water users associations sub-unit and setting up two positions in the list of staff members (Head of unit – 1 position and Senior specialist -1 position).

3. To include one working position of Senior specialist on support of water user associations in Water Resources Departments of the pilot districts: Asht-1, Vahdat, Farkhor, Pyanj, Vakhsh, J. Rasulov, B. Gafurov, Konibodom, Rushon and Rudaki.

4. The maintenance of the Unit, sub-units and positions regarding support of water users associations should be carried out at the expenses of water fee.

5. It should be noted that regarding establishment of the unit, water users associations subunits to pilot districts equipments, furniture, computers and transportation means will be provided according to the agreement by the Projects centers of "Agricultures rehabilitation in Tajikistan", "Irrigation rehabilitation", "Management of water resources of Fergana valley" and Technical Assistance of Asian Development Bank "Support for Monitoring Policy Reform and Improving Farm and Water Management".

6. Heads of water resources departments of oblasts and districts should be given a task so that in coordination with specialists of Support for Monitoring Policy Reform and Improving Farm and Water Management Project to prepare terms of references of staff of water users associations support units till June 1, 2007 and to submit to the ministry.

7. Control over implementation of the given order should be fulfilled by Deputy Minister Mr. H. Hasanov.

M. Hamidov

Minister

AGENCY FOR LAND RECLAMATION AND IRRIGATION UNDER THE GOVERNMENT OF THE REPUBLIC OF TAJIKISTAN

ORDER

22.05.2014 Dushanbe City

No.103

"On establishment of Water User Associations Support Department"

In order to implement the Law of the Republic of Tajikistan "On Water User Associations" and the Resolution of the Government of the Republic of Tajikistan date February 27, 2014 "On Agency for land reclamation and irrigation under the Government of the Republic of Tajikistan" and its Charter and in order to create favorable conditions for implementation of GREEMENTS WITH THE World Bank, Asian Development Bank and Islamic Development Bank and international donor organisations,

I hereby order

1. As of February 5, 2014, to establish a Water User Associations Support Department under the Agency for Land Reclamation and Irrigation Department under the Government of the Republic of Tajikistan consisting of 5 work units.
2. Maintenance of the Water User Associations Support Departments to be from a special account and from proceeds of water delivery fees.
1. Deputy Director Ghaforov B. is appointed to oversee the implementation of this order.

Director H. Hasanov

ANNEX 2. TRAINING COURSES FOR WUA ESTABLISHMENT

WUA Establishment Training Courses

#	Topic	Client group	Duration (days)
1	Training of trainers	Trainers	2.0
2	Establishing a WUA	WUA Exec Committee	2.0
3	Legal issues	WUA Exec Committee	1.0
4	Charters and bylaws	WUA Exec Committee	1.0
5	Governance and records	WUA Exec Committee	0.5
6	Communication skills	WUA Board and zone reps	0.5
7	Irrigation service plan (Ops)	WUA Exec Committee	1.0
8	Irrigation service plan (Maint)	WUA Exec Committee	1.5
9	Irrigation service plan (Finance)	WUA Exec Committee	1.0
10	On-farm water management	WUA Exec Committee	1.0
11	Water measurement	WUA Board and Exec Committee	1.0
12	Dispute resolution	WUA Exec Committee	1.5
13	Irrigation management audit	WUA Exec Committee	1.0
14	Rehabilitation and improvement	WUA Exec Committee	1.0
15	Establishing a WUA federation	WUA Exec Committee	1.5
16	Irrigation service agreement	WUA Exec Committee	0.5
17	Management consulting	Management consultants	1.0
18	Management transfer agreements	WUA Board	1.0
19	Fund raising	WUA Board	1.0
20	Cross-site visits	WUA Board	1.0
			22.0

Source: FFP. 2014. Guide for establishing strong Water Users Associations in Tajikistan.

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