



Policy Brief

Regional cooperation to address water security challenges in Central Asia

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Introduction

Regional cooperation in Central Asia to address water security challenges is crucial due to shared water resources and infrastructure among the countries. Considering the growing population and increased variability of water availability due to climate change, collaborative efforts are more essential than ever for sustainable water management in the region.

This policy brief integrates a review of academic literature, the analysis of current policy frameworks and the empirical evaluation of the current situation in Central Asia related to the regional cooperation in water related projects.

Literature review

All Central Asia countries share a common past in the Soviet Union, during which water security was understood as a multidimensional factor dependent on energy, agricultural and environmental aspects. In the Soviet-era, the water-rich upstream countries provided water for irrigation to downstream countries in spring and summer. In exchange, they were supplied with coal, oil and gas for heating and electricity in the winter months. After the five Central Asia republics gained independence in 1991, the centrally planned water and energy management systems from Soviet-era had to be substantially reshaped towards market-oriented approaches. Energy allocation between the countries became a source of conflict due to the price differences between upstream hydro-energy and downstream fuel-produced energy. This has led to deteriorating relations between the countries, highlighting the regional resource imbalance.¹

Climate change has put the water and energy security of Central Asian countries at risk. Glaciers are shrinking (decreasing in size by 30% over the last 50-60 years), while the demand for water and energy in the region is growing. The population of Central Asia is projected to increase from 77 million people today to 110 million by 2050. Climate, water, and energy challenges have inherent social consequences that will likely trigger migration and instability at the local level with the potential for spillover effects across the region. These threats cannot be addressed only at the national level - they require regional cooperation. In 2022, the Interstate Commission for Water Coordination (ICWC), part of the International Fund for saving the Aral Sea, marked its thirtieth anniversary. The Kyrgyz Republic froze its membership in 2016, but before that, it was the only platform where all five Central Asian countries would cooperate on political arrangements and policy as well as on technical terms. More importantly, this multilateral institution helped foster exchanges of national and regional expertise in the field of water engineering.²

Policy context

In Central Asia, the quantity and quality of the water resources are affected by the increasing water demand of the hydropower and irrigation sectors, the effects of climate change and the inefficient/outdated systems for water distribution. Regional actions are necessary to mitigate the effects of these shortcomings.

¹ Nazarbayev University (2020), Water Security in Central Asia: an overview article <https://nu.edu.kz/news/water-security-in-central-asia-an-overview>

² Meirkhanova, A. (2023), Central Asian Regional Cooperation on Water, Energy and Climate Change: Ways Forward <https://daviscenter.fas.harvard.edu/insights/central-asian-regional-cooperation-water-energy-and-climate-change-ways-forward>

Analysis of findings

The Central Asia countries already have experience in working in joint water management planning and investments projects. To name a few examples, the “Tuyamuyun” hydro complex is jointly operated by Turkmenistan and Uzbekistan; in the Talas river basin management project Kazakhstan and the Kyrgyz Republic developed a strong collaboration for the joint management of the water resources. These projects can be considered pilot projects or examples of best practices for future regional projects where all the Central Asia countries are collaborating in the same project. Having multiple countries involved in the same project can have several benefits, including:

- Improved access to financing for new projects;
- Lower interest rates for loans;
- The new projects will take into account the benefits and drawbacks for each project partner.

Regional collaboration can achieve improved water security, more efficient resource use and will reduce potential for conflict by cooperating in areas like joint water management planning, data sharing, transboundary management, and capacity building.

Recommendations

A review of the ICWC structure, goals and long-term strategies is recommended, with all the Central Asia countries represented and involved in the decision-making processes. Additionally, alternative resolution mechanisms should be established and adopted to provide the proper environment for potential regional debates’ resolution, where involved parties can settle their claims. It is important to mention that in formulating strategies for regional water cooperation in Central Asia, it's crucial to acknowledge the roles of external actors, such as the Russian Federation, Afghanistan and China.

Way Forward / consulting mechanisms

Rebuilding the dialogue:

- To address core grievances and initiate the process of rebuilding trust, it is important to establish diplomatic dialogues between Kyrgyzstan and other ICWC members;
- Informal dialogues should be facilitated through technical working groups on specific water management issues with emphasis on searching for mutually acceptable solutions;
- Arranging for neutral third-party mediating actors such as international organizations or respected regional experts, who can facilitate negotiations and encourage compromise.

Revising water allocation agreements:

- All Central Asian countries need to conduct a comprehensive water needs assessment that will consider both hydropower and irrigation requirements for sustainable development;
- Develop new agreements on water sharing that will:
 - Prioritize efficient use of water resources in both upstream and downstream countries;
 - Incorporate climate change adaptation strategies;
 - Include clear dispute resolution mechanisms and periodic reviews of agreements.