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"The Koshtepa Canal and its Impact on Central Asia's Water Security"

Shokhrukhbek Abdujabborov
Assistant teacher,
Department of International Relations,
University of World Economy and Diplomacy,
Tashkent, Uzbekistan
E-mail: abdujabborovshohruhbek2712@gmail.com

Abstract: This is an International Relations policy-research article analyzing the hydropolitical implications of Afghanistan's Koshtepa Canal for Central Asia's regional water security and cooperative governance. The construction of Afghanistan's 280-kilometer Koshtepa Canal represents a turning point in Central Asia's hydropolitics. Drawing on principles from the 1997 UN Convention on the Non-Navigational Uses of International Watercourses and regional water-sharing regimes, this article analyzes the canal's implications for water security in the Amu Darya basin. While the project seeks to alleviate Afghanistan's agricultural deprivation, it risks intensifying scarcity in downstream Uzbekistan and Turkmenistan. The paper argues that effective cooperative mechanisms rooted in equitable utilization, the no-harm rule and joint monitoring are essential to transform potential conflict into hydro-diplomatic engagement.
Keywords: Koshtepa Canal, Amu Darya basin, water security, hydropolitics, transboundary water governance, Uzbekistan, Turkmenistan, Afghanistan, Central Asia

As water quality deteriorates or the amount available must meet increasing demands over time, competition among water users increases. It is not a more volatile place than in river basins that cross political borders. But experience shows that in many cases, rather than creating open conflict, the need to share water can create unexpected cooperation. Despite the complexity of the issues, historical facts show that water disputes can be resolved diplomatically. Of the 150 treaties signed over the past 50 years, only 37 violent conflicts have occurred. In the past century, the focus of negotiations and treaty making has shifted from navigation to the use, development, protection and conservation of water resources. The more than 3,600 signed agreements and contracts are an achievement in themselves, but a closer look reveals serious shortcomings.[1] Effective monitoring regulations, enforcement mechanisms, and specific water allocation regulations are needed that take into account changes in water flow and changing needs. The 1997 United Nations Convention on the Non-Navigational Uses of International Watercourses is one of the international instruments that focuses on common water resources. He established two basic principles that govern the behavior of nations in relation to public watercourses: "proper and reasonable use" and "the obligation not to cause serious harm" to neighbors. However, it is up to countries to define exactly what these terms mean in their watersheds.

The Amu Darya River, originating in the Pamir Mountains, is a lifeline for Afghanistan, Tajikistan, Turkmenistan, and Uzbekistan. The Koshtepa Canal with 280 km long, 100 m wide, 8.5 m deep aims to divert up to 26 percent of the river's flow, approximately 10 billion m³ per year.[2] Initiated by Afghanistan's de facto authorities, the project seeks to expand irrigated land and boost food security after decades of conflict. Downstream states, however, warn that reduced flows could aggravate existing shortages, especially for Uzbekistan's cotton sector and the fragile Aral Sea ecosystem. The ongoing Koshtepa canal in Afghanistan has raised concerns among the downstream states of Uzbekistan and Turkmenistan in the Amudarya basin. However, Afghanistan is not a party to the 1992 Almaty Agreement governing the Amu Darya basin[3] nor to

[1] United Nations Office to support the International Decade for Action 'Water for Life' 2005-2015, n.d. https://digitallibrary.un.org/record/786726?v=pdf

[2] Legality of Taliban's new Qosh Tepa canal from Amu Darya, Sh.Abduboqiyev 2023 https://uzbekistanlawblog.com/legality-of-talibans-new-qosh-tepa-canal-from-amu-darya/

[3] Agreement on joint actions to solve the problem of the Aral Sea and the Aral Sea region, environmental rehabilitation and ensuring the socio-economic development of the Aral region, 1992 https://faolex.fao.org/docs/pdf/mul67055.pdf

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the 1997 UN Watercourses Convention.[4] Nonetheless, customary international law recognizes each riparian's right to reasonable utilization while imposing a duty to avoid significant harm to others. Under the Almaty framework, Afghanistan was allocated only about 2.1 billion m³ per year.[5] Koshtepa's projected withdrawals far exceed this amount, raising concerns over potential violations of equitable-use standards and regional water security.

