



## **Central Asia Knowledge Network: Building Partnerships for Regional Cooperation on Water and Energy**

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### **Overview**

Water and energy are crucial for economic, social and human development in Central Asia, but the region has faced difficulties for several years with regard to transboundary water and energy management. To help address these challenges, the World Bank has offered a multisector approach to regional collaboration, establishing what is known today as the **Central Asia Knowledge Network** program (henceforth referred to as “the Network”).

Launched as part of the **Central Asia Energy-Water Development Program (CAEWDP)**, the Network seeks to stimulate cooperation and knowledge exchange among local and regional institutions and practitioners in the area of water resource management, energy, and climate change. Regional networks and communities of practice have been established, and institutions equipped with cutting-edge knowledge and skills to build the capacity of government officials and other professionals.

Serving as a platform for collaboration at both country and regional levels, the Network not only links cross-sectoral practitioners, academics and decision-makers, but also offers wide support for youth engagement through innovative outreach.

Covering the five Central Asia countries of Kazakhstan, Uzbekistan, Tajikistan, Turkmenistan, and the Kyrgyz Republic, plus Afghanistan, the Network supports coordinated access to water management and climate knowledge for various stakeholders, and contributes to the World Bank Group’s operational projects in the region.

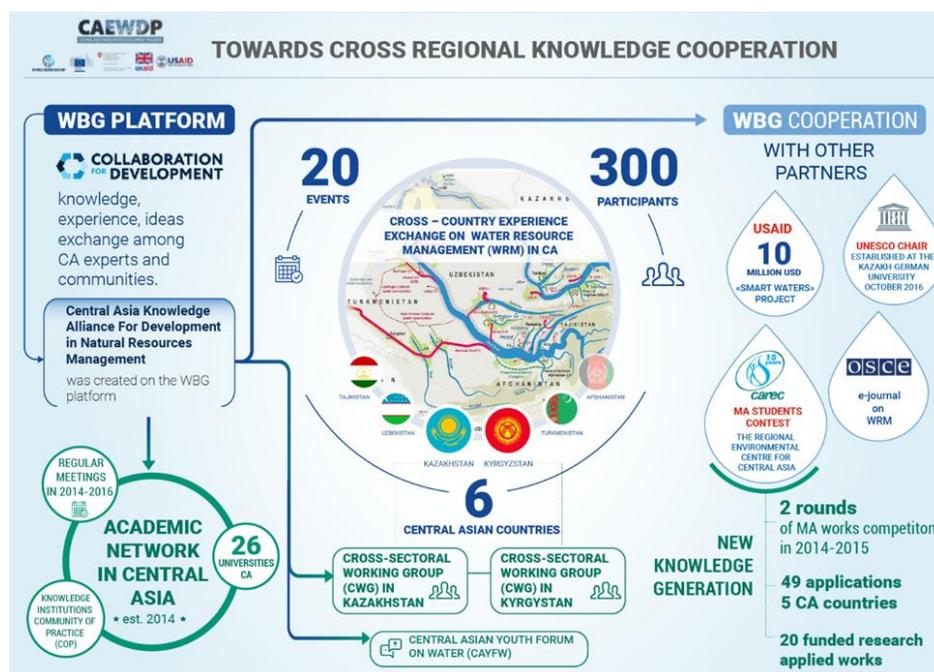
### **Cross-Regional Knowledge Cooperation**

To effectively address sustainable energy-water development goals set for the Central Asia region, sole reliance on financial investment is not sufficient: investment and project finance have to be combined with generating and sharing knowledge, building cross-border, cross-sectoral partnerships, and offering programs to engage youth in solving regional water and energy challenges.

The Network strives to achieve this by bringing together over 300 professionals with experience in water resource management across academia, and public and private sectors in Central Asia. These professionals exchange knowledge and experience by way of four

interlinked communities of practice, workshops, joint research and analytical studies, competitions (such as Olympiads for students), training sessions (including Train-the-Trainer programs), and field work and visits.

Four communities of practice located within the World Bank Group's Collaboration4Development Platform comprise the **Academic Network in Central Asia** (which brings together representatives from 26 regional universities), the **Regional Cross-Sectoral Working Group in Kazakhstan**, the **National Cross-Sectoral Working Group in the Kyrgyz Republic**, and the **Central Asia Youth Forum on Water**.



The **Knowledge Institutions Communities of Practice in Central Asia**, established in 2014 in cooperation with the **Regional Environmental Centre for Central Asia (CAREC)**, equips national knowledge institutions with knowledge-sharing practices and skills to build the capacity of young professionals to address water, energy, agriculture, and climate change-related issues in the region.

The **Central Asia Knowledge Alliance for Development in Natural Resources Management** group, established by the World Bank Group in January 2014, serves as a convenient tool for knowledge sharing, collaboration, network development and outreach that brings together all parties involved across three levels of engagement: cross-region, cross-sectoral, and cross-generational. Offering multi-dimensional collaboration based on new technologies, the platform also serves as a practical tool for a future, technology-savvy, generation of water and energy experts and leaders.

