



## CASE STUDY

# Uzbekistan: Improved irrigation based on IWRM approaches

## Summary

Uzbekistan is experiencing water scarcity, an issue which will be exacerbated with increased demand. Although policies exist, the water seldom reaches the end water users. To combat this issue, action has been taken by GWP Uzbekistan to conduct trainings and workshops on the dissemination of IWRM to encourage a participatory multi-sector approach. This case study illustrates the importance of public awareness, and work distribution at all levels.

## Background

The water sector of the Republic of Uzbekistan is a quite complex system composed of water supply and sewerage systems, hydropower, recreation, conservation of water resources, water infrastructure management, fishery, etc. Because of climatic peculiarities of the Republic, about 98 % of all the crop production is gained on irrigated lands. Thus, special attention is given to the state of irrigated agriculture the effectiveness of which is subject to rational water management. To date, the total area of irrigated lands is 4.2 mln ha, which comes to less than 9 % of the national territory. Development of irrigated areas is limited due to lack of fresh water and not effective irrigation technologies. The agricultural sectors, thus, one of the main focuses of the country water management practices. Significant changes have taken place in the political and economic life of the country for the past 10 years; those changes have led to the acceleration of the reforms in the management and rational use of land and water resources. One of these changes concerned the agricultural sector.

The main drawback of the current management structure is the existence of dual hierarchy of the water supply management system. The lifetime of the majority of the irrigation system components has expired while it is not clear who is in charge of changing the systems. This is because the reorganization of shirkats didn't clarify the transfer of the irrigation systems.

## Actions taken

Governmental initiatives regarding IWRM exist but they often fail to reach the end water users. Thus, GWP Uzbekistan held round tables aiming to improve public awareness on the issue.

The work of the GWP Uzbekistan is focusing on sustainable water development based on IWRM, as well as improvement of water facilities. It also conducted trainings and workshops on the dissemination of IWRM in Uzbekistan together with the "Rural Enterprise Support Project - Phase II. Irrigation And Drainage Component " (of World Bank and the Swiss Agency for Cooperation).

The critical role of GWP Uzbekistan in this initiative was to integrate different water management and land reclamation organizations aiming for greater autonomy and self-regulation among IWRM organizations. It also supported the transition from a rigid administrative system of water management to a decentralized with massive public participation in water management.

Based on the analysis of existing irrigation scheme, GWP Uzbekistan supported establishment of Water Users Associations based on hydrographic principle. The Initiative group to implement this has been already created and promoted ideas among farmers during small scale meetings.

GWP Uzbekistan recognized a need to see practical actions and thus supported technical improvements of water supply systems (e.g applying of PVC reusable tubes instead of the traditional plastic film) and worked with water saving technologies introduction in agriculture irrigation.

## **Outcomes**

The program supported the transition from a rigid administrative system of water management to a decentralized with massive public participation in water management. Based on the analysis of existing irrigation scheme, GWP Uzbekistan supported establishment of Water Users Associations based on hydrographic principle. The Initiative group to implement this has been already created and promoted ideas among farmers during small scale meetings. One of the tools of IWRM implementation in Uzbekistan is improvement of channels technical equipments, hydraulic structures regulating water flow and similar. GWP Uzbekistan supported technical improvements of water supply systems and worked with water saving technologies introduction in the irrigation systems.

## **Lessons Learned**

IWRM is a complex approach that requires work to be done at different levels and sectors (e.g technical improvements, public involvement, and institutional rearrangements).

Increased public awareness and involvement can be achieved through number of round tables, seminar and workshops involving water suppliers and water users. However it is important to focus on practical improvements at the same time.

Rigid administrative system of water management can be improved by institutional changes that allow decentralized approaches with massive public participation in water management, such as establishment of Water Users Associations based on hydrographic principle.

Technical improvement should be also considered part of the IWRM implementation.

**Corresponding Author**

Abduraimov, Mansur

**Corresponding Author Contact**

mansurzbz@mail.ru

**Organisation**

Zaravshan River Protection - Uzbekistan

**Year**

2013

**Country**

Uzbekistan

**Region**

Asia

**Keywords**

Food and Nutrition , Integrated Water Resources Management (IWRM)

**Thematic Tagging**

Urban , Water services , Gender , Youth , WEFE Nexus

Language English

**Supporting Materials**

GWP Central Asia and Caucasus

**Related IWRM Tools**

Community-based water supply and management organisations, Multi-Stakeholder Partnerships, Training Water Professionals

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**Source  
URL:**

<https://iwrmaactionhub.org/case-study/uzbekistan-improved-irrigation-based-iwrn-approaches>