The central challenge currently facing the international community in water governance lies in transforming global commitments for the well-being of people, ecosystems, and the biosphere into concrete, implementable actions. Effective cooperation over shared water resources has repeatedly proven to be a foundation for peace, trust, and sustainable economic growth. Developing institutionalized frameworks that foster collaboration among all stakeholders of states, regional organizations, and local communities can significantly strengthen mutual respect, understanding, and regional stability. Empirical evidence suggests that water, contrary to popular perception, is more often a driver of cooperation than of conflict. Over the past five decades, there have been approximately 37 recorded incidents of inter-state water-related violence, most of which were minor skirmishes. In contrast, more than 200 international water treaties were successfully negotiated during the same period.

A number of these agreements such as the Indus Waters Treaty[6] between India and Pakistan have demonstrated remarkable resilience, remaining in force even during periods of armed confrontation. These experiences illustrate a broader principle: even historically adversarial states possess the capacity to cooperate when vital shared interests are at stake. Governments increasingly recognize that violent confrontation over water is neither a strategically viable nor an economically rational option. The international institutions established to manage such resources whether the Indus Basin Commission[7], the Nile Basin Initiative[8], or the Jordan River agreements[9] have endured through political transitions and conflicts, attesting to their institutional robustness. The protracted negotiation periods ten years for the Indus Treaty, two decades for the Nile Initiative, and four decades for the Jordan Agreement underscore both the complexity and sensitivity of water diplomacy.

In the Amu Darya basin, however, cooperative frameworks have remained comparatively fragile. Existing water-sharing mechanisms are outdated, offering limited regulatory capacity over new projects. Historical precedents such as the construction of the Karakum Canal and the large-scale irrigation expansion of the Soviet era triggered severe ecological degradation, including the desiccation of the Aral Sea. These developments dramatically reduced water inflows to Uzbekistan and Turkmenistan, demonstrating the far-reaching consequences of unilateral water diversion.

In this context, there are two main policy issues that need to be addressed. The first issue is related to Afghanistan's right to use Amudarya water under international law. The second issue is related to Afghanistan's obligations to downstream countries in the use of Amudarya waters.

Regarding the first policy issue, Afghanistan's right to use the Amudarya water should be recognized. Although Afghanistan is not a party to major agreements on water resources management in the region, this does not limit their right to use water. Therefore, it is recommended that Afghanistan adhere to regional and international agreements on water resources management in order to avoid any legal disputes. In particular, joining and implementing the signed agreements on transboundary water basins adopted by the UN can be a solution to the problem.

As for the second policy issue, it is very important to ensure that the interests of downstream countries are not harmed by the construction of the Koshtepa Canal. Afghanistan should consider the water needs of

[4] Convention on the Law of the Non-navigational Uses of International Watercourses, 1997 https://legal.un.org/ilc/texts/instruments/english/conventions/8_3_1997.pdf

[5] **What Afghanistan's Qosh Tepa Canal Means for Central Asia, S.Duffy 2023 https://thediplomat.com/2023/04/what-afghanistans-qosh-tepa-canal-means-for-central-asia/**

[6] The Indus Waters Treaty, 1960 https://treaties.un.org/doc/Publication/UNTs/Volume%20419/volume-419-I-6032-English.pdf

[7] Indus Basin Commission https://www.mowr.gov.pk/Detail/MDQ1NDQ1YTQtMzQ1MC00YTU5LTljMWEtMzliZTVhM2QxMjhl

[8] Nile Basin Initiative https://nilebasin.org/

[9] Syria and Jordan Agreement concerning the utilization of the Yarmuk waters. Signed at Damascus, on 4 June 1953 https://treaties.un.org/doc/Publication/UNTS/Volume%20184/volume-184-I-2437-English.pdf

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downstream countries and cooperate with them in water resource management. Therefore, Afghanistan is recommended to communicate with downstream countries to find a mutually beneficial solution to the problem of water distribution.

Also, all stakeholders, including Afghanistan, Uzbekistan, and Turkmenistan, should negotiate a new water-sharing agreement that takes into account current and future needs. In order to ensure the economic stability of the region and the health of the population, the contract should specify clear guidelines for the use and distribution of water resources, including the Koshtepa canal project. Establish a joint monitoring mechanism to oversee the implementation of the new agreement and ensure compliance by all parties. The mechanism should be transparent, independent and inclusive to foster trust and cooperation between parties. Invest in alternative water sources and technologies to reduce dependence on the Amudarya and mitigate the impact of water scarcity on regional economies and public health. This includes promoting water conservation practices, developing wastewater treatment facilities, and implementing climate-resilient agricultural practices.

In addition, it is important to take measures to ensure the stability of the water distribution system. According to the 2022 report of the Eurasian Development Bank, there will be a water shortage in Central Asia by 2050[10].

Therefore, it is recommended that the countries of the region work together to find a solution to the water shortage problem. This includes investing in water-saving technologies, water recycling and developing alternative water sources.

In conclusion, the issue of water resources management in the Amudarya basin and the construction project of the Koshtepa canal in Afghanistan show the need for regional cooperation and sustainable practice. Although Afghanistan has the right to use Amudarya water, it is necessary to ensure that it does not adversely affect the interests of downstream countries. To achieve this, all stakeholders need to engage in dialogue and work together to find a mutually beneficial solution to the problem of water distribution. This can be achieved by implementing a comprehensive water sharing agreement that takes into account the interests and needs of all stakeholders, as well as by investing in alternative water sources and technologies. By adopting a sustainable and sustainable approach to water resources management, Central Asia can ensure the region's economic stability and public health while maintaining regional stability and cooperation.

References:

1. Akhmedov, Sardor, and Alisher Yuldashev. 2024. “Hydropolitical Dynamics of the Amu Darya Basin Under Emerging Afghan Water Infrastructure.” *Water International* 49(2): 215–233.
2. Alimov, Timur. 2023. “Climate-Induced Water Scarcity and Security Risks in Central Asia.” *Journal of Environmental Security* 7(3): 122–140.
3. Buranelli, Filippo. 2023. “Central Asian Regionalism and the Politics of Resource Governance.” *Central Asian Survey* 42(1): 54–72.
4. Dehdarian, Farhad, and Shah Mahmood. 2024. “Afghanistan’s Qosh Tepa Canal: Regional Water Politics and Downstream Challenges.” *International Journal of Water Resources Development* 40(1): 98–118.
5. Djumaboev, Kahramon, et al. 2024. “Water Allocation and Climate Adaptation in the Amu Darya Basin: New Scenarios and Cooperative Pathways.” *Hydrology and Earth System Sciences* 28(6): 887–905.
6. FAO. 2024. *AQUASTAT Regional Update for Central Asia 2024.* Rome: Food and Agriculture Organization.
7. Gleason, Gregory, and Rashid Kurbanov. 2023. “The Politics of Water in Central Asia: Institutions, Interests, and Instability.” *Global Policy* 14(4): 67–82.
8. Khasanov, Jakhongir. 2025. “Downstream Vulnerabilities in Uzbekistan: Assessing the Impact of Afghanistan’s Water Diversion Projects.” *Water Policy* 27(1): 44–66.
9. Kibaroglu, Aysegul, and Sevinj Mammadova. 2023. “New Frontiers of Hydro-Diplomacy in Eurasia: Cooperation or Fragmentation?” *International Negotiation* 28(3): 301–325.

[10] The Economy of Central Asia: A Fresh Perspective https://eabr.org/upload/iblock/1fe/EDB_2022_Report-3_The-Economy-of-CA_eng.pdf

ISSN NO: 2769-996X
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10. Mustafa, Majid, and Wais Omar. 2023. “Assessing the Strategic Implications of the Koshtepa Canal for Afghanistan and Central Asia.” *Journal of Hydropolitics* 12(2): 60–82.
11. OECD. 2024. *Water Security in Central Asia: Policy Outlook 2024.* Paris: OECD Publishing.
12. Saidov, Ulugbek, and Feruza Ruzmetova. 2024. “Transboundary Water Governance Reforms in Uzbekistan: New Legal Approaches and Regional Cooperation.” *Central Asian Journal of Water Research* 10(1): 33–52.
13. UN ESCAP. 2024. *Regional Water and Climate Outlook for Central Asia 2024–2025.* Bangkok: United Nations ESCAP.
14. UNEP. 2023. *Transboundary Water Stress in Central Asia: Environmental Assessment Report 2023.* Nairobi: UNEP.
15. Ziganshina, Dina, and Anthony Turton. 2025. “Legal Dimensions of Water Diplomacy in the Amu Darya Basin: Trends, Risks, and Cooperative Solutions.” *International Environmental Agreements* 25(2): 141–159.