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International Commission on Irrigation and Drainage (ICID)



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Achievements of Uzbekistan in Efficiency Increasing of Irrigation and Water Management Sector

2nd Indo Global Irrigation Summit

24-25 June 2026, New Delhi India

Achievements of Uzbekistan in Efficiency Increasing of Irrigation and Water Management Sector

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**Vice-President of International Commission on Irrigation and Drainage,
Manager of Agency for Project Implementation of the International Fund for Aral Sea
Saving in Uzbekistan**

General Information about Uzbekistan

Republic of Uzbekistan is **doubly landlocked country** (to get Ocean it is needed to cross two countries). Uzbekistan located in the hearth of Central Asia and belong to the Aral Sea basin



Total Area	448,900 km ² , 55th country in the world according to a size of its territory
Population	38,236,700 as of 1 January 2026 (42th in the world); Almost 50% of population is rural
Gross Domestic Product (GDP)	145 billion USD in 2025 Pattern of GDP (2025): Agriculture – 16.2%, Industry – 24.8%, Construction – 7.1%, Trade, accommodation and food services – 10.8%, Transport – 8.0%, Net taxes– 4.9%, Others – 28.2%
Key Agricultural Production	Cotton, wheat, vegetables, fruits, grape, melons, silk, astrakhan fur, meat, eggs, and milk
Key Export Goods and Their Share in Export in 2025	Industrial products (11.8%), Gold (29.3%), Services (28.9%), Food products and animals (8.7%), Chemical production (6.3%), Textile (7.8%), other (5.1%)
Key Goods for Import in 2025	Machinery and equipment (33.8%), Industrial products (15.3%), Chemical production (18.8%), Foodstuffs (9.9%), Services (12.1%), Other (10.1%)
Rating in the World Economy	7th place in cotton lint production, 2nd place in astrakhan fur production, 4th place in gold reserves, 7th place in gold extraction, 7th place in uranium mining, and 14th place in gas production
Data Source	The State Committee of the Republic of Uzbekistan on Statistics: www.stat.uz

Water Resources of Uzbekistan

Main sources of water – mountains of Tyan Shan and Pamir



Total natural river flow in the Aral Sea Basin

Country	River basin		Aral Sea Basin	
	Syrdarya	Amudarya	Km ³	%
Kazakhstan	2.426	-	2.426	2.1
Kyrgyz Republic	27.605	1.604	29.209	25.1
Tajikistan	1.005	49.578	50.583	52.0
Turkmenistan	-	1.549	1.549	1.2
Uzbekistan	6.167	5.056	11.223	9.6
Afghanistan and Iran	-	21.593	21.593	18.6
Total Aral sea basin	37.203	79.280	116.483	100



The only 9,6% of the total volume of waters available for use is formed on the own territory of Uzbekistan; about 90% - water from transboundary sources



Irrigation and Water Infrastructure

Total Irrigated Area in Uzbekistan: 4.3 million hectares



4.3

MLN ha

cotton

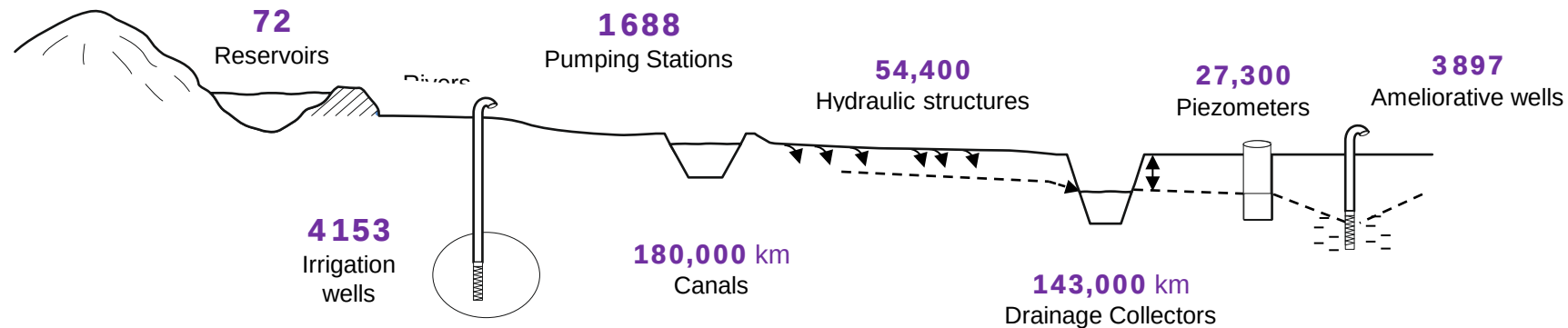
1.02 MLN ha

wheat

1.01 MLN ha

other crops

2.27 MLN ha



Water use by economic sectors



Agriculture



Public utilities



Industry and Energy



Fishery

2021	2025
90 %	88 %
4,5 %	6,9 %
4,3 %	3,1 %
1,2 %	2,0 %

Due to the arid climate, **97,5%** of agricultural production in Uzbekistan is almost entirely **dependent on irrigation**

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The fundamental strategic document is
Concept of Water Management development of the Republic of Uzbekistan for 2020-2030

The concept was approved by Decree of President of the Republic of Uzbekistan No. UP 6024 dated July 10, 2020.

Objectives of this concept:

-  creating conditions to meet ever-growing needs of population, economic sectors and environment for water;
-  ensuring effective management and use of water resources, improvement of reclamation status of irrigated lands;
-  achieving water and food security in context of increasing scarcity of water resources, as well as global climate change.



Concept defines the goals, objectives and 11 priority areas for development of water sector of the Republic of Uzbekistan for medium and long term. Concept is basis for development of three-year "Strategies for water resources management and irrigation sector development" and programs for the further development of water sector.

The first three-year **Strategy, for 2021-2024**, has been completed, and the second, **for 2025-2027**, is under implementation.

As part of implementation of above-mentioned Concept and Strategy (in period 2021-2024) , work was underway to develop the Water Code of Uzbekistan

The draft Code was developed during 2021-2024 with participation of an interdepartmental working group consisting of responsible officials of ministries and departments (26 experts). At the same time, international experts and specialists from the Swiss Agency for Development and Cooperation and the Asian Development Bank were involved in development of draft document.

The "Water Code" was approved by Parliament (the law No. 1076) on July 30, 2025, and on October 31 2025, the new Water Code of the Republic of Uzbekistan came into force.

The "Water Code" aims to systematically manage relations regarding the use of water, water bodies, and land of the water fund in the country. This code recognizes water as a national wealth and establishes principles of rational and targeted use, as well as additional protective measures by the state.

Text in English: [Water Code of Uzbekistan ENG 2025](#)

On September 11, 2023, Decree of President of the Republic of Uzbekistan No. UP-158 **"On Strategy of Uzbekistan-2030"** and Resolution No. PP-300 **"On measures for qualitative and timely implementation of strategy "Uzbekistan-2030" in 2023"** were approved

For the first time, the National Strategy includes special (Third) direction of the Strategy – conservation of water resources and environmental protection, which has goals 62, 63, 64, 65.

Target - 62

Improving culture of rational water management and efficiency of water consumption in the country
(Includes 6 directions)

**Target - 63**

Ensuring rational water management in agricultural sector (Includes 4 directions)

**Target - 64**

Development of irrigation system and water-saving technologies, widespread introduction of private sector and public-private partnership mechanisms into management
(Includes 3 directions)

**Target - 65**

Reducing electricity consumption by pumping stations as part of widespread introduction of "green energy" technologies
(Includes 3 directions)



According to official data from Water Cadaster, which is maintained by Ministry of Water Resources of Uzbekistan, **average water intake over ten years (2011-2020) amounted to 53545 million m³**. Over **past five years (2021-2025) – 44848 million m³**.

As a result of measures implemented by Country, the localization of production of water-saving irrigation systems has increased to 80 percent. Currently, there are **62** manufacturing enterprises operating in the country. They have ability to produce products capable of covering more than **500,000 hectares per year**.

Due to water-saving measures, **Uzbekistan today uses 8.6 billion cubic meters of water less than in the previous ten years**.



664,3 thousand hectares
Drip irrigation



121,3 thousand hectares
sprinkler irrigation



73 thousand hectares
discrete irrigation



1,6 million hectares
laser land levelling

Total area covered by water-saving technologies in 2017 was only 28,000 hectares (or 1 percent of the total irrigated area), **today (2026) it exceeds 2.6 million hectares**, representing 60 percent of the total irrigated area in Uzbekistan.

President of the country on 5th February 2026 has set a new goal to reduce water intake by **another 7 billion cubic meters up-to 2030**, while we are also working to increase production per unit of water consumed.

Important task is to reduce energy consumption and increase pumps efficiency

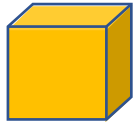
Power consumption in 2017-2024

8,3
billion kWh



2017

7,5
billion kWh



2019

7,3
billion kWh



2021

6,4
billion kWh



2025

518
Pumps
renovated

807 electric
machines
renovated

299
Compensators
installed

300
frequency-
changing
devices
installed

28 000 m
old cables
renovated



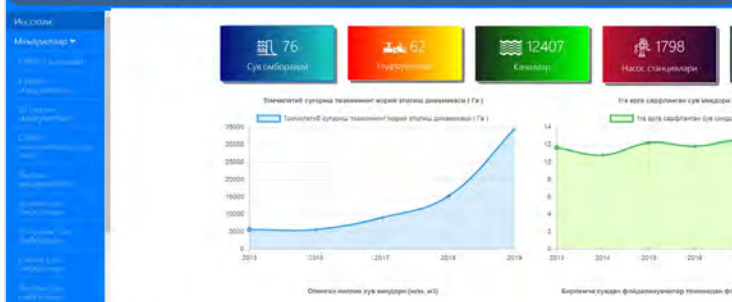
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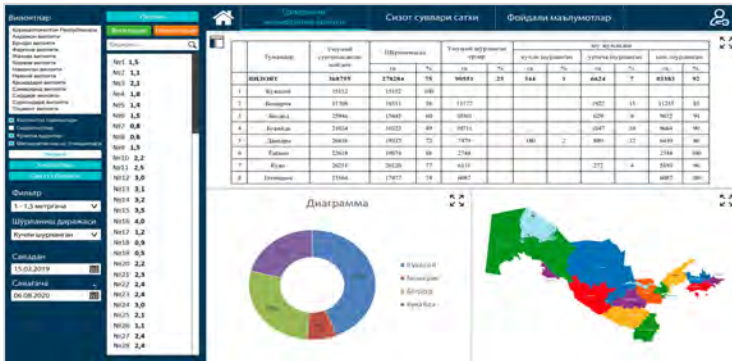
Information Systems in Water Resources Management Sector

Information System for the National Water Cadaster



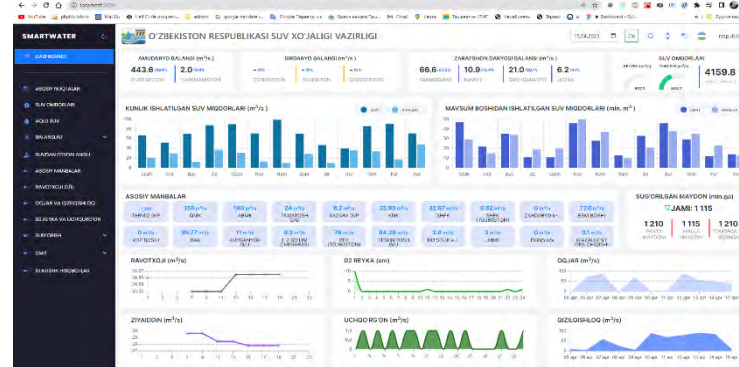
An automated operational system that provides information search, interdepartmental information exchange, its synthesis and analysis related to Water Cadaster, with a single database of water resources

Information System on Land Reclamation



An information system that allows you to monitor level of groundwater and state of their mineralization, as well as dynamics of salinization of irrigated lands using digital devices

Information System on Water Use



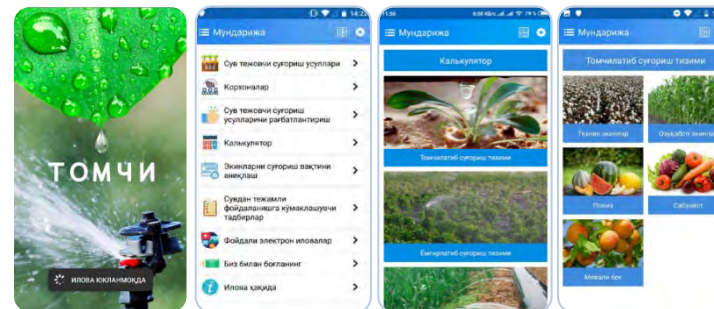
An information system with a database that allows you to manage, distribute and monitor water resources, as well as monitor existing reservoirs online using digital devices.

Information System on Pumping Stations



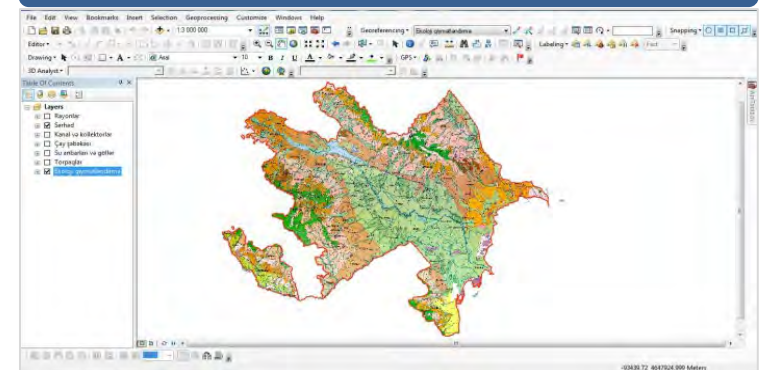
An information system that allows you to control volume of electricity and water supplied and track them at existing pumping stations in water management system

Mobil application "TOMCHI"



Methods of saving in irrigation, which make it possible to explain their advantages, as well as calculate approximate cost of implementing water-saving technologies.

Data Base of GIS products and maps



A database of digital maps of water management facilities (canals, collectors, pumping stations, irrigation and reclamation wells, hydraulic structures and reservoirs)

Education and preparation specialists for Water Sector



At the National University "TIAME" Bachelor's degree programs "**Water-saving irrigation technologies**" and Master's degree programs "**Innovative technologies and their use in water management**" were created.



A professional course "**Technician for maintenance of water-saving irrigation systems**" was created in 9 colleges of Ministry of Water Resources.



In order to improve skills of specialists and young personnel, as well as cluster and farm workers, **a School of Water Specialists** was established in cooperation with Agrobank.

Special Classrooms and Laboratories have been set up at

- National University "TIAME"
- and colleges of Agriculture and Land Reclamation (in total 9)



In order to improve knowledge and skills of agricultural producers at grassroot level, more than 2,500 on-line and practical seminars were held during 2022-2026

Published about 25 000 teaching methodologies and textbooks



1 500 copies of textbooks



3 000 copies of teaching methodologies



20 000 copies of materials for distribution



Within framework of **National Water Resources Management Project in Uzbekistan**, implemented by Agency of IFAS and the Project team with financial support from the **Swiss Agency for Development and Cooperation (SDC)**, published textbooks and manuals on water-saving technologies (in Uzbek) in 2022.

These textbooks have been approved by Ministry of Higher and Secondary Special Education of the Republic of Uzbekistan.



Fundamentals of water-saving irrigation technologies (textbook): Mamatov S. A., Xamrayev Sh.R., Qarshiyev R.J., Zaks I. A., Burxonjonov B. Sh. Suv tejovchi sug'orish texnologiyalari asoslari (darslik). Info Capital Books. Toshkent – 2022. 385c

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Water-saving irrigation technologies (teaching methodology): Mamatov S. A., Zaks I. A., Burxonjonov B. Sh. Suv tejovchi sug'orish texnologiyalari (o'quv qo'llanma). Info Capital Books. Toshkent – 2022. 201c.

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Collection of methodological materials on water-saving technologies in irrigation: Mamatov S. A., Burxonjonov B. Sh., Shoyqulov B.B., Sarimsaqov M.M. Suv tejovchi sug'orish texnologiyalari fanidan o'qitish materiallari to'plami. Info Capital Books. Toshkent – 2022. 265c

<https://aral.uz/wp/wp-content/uploads/2024/02/3-%D0%BA%D0%B8%D1%82%D0%BE%D0%B1-%D1%81%D0%B1%D0%BE%D1%80%D0%BD%D0%B8%D0%BA-%D0%BC%D0%B0%D1%82%D0%B5%D1%80%D0%B8%D0%B0%D0%BB%D0%BE%D0%B2.pdf>

Thank You!

Uzbekistan is looking for productive cooperation

«Viam supervadet vadens cunctim»

Walk together and we shall reach our goal

