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International Legal Foundations for The Use of Transboundary Water Resources

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Abstract

This article analyzes the international legal foundations for the use of transboundary water resources. The author examines international treaties, regulations, and conventions on the effective and equitable use of transboundary rivers and water basins. Legal mechanisms for resolving disputes arising between states in the use of water resources are also analyzed. The article also highlights Uzbekistan's practices in this field and prospects for international cooperation. The study reveals the importance of international legal norms for the sustainable use of water resources. The study further argues that effective governance of transboundary water resources requires not only binding treaties but also flexible cooperative frameworks that accommodate changing climatic and socio-economic conditions. Drawing on comparative analysis of global instruments such as the UN Watercourses Convention, the UNECE Water Convention, and regional agreements, the article identifies best practices for establishing equitable allocation principles, procedural obligations for information exchange, and joint monitoring mechanisms. By linking normative analysis with practical policy proposals, the research underscores the centrality of international legal norms and cooperative mechanisms in preventing conflict, fostering equitable use, and securing resilient water governance for downstream and upstream communities alike.

Keywords: Transboundary Water Resources, International Law, Water Use, Interstate Cooperation, Legal Mechanisms, Sustainable Development, Uzbekistan, Water Disputes, Convention, International Treaty

1. Introduction

Water resource management and use issues are becoming increasingly acute and their scope is expanding year after year, requiring more and more individual and organizational involvement at the local, national, and international levels to resolve them. It is therefore vital that we create a foundation for continuous dialogue and cooperation among all interested parties in our time. International conventions on nature conservation are the most widespread form of international cooperation in the field of environmental protection. The peaceful and sustainable management of transboundary water resources is particularly important.

Scientists and practitioners are linking the beginning of the third millennium with the ever-increasing scarcity of this natural resource. This wealth is an absolutely irreplaceable resource, even compared to the most crucial non-renewable energy sources (oil and gas).

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UNESCO Director-General K. Matsuura emphasized: “Among all the social or natural crises facing humanity, it is the water resource crisis that puts the issue of our and our planet's survival on the agenda” [1].

Today in Uzbekistan, the issues of providing the population with clean drinking water and effectively utilizing available water resources are becoming more crucial than ever. This, in turn, necessitates the equitable use of the Amu Darya and Syr Darya rivers, the largest water arteries supplying the region with its primary water source, against the backdrop of global climate change occurring in Central Asia, while taking into account the interests of the basin states [2].

Literature Review

The number of people without stable access to clean water exceeds 1 billion. In a study by another national scientist, S.Jurayev, titled “New Trends in Solving Systemic Problems in Central Asia (Analytical Report)” a historical and systematic analysis of agreements reached in the field of transboundary water use in Central Asia over the past few years was conducted [3].

More than a third of the world's population, that is, 2.4 billion people, do not have access to adequate sanitation facilities. This situation is leading to tragic consequences. Every year, over 2.2 million people die, mainly in developing countries, from diseases associated with poor water quality and unsatisfactory sanitary and hygienic conditions. Despite the vital importance of fresh water, its resources are unevenly distributed: although 70% of the Earth's surface is covered with water, 97.5% of it is salt water. The remaining 2.5% is fresh water, but almost two-thirds of it remains frozen in glacial covers [4].

Natural resource issues are shifting from a national perspective to an international one as a result of environmental problems associated with transboundary water bodies. There are approximately 263 transboundary water basins in the world, of which one-third belong to more than two countries and 19 to more than five.

B.A. Iskandarkhonova, noting that there are no universally recognized norms for the use of transboundary rivers in world practice, attributes the complexity of the problem to the differences in approaches to property rights in water legislation adopted by various states [5].

The issue of legal regulation of transboundary water resources use in Central Asia has also been the focus of attention for many scientists.

A scientific article by A.Khaydarov titled “Uzbekistan: A New View on Prospects for Cooperation in Central Asia” examined issues of regional integration and water-energy cooperation in Central Asia. In particular, the author, addressing the matter of the Kushtepa canal construction, argues that the lack of coordinated water resource management between Afghanistan and Central Asian states may lead to the emergence of a complex of problems with geopolitical, economic, and international legal consequences [6].

In their scientific article titled “Water Issues in Central Asia: Resolution Mechanisms at Different Levels of Political Governance”, B. Saidamirov and A. Toropygin examine approaches to addressing the water problem in Central Asia. The study includes an analysis of the international legal status of transboundary water sources and explores various political instruments for resolving these issues [7].