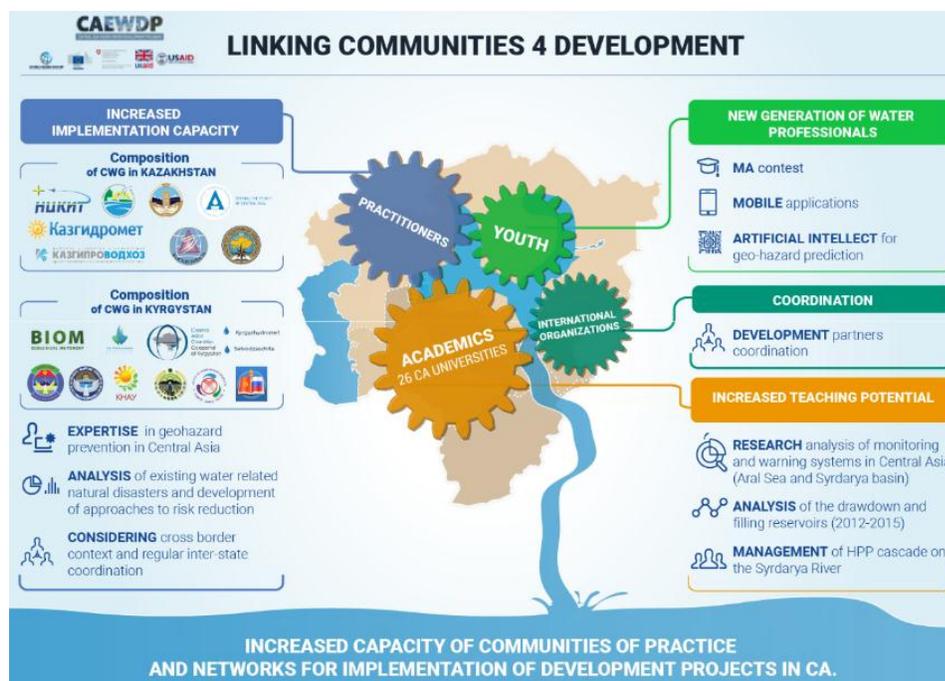
In addition, the **Central Asia Youth Forum on Water** and its online platform were launched in 2017 in collaboration with the German-Kazakh University to provide a greater voice to young people.

The Network facilitates cooperation in water resource management issues between the World Bank Group and its development partners, such as **UNESCO, USAID, UNEP, and OSCE**, creating opportunities to launch and sustain multiple knowledge-sharing initiatives.

In 2014 and 2015, the Network partnered with CAREC to launch a research project competition among Masters students from Central Asia countries as part of its capacity building and youth engagement efforts. During the application process, 49 fundamental and applied research project proposals were received from five Central Asian countries, 20 of which were selected as winners and presented to the regional practitioners' community.

Based on the results of this initiative, USAID provided multimillion-dollar funding to further expand water-energy related Research & Development activities for youth in Central Asia over the period 2015-20.

“We are delighted to note that some of the academic exchange activities carried out under our program will be further scaled-up under the USAID-funded Smart Waters Project, to be implemented by CAREC in 2015-20,” said **Julia Komagaeva, Program Coordinator of the Central Asia Knowledge Network Program**. “Linking practitioners with youth from all over Central Asia in the area of water resource management will contribute to enhanced security and development in the region in the future.”



## Linking Communities for Development

Building on the cooperation and analytical capacity in water resource management among experts from 5 Central Asia countries, plus Afghanistan, the Network links communities for development and facilitates informed decision-making by Central Asian governments on water management issues and the development of new information technologies.

The Network helps enhance teaching potential in universities across Central Asia through scientific workshops, and helps young professionals gain practical water resource management experience through collaboration with water specialists.

### Providing Solutions through a Multisector Approach

The Network supports the practical integration of established networks in Central Asia's water institutions. Efforts to facilitate knowledge exchange across the region have encouraged activities among national **Cross-Sectoral Working Groups** established in Kazakhstan and the Kyrgyz Republic, and also among policy-makers, youth, academia, and water and energy sectors practitioners across the region.

By linking specialists from different fields and sharing accumulated knowledge, the **Kazakh Cross-Sectoral Working Group** has helped the expert community attain significant results in addressing national water and energy challenges. For example, recommendations proposed by the Working Group on the Shardara Dam's safety issues (2014) and mudflows (2015-16) were adopted by the Kazakh Government in 2014 and 2016, respectively.



The **Cross-Sectoral Working Group in Kyrgyz Republic**, established in 2015, has helped improve collaboration among sectoral institutions to address natural disasters and water issues in the Kyrgyz Republic. For instance, in 2016, the Working Group submitted an Appeal to the

Kyrgyz Government to implement mudflow protection measures that would reduce the risk of mudflows nationwide.

Based on the experiences of both Kazakhstan and the Kyrgyz Republic, Tajikistan has since expressed its interest and readiness to also create a national Cross-Sectoral Working Group.

In partnership with the German-Kazakh University, the Network facilitated students' involvement in the development of new technologies to help solve complex regional and local water challenges. As a result of this initiative, three mobile apps have been created: for the e-Journal on IWRM for GKU, for the "Kazhydromet", and for the International Fund for Saving the Aral Sea.

"It was the first time we worked with students on developing a specialized mobile app, and I must say, they have done a great job," said **Paizkhan Kozhahmetov, Director of Kazhydromet's Department of Water and Climate Studies**, describing his experience working with young researchers. "They represent the next generation of Central Asian hydrologists, and we were very pleased to see their enthusiasm and genuine interest in the profession."

In December 2016, the Network organized an experts workshop in Bishkek on the topic of "**Geo-hazard Risks in International Water Resource Management**" in Central Asia. One of the main outcomes of this workshop was an agreement by participants to deliver a new appeal to the government of the Kyrgyz Republic to launch a unified open-source geo-hazard risks monitoring database.

The workshop offered an opportunity to scale-up regional collaboration by using innovative mechanisms to share and build knowledge, engage the next-generation of water and energy specialists, and address more effectively the natural resource management challenges facing the region.

Going forward, the Network's participants and partners remain highly committed to further cooperating and continuing efforts to deepen regional, cross-sectoral, and cross-generational collaboration to find solutions for vital water and energy challenges in Central Asia.