



CLIMATE CHANGE AS A DIPLOMATIC TEST: POWER, ADAPTATION, AND TRANSBOUNDARY WATER NEGOTIATIONS IN CENTRAL ASIA

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ABSTRACT

Climate change is increasingly becoming a determining factor in the transformation of international relations, particularly in regions where natural resources are unevenly distributed and shared among multiple states. Central Asia represents one of the most vulnerable regions to climate change due to its arid climate, dependence on transboundary river systems, and socio-economic reliance on water-intensive agriculture. Changes in precipitation patterns, rising temperatures, glacier retreat, and increasing frequency of droughts are creating new challenges for regional water governance and diplomatic cooperation. The central argument of this study is that climate change should be understood not only as an environmental challenge but also as a diplomatic test that reveals the relationship between power, national interests, and institutional capacity in transboundary water negotiations. The Amu Darya and Syr Darya river basins demonstrate how environmental pressures interact with political and economic interests of upstream and downstream states. While upstream countries such as Kyrgyzstan and Tajikistan emphasize hydropower development and energy security, downstream countries including Uzbekistan, Kazakhstan, and Turkmenistan depend heavily on predictable water flows for irrigation and agricultural production. The study aims to analyze how climate change influences water diplomacy in Central Asia and how existing regional mechanisms respond to emerging challenges. The research applies the theoretical approaches of environmental security, hydro-politics, and complex interdependence. The methodology is based on comparative analysis of regional water policies, examination of international legal frameworks, and analysis of reports by international organizations dealing with climate change and water governance. A significant

aspect of contemporary Central Asian water diplomacy is the emergence of new factors affecting the Amu Darya Basin. One of these factors is Afghanistan's Qosh Tepa Canal project. The construction of the canal represents an important development because it introduces Afghanistan as a more active participant in the hydropolitical dynamics of the basin. Since Afghanistan has historically not been fully integrated into the water governance mechanisms established among the former Soviet republics, the project highlights the need to reconsider existing approaches toward inclusive transboundary water management. However, the long-term impact of the canal requires further scientific assessment based on comprehensive hydrological data and regional cooperation. The research demonstrates that water-related tensions in Central Asia are not caused solely by physical water scarcity. Rather, they emerge from the interaction of environmental changes, political interests, unequal resource distribution, and limitations of existing institutions. Therefore, effective climate adaptation requires strengthening diplomatic mechanisms, improving scientific cooperation, ensuring transparency of hydrological information, and developing inclusive negotiation platforms involving all basin states.

Introduction and Research Problem

Water resources have historically played a central role in the political and economic development of Central Asia. During the Soviet period, the region developed an interconnected water-energy system in which upstream republics provided water storage and hydropower resources, while downstream republics specialized in agricultural production. After independence, this interdependent system became more politically complex as newly sovereign states began prioritizing national development strategies. Climate change has intensified these challenges by increasing uncertainty regarding future water availability. According to international scientific assessments, Central Asia is experiencing significant warming trends, with consequences for glacier-dependent river systems and regional water security. These changes create a new diplomatic environment in which traditional approaches to water allocation require adaptation.

The main research problem of this study is the following: **How does climate change transform transboundary water negotiations in Central Asia, and what diplomatic mechanisms can support sustainable regional cooperation?**

Research Objective

The objective of this study is to examine the influence of climate change on transboundary water diplomacy in Central Asia by analyzing power relations, adaptation strategies, and emerging challenges within the Amu Darya and Syr Darya basins.

Research Methods

The study uses qualitative research methods, including:

- comparative analysis of national water policies of Central Asian states;
- analysis of international agreements and regional institutional frameworks;
- examination of reports published by international organizations;
- application of environmental security and hydro-political theories to regional water relations.

Main Scientific Arguments

First, climate change has transformed water governance from a technical resource-management issue into a strategic diplomatic challenge. Water availability now influences regional security, economic development, and interstate relations.

Second, Central Asian water negotiations are shaped by asymmetrical interests between upstream and downstream states. Differences in energy priorities, agricultural dependence, and geographical position continue to influence diplomatic bargaining.

Third, the emergence of Afghanistan's Qosh Tepa Canal demonstrates that the hydropolitical structure of the Amu Darya Basin is changing. The project highlights the necessity of broader regional dialogue and the inclusion of all relevant riparian states in future water governance mechanisms.

Fourth, sustainable water security cannot be achieved through unilateral actions. Long-term stability requires cooperative adaptation strategies, scientific exchange, modernization of water infrastructure, and stronger regional institutions.

Conclusion

Climate change represents a significant diplomatic test for Central Asia because it challenges existing models of water governance and interstate cooperation. The future of regional water security will depend not only on the availability of freshwater resources but also on the ability of states to develop effective diplomatic mechanisms for managing shared challenges. The case of the Amu Darya Basin demonstrates that environmental pressures can either become a source of political competition or create incentives for deeper cooperation. Strengthening climate diplomacy, improving institutional coordination, and developing inclusive transboundary water management frameworks are essential conditions for sustainable development and regional stability in Central Asia.

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