2. Research Method

The methodology of this article is based on a combination of qualitative and analytical research methods, which focus on the legal aspects of transboundary water resources

management. It employs a comparative analysis of international treaties, conventions, and agreements related to transboundary water usage. This approach involves examining global legal frameworks such as the UN Watercourses Convention, the UNECE Water Convention, and regional agreements to identify key principles of equitable and sustainable water management. The study also delves into the international legal foundations governing the use and protection of transboundary water bodies, with a particular emphasis on the Central Asian region, including the Amu Darya and Syr Darya rivers. Furthermore, it integrates case studies and historical analysis to assess past water-sharing agreements and their impact on the region's cooperation efforts. By analyzing the legal norms and frameworks, the methodology seeks to provide a comprehensive understanding of how international law can facilitate better cooperation between riparian states, address disputes, and ensure the fair allocation of water resources. The research also incorporates policy analysis and best practices from existing international water agreements, examining how these can be adapted and implemented in Central Asia. This methodology provides insights into the role of legal mechanisms in promoting sustainable water use and preventing conflicts among countries sharing transboundary waters.

3. Results and Discussion

International legal documents should be adopted to enhance national and international laws concerning the use and protection of water resources for transboundary water bodies (e.g., separately for the Caspian Sea by defining its legal and geographical status, as well as separately for the Irtysh River, the Ili-Balkhash basin, the Syr Darya, and the Amu Darya). Regional features, the number of nations using transboundary waters, the water's state, and whether it is navigable or not should all be considered. Coordination of their control procedures is advised in addition to strengthening the international legal framework. As a result, transboundary waters will be used sensibly going forward.

The necessity for a unified approach is affirmed by the Helsinki Convention on the Protection and Use of Transboundary Watercourses and International Lakes, adopted by the UN General Assembly in 1992; the New York Convention on the Law of Non-Navigational Uses of International Watercourses, adopted in 1997; the Protocol on Water and Health to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes; the Convention on Environmental Impact Assessment in a Transboundary Context; the UNECE Convention on the Transboundary Effects of Industrial Accidents; the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, adopted in 1998; and a number of other documents.

These international documents serve as a common legal foundation for developing bilateral and multilateral agreements concerning various transboundary watercourses. They establish the fundamental principle of each state's right to an equitable share in the use of transboundary river basin waters. Additionally, they outline obligations to prevent various types of damage (including environmental) to water bodies, structures and mechanisms for interstate cooperation in this field, including systems for notification and information exchange.

The UN Convention on Transboundary Watercourses and International Lakes was adopted in 1992 and entered into force in 1996. The Convention aims to establish common approaches and legal mechanisms for protecting transboundary rivers and lakes from pollution. To this end, the Convention stipulates obligations for the Parties to implement water

quality standards, prevent and reduce transboundary impacts, and protect and restore aquatic ecosystems, including water basin lands, wildlife, and forest ecosystems.

Article 1 of the Helsinki Convention on the Protection and Use of Transboundary Watercourses and International Lakes provides the following definition: transboundary waters refer to any surface or groundwater that marks, crosses, or is located within the boundaries between two or more states. In cases where transboundary waters flow directly into the sea, the boundaries of such transboundary waters are defined by a straight line intersecting the discharge point between points located on the low-water mark of their shores [8].

Among the measures ensuring the protection of waters from transboundary impacts, the Convention provides for: preventing and reducing water pollution that may have a transboundary impact; ensuring the rational use of transboundary waters; and ensuring the “rational and equitable” use of transboundary waters [9].

The Convention consolidates important principles of water relations that previously operated as international custom. According to these principles, states are obliged to use the waters of transboundary watercourses in an environmentally favorable and rational manner, and the principles of equitable and reasonable utilization, precaution, and compensation for damage are also reflected. To further develop the Convention, in 1999, 35 European countries signed the Protocol on Water and Health, committing to cooperate in protecting water ecosystems, ensuring sustainable development in the European region, and harmonizing legislation in the interests of protecting human health. The Protocol was adopted in June 1999 and presented for signing at the World Forum "Water and Health," held in 2000 in The Hague (Netherlands).

In 1997, the UN General Assembly adopted the Convention on the Law of the Non-navigational Uses of International Watercourses. It is an international framework treaty that has global application and is recognized as an international framework treaty. As a result, any state that wishes to participate in the Convention could do so. The Convention was adopted in order to establish uniform rules for the economic use of transboundary rivers' water resources. These rules cover issues such as the construction of hydraulic structures, irrigation, water intake for utilities and industries, as well as the distribution of water resources between upstream and downstream states. Convention requirements were developed primarily using customary law norms and international doctrines based on bilateral and other basin agreements.

To ensure equal access to water resources for states sharing transboundary river basins, obligations have been established regarding notification of planned economic projects related to water use, prevention of significant harm, prevention of pollution, and fair and rational distribution of water. In practice, the latter obligation is implemented through a widely used mechanism of percentage-based quota allocation or distribution of water resources among the basin countries.

International maritime law constitutes a distinct area of legal regulation for water relations. It encompasses the UN Convention on the Law of the Sea of 1982, the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter of 1972, the International Convention for the Prevention of Pollution from Ships of 1973, the International Convention for the Prevention of Pollution of the Sea by Oil of 1954, the Convention on the High Seas and the Continental Shelf of 1958, the International Convention on Civil Liability for Oil Pollution Damage of 1969, and a number of other global and regional agreements. These agreements provide detailed regulations for the marine environment and establish a complex

system of state obligations to reduce and control marine pollution from various sources, as well as liability measures.

In 1976, UNEP approved the Regional Seas Programme, resulting in more than 30 agreements on individual seas. In 2003, within the framework of this program, the Convention for the Protection of the Marine Environment of the Caspian Sea was signed [10].

Uzbekistan is adapting its state policy on water use to modern conditions and requirements. From the first years of independence, Uzbekistan has identified water use issues as a key direction of state policy. On May 6, 1993, the Law of the Republic of Uzbekistan “On Water and Water Use” was adopted, while at the international level, our country pursues an independent policy as a party to the International Convention on the Protection and Use of Transboundary Watercourses and International Lakes and the UN Convention on the Law of the Non-navigational Uses of International Watercourses.

Additionally, the new Development Strategy of Uzbekistan for 2022-2026 provides for a radical reform of the water resources management system and the implementation of a separate state program on water management (Goal 31), while the 3rd section of the "Uzbekistan-2030" Strategy dated September 11, 2023, outlines organizational and practical measures for water resources management, nature conservation, and environmental protection. Concurrently, the Decree of the President of the Republic of Uzbekistan dated July 2, 2018, "On Measures to Increase the Efficiency of Water Resources Use," the Decree dated July 10, 2020, "On Approving the Concept for the Development of Water Management of the Republic of Uzbekistan for 2020-2030," and the Decree dated June 23, 2023, "On Measures for the Effective Organization of State Management in the Field of Water Resources" were adopted. In general, it would not be an exaggeration to say that the adoption of such subordinate acts in our country provides a legal foundation for future reforms in water resources management and their rational use.

According to researcher A.A.Kenzhaev, “The modern water and energy system of Central Asia began to form during the Soviet era and ceased to exist after the collapse of the state. After gaining independence in 1991, the Central Asian states immediately began establishing the international legal basis for their joint transboundary water use. However, it should be noted that the agreements signed between the Central Asian states in the 1990s were formed very quickly to avoid interstate conflicts in transboundary water use, and as a result, these international acts contain some legal shortcomings” [11].

A. Kukushkina and Sh. Sodikov in their research indicate that the water agreements signed between the states of Central Asia in the 90s were aimed at the rapid resolution of water conflicts and were declaratory in nature, without the possibility of applying sanctions for violation of the terms of these agreements.

The international legal framework that regulates transboundary waters of rivers, lakes and aquifers provides an essential foundation for co-ordination of shared rivers, lakes and aquifers in a manner that harmonises sovereign privileges with reciprocal responsibilities [12]. Several decades of conventional practice and treaty law have clarified expectations and created channels for co-operation that reduce conflict risk and optimize resource use more sustainably. Universal principles equitable and reasonable use, the responsibility not to cause significant harm, cooperation and transparency in information exchange remain the hallmarks of effective basin management. Mechanisms such as the UN Watercourses Convention and intraregional agreements have translated such principles into practical obligations, encouraging basin-wide planning and institutional arrangements common to the basin.

Institutional solutions and arrangements for conflict resolution complement substantive laws by making coordination easier, cooperative fact-finding and negotiated settlements possible [13]. River commissions, joint monitoring systems and adaptive management solutions bridge the gap between legal obligations and actual practice, allowing riparian states to accommodate changing conditions while maintaining channels of communication. Sustaining problems climate change, unequal data and capacity, and political or economic differences among riparians underscore the difference between principle and practice on the ground [14]. The gaps need to be bridged through long-term investment in shared science, capacity building, participatory decision-making and institutions that ensure equitable benefits to all basin users, including the poor and other vulnerable people. In the future, additional reinforcement of the implementation of law and cooperation are necessary in order to ensure transboundary waters for future generations. Through reinforcing values of equity, transparency and flexibility, and supplementing legal commitments with institutionalized practice and finance, the global community is able to better manage shared waters as common goods that foster peace, development and environmental resilience [15].

4. Conclusion

In conclusion, we believe it is appropriate to adopt international legal documents in order to improve legislation pertaining to the protection and utilization of water resources on both an international and a national level for transboundary water bodies (for example, separately for the Caspian Sea by defining its geographical and legal status, as well as separately for the Irtysh River, the Ili-Balkhash basin, the Syr Darya, and the Amu Darya). This should take into account regional characteristics, the number of countries that use transboundary waters, the condition of the water, and whether it is navigable or non-navigable. Besides improving the international legal framework, coordination of their control mechanisms is advisable. The result will be a rational use of transboundary waters in the future as well as the resolution of potential conflicts.

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