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THE THREAT OF DRINKING WATER SHORTAGE IN CENTRAL ASIA

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Abstract. This article examines the growing drinking water shortage in Central Asia as a multidimensional challenge crossing environmental, demographic, agricultural, and governance lines. It argues that the regional water crisis is not merely a technical issue, but a structural threat to public health, social stability, and regional security. Using the Aral Sea disaster as a historical warning, the study demonstrates how contemporary scarcity in the Amu Darya and Syr Darya basins is driven by both climate change, such as glacier retreat, and institutional failures, including outdated irrigation models. Focusing on Uzbekistan, a downstream state highly vulnerable to transboundary flows, the article analyzes the evolution of regional legal frameworks, allocation mechanisms, and the water-energy nexus. It evaluates Uzbekistan's recent domestic policy shifts, notably its new Water Code, infrastructure modernization, and accession to the Protocol on Water and Health. Finally, by framing water access under international human rights law, the article advocates for a rights-based approach alongside efficiency reforms. It concludes that safeguarding Central Asia's future stability requires a parallel commitment to robust domestic legal updates and unified, basin-wide cooperation.

Keywords: Central Asia, water security, transboundary watercourses, Aral Sea, climate change, international water law, right to water, water governance

MARKAZIY OSIYODA ICHIMLIK SUVI TANQISLIGI TAHDIDI

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Annotatsiya. Ushbu maqolada Markaziy Osiyoda tobora ortib borayotgan ichimlik suvi tanqisligi ekologik, demografik, qishloq xo'jaligi va boshqaruv chegaralarini kesib o'tuvchi ko'p qirrali muammo sifatida ko'rib chiqilgan. Muallif mintaqaviy suv inqirozi shunchaki texnik masala emas, balki jamoat salomatligi, ijtimoiy barqarorlik va mintaqaviy xavfsizlik uchun tizimli tahdid ekanini ta'kidlagan. Tadqiqotda Orol dengizi fojiasidan tarixiy ogohlantirish sifatida foydalangan holda Amudaryo va Sirdaryo havzalaridagi bugungi tanqislik muzliklarning erishi kabi iqlim o'zgarishlari hamda eskirgan irrigatsiya modellari singari institutsional kamchiliklar tufayli yuzaga kelayotgani ko'rsatib berilgan. Transchegaraviy oqimlarga o'ta bog'liq bo'lgan quyi oqim davlati – O'zbekistonga e'tibor qaratilib, mintaqaviy huquqiy asoslarning rivojlanishi, suv taqsimoti mexanizmlari va suv-energetika bog'liqligi tahlil qilingan. Shuningdek, O'zbekistonning ichki siyosatidagi so'nggi o'zgarishlar, xususan, yangi Suv kodeksi, infratuzilmani modernizatