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AFGHANISTAN'S ROLE IN TRANSBOUNDARY WATER USE IN CENTRAL ASIA

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ANNOTATSIYA:

This article examines Afghanistan's role in the management and utilization of transboundary water resources in Central Asia. As an upstream country sharing important river basins, particularly the Amu Darya, Afghanistan has become an increasingly significant stakeholder in regional water governance. The study analyzes the geographical, political, legal, and environmental dimensions of Afghanistan's participation in transboundary water use. Special attention is given to the impact of water infrastructure development, irrigation projects, and growing water demand on downstream states such as Uzbekistan, Turkmenistan, and Tajikistan. The article also explores existing international legal principles, regional cooperation mechanisms, and challenges related to equitable and sustainable water allocation. The findings indicate that enhanced dialogue, data sharing, and multilateral cooperation are essential for ensuring regional stability and effective water resource management. Strengthening Afghanistan's integration into regional water governance frameworks can contribute to sustainable development, environmental protection, and long-term water security in Central Asia.

INTRODUCTION

Water resources are among the most important factors influencing economic development, environmental sustainability, and regional stability in Central Asia. The region relies heavily on transboundary Rivers, particularly the Amu Darya and Syr Darya, which cross national borders and support agriculture, energy production, and domestic water consumption. Afghanistan occupies a strategically important position within the Amu Darya

basin, contributing a significant share of the river's flow through its mountainous watersheds. Despite this hydrological importance, Afghanistan has historically played a limited role in regional water management arrangements due to decades of political instability and conflict. In recent years, Afghanistan has increased its efforts to develop water infrastructure and expand irrigation systems to support economic growth and food security. Projects such as the Qosh Tepa Canal have attracted considerable attention from neighboring countries because of their potential impact on downstream water availability. These developments have highlighted the need for greater cooperation among Afghanistan and Central Asian states regarding the management of shared water resources. The purpose of this study is to examine Afghanistan's role in transboundary water use in Central Asia and to assess the opportunities and challenges associated with its increasing participation in regional water governance. The research focuses on the legal, political, and environmental aspects of water management within the Amu Darya basin. Understanding Afghanistan's position is essential for developing effective mechanisms that ensure equitable water allocation, sustainable resource utilization, and regional stability. The study contributes to the growing body of literature on transboundary water governance by emphasizing the importance of inclusive cooperation. As water demand continues to increase due to population growth, climate change, and economic development, the integration of Afghanistan into regional water management frameworks becomes increasingly necessary. Effective collaboration can help reduce tensions, enhance water security, and promote sustainable development throughout Central Asia.

METHODOLOGY

This study employs a qualitative research methodology to investigate Afghanistan's role in transboundary water use in Central Asia. The research is based on a comprehensive review of academic literature, international legal documents, policy reports, and regional water management studies. Sources were selected from peer-reviewed journals, publications of international organizations, government reports, and regional institutions concerned with water governance and environmental management. A descriptive and analytical approach was used to examine the hydrological significance of Afghanistan within the Amu Darya basin and to evaluate the implications of its water development projects for neighboring countries. Particular attention was given to recent infrastructure initiatives, including irrigation and canal construction projects, which may influence water distribution patterns across the region. The study also applies a comparative framework to analyze the interests and perspectives of Afghanistan and downstream states such as Uzbekistan, Turkmenistan, and Tajikistan. Relevant international legal principles, including equitable and reasonable utilization, the obligation not to cause significant harm, and the duty to cooperate, were examined to assess their applicability to regional water management challenges. In addition, the research explores environmental and socio-economic factors affecting transboundary water use. These include climate change impacts, increasing water demand, agricultural expansion, and population

growth. The collected information was systematically analyzed to identify major challenges, opportunities for cooperation, and policy recommendations.

RESULT

The findings of the study demonstrate that Afghanistan has become an increasingly influential actor in the management of transboundary water resources in Central Asia. Due to its geographical position within the upper reaches of the Amu Darya basin, Afghanistan contributes a significant portion of the river's flow. Recent efforts to expand irrigation infrastructure and improve water management have increased the country's utilization of available water resources. The analysis indicates that projects such as the Qosh Tepa Canal have raised concerns among downstream countries regarding potential reductions in water availability. Uzbekistan and Turkmenistan, whose agricultural sectors depend heavily on Amu Darya waters, have expressed interest in maintaining stable water flows while also recognizing Afghanistan's legitimate development needs. The results suggest that balancing these competing interests represents one of the primary challenges in regional water governance. The study also reveals that existing institutional mechanisms in Central Asia provide only limited opportunities for Afghanistan's participation. Unlike the Central Asian republics, Afghanistan is not fully integrated into many regional water management frameworks. This institutional gap complicates data sharing, joint planning, and coordinated responses to water-related challenges. Furthermore, the findings highlight the growing influence of climate change on regional water security. Rising temperatures, glacier retreat, and changing precipitation patterns are expected to increase pressure on shared water resources. Under such conditions, unilateral water development projects may contribute to regional tensions if not accompanied by effective communication and cooperation.

Despite these challenges, the results identify significant opportunities for collaboration. Shared interests in sustainable agriculture, environmental protection, and regional stability create a foundation for constructive dialogue. Enhanced information exchange, joint monitoring programs, and inclusive water governance mechanisms could improve trust among riparian states. The findings suggest that integrating Afghanistan more effectively into regional water management structures would contribute to equitable water allocation and long-term water security throughout Central Asia.

DISCUSSION

The results of this study emphasize the growing importance of Afghanistan in the transboundary water dynamics of Central Asia. As the country continues to develop its water infrastructure and expand agricultural production, its influence on regional water availability is expected to increase. This situation presents both challenges and opportunities for neighboring states that depend on shared river systems. One of the key issues identified in the study is the absence of comprehensive regional agreements that fully incorporate Afghanistan into existing water governance structures. Historical water-sharing arrangements were largely developed without substantial Afghan participation, reflecting the country's prolonged

political instability. However, current developments indicate that future regional water management strategies must acknowledge Afghanistan as an essential stakeholder.

The findings support the argument that cooperative approaches are more effective than unilateral actions in addressing transboundary water challenges. International water law emphasizes principles such as equitable utilization and mutual cooperation, which can provide a useful framework for negotiations among riparian countries. Implementing these principles could help balance Afghanistan's development objectives with the water needs of downstream states. Climate change further reinforces the necessity of cooperation. Decreasing water availability and increasing demand may intensify competition for resources unless countries adopt coordinated management strategies. Regional institutions can play an important role in facilitating dialogue, promoting transparency, and supporting scientific cooperation. The study also highlights the importance of trust-building measures. Regular data exchange, joint technical assessments, and collaborative infrastructure planning can reduce uncertainty and minimize the risk of disputes. Economic cooperation linked to water management may provide additional incentives for regional engagement. In conclusion, Afghanistan's expanding role in transboundary water use represents a significant development in Central Asian water politics. Sustainable and equitable management of shared water resources will depend on the willingness of all parties to engage in constructive dialogue and establish inclusive governance mechanisms. Strengthening regional cooperation offers the most promising path toward long-term water security, environmental sustainability, and regional stability.

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