

Managing water better in Central Asia

Context

Climate change is a serious risk to national and regional security in Central Asia, posing additional challenges to water availability, energy security and eco-friendly land management. The region is already highly vulnerable to natural hazards. Floods, for example, already affect almost one million people in the region each year, and economic losses amount to USD 4.7 billion. In the coming years, climate change is expected to intensify the impact of this issues; in Central Asia, the Intergovernmental Panel on Climate Change (IPCC) report (2022) predicts a warming of up to 6 degrees by the end of the century. The negative impacts of climate change, which are already being felt to varying degrees in the region, include glacier regression and desertification, as well as extreme weather events. Increasing glacier melt in the Tien Shan and Pamir Mountains could lead to increased river discharge in the short term, while water availability is set to decrease in the medium to long term.

Our objective

Regional cooperation in the water sector in the Central Asia region is strong and awareness of the principles of sustainable integrated water resources management (IWRM) is increased.

Our measures

The project contributes to the Team Europe Initiative on Water, Energy and Climate Change in Central Asia. It builds on the results of the Berlin Process, which was largely implemented through the regional project “Transboundary Water Management in Central Asia” (2009-2019), commissioned by the Federal Foreign Office. Current project measures foster regional cooperation through advisory support, promoting scientific

Programme name	Climate-sensitive Water Resources Management in Central Asia
Commissioned by	German Federal Ministry for Economic Cooperation and Development (BMZ)
Co-funded by	European Union (EU) and Swiss Government
Project region	Republic of Kazakhstan, Kyrgyz Republic, Republic of Tajikistan, Turkmenistan, Republic of Uzbekistan
Main partners	Ministries and agencies responsible for water resources in Central Asian countries
Duration	03.2023 - 09.2028

networks, developing planning and modelling tools, trainings for water practitioners and other stakeholders.

Target groups

The project’s team and experts work together and for the national and regional organisations responsible for water management: ministries responsible for water, climate, environment and energy and the International Fund for Saving the Aral Sea (IFAS) with its sub-organisations: the Basin Water Organisations Amu Darya and Syr Darya. At the local level, these are the river basin organisations, provincial and local governments as well as civil society organisations (especially water user groups, agricultural associations, business representatives) and others.

The project pays particular attention to ensuring that the measures benefit vulnerable population groups in areas particularly affected by water scarcity and climate change (in line with the Leave No One Behind principle of the 2030 Agenda) and thus, contributes to the objectives of the Recover Better Support Fund, especially the sub-objective of securing livelihoods.



L. to r.: Amu Darya Day in Turkmenistan. 2025.

Third Meeting of the Basin Dialogues. Tashkent. 2025.

Pg 2: Opening ceremony of a training laboratory at the Faculty of Hydromelioration of the Tajik Agrarian University. 2025.

Kafirnigan Woman Forum. Tajikistan. 2025..



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Our results to date

- Six Basin Dialogues along the Amu Darya and Syr Darya Rivers for improving regional cooperation have been officially established and approved by all five Central Asian countries. **The basin dialogue along the Amu Darya** concentrates on conservation of river basin ecosystems, review of economic interaction/instruments/mechanisms in the river basin, implementation of automatization systems, digitalization, monitoring and management of water resources. **The basin dialogue along the Syr Darya** works on strengthening existing bilateral cooperation mechanisms, attempting to regionalise them and supporting existing Basin Councils through exchange formats.
- Two Partner Dialogues contributed to strengthening coordination, exchange perspectives, and aligning activities among key stakeholders.
- Three bilateral water commission meetings (Kyrgyz Republic – Uzbekistan, Kyrgyz Republic – Tajikistan, and Kyrgyz Republic – Kazakhstan) between government water bodies.
- River basin organisations have improved knowledge and institutional capacities through 24 training sessions organised by the Regional Environmental Center of Central Asia (CAREC). These sessions included one women-only training to promote women's roles in water management.
- Celebration of International Days of the Syr Darya and Amu Darya across five Central Asian countries engaged 3,000+ direct participants and resulted in 200+ planted trees and 240+ kg of waste collected from riverbanks.
- Mobile laboratories are being used to monitor the environment and control the water quality of transboundary rivers in Kazakhstan. The Mobile Water Quality Laboratory of the Hydromet in Tajikistan utilises a sophisticated water quality monitoring system.
- The chemical laboratory at the Meliorative Hydrogeological Expedition in Kyrgyzstan and the faculty's laboratory of the hydromelioration at the Tajik Agrarian University have modern equipment.
- Rational groundwater use scenarios for irrigation of the eastern part of the Chui Valley improve irrigation planning, ensure water abstraction, prevent the depletion and degradation of groundwater quality.
- The Basin Organisation have developed a five-year river basin plan and the Kafirnigan River Basin Plan, conducted the assessment and control of water quality.
- A decentralized network of four laboratories has been established at the main reservoirs on Karakum River to improve water quality monitoring. Laboratory and related equipment for water sampling is being provided.
- Uzhydrogeology has a new Situation Center focused on groundwater management.
- UzHydromet works with improved material and technical capacity for surface water quality monitoring.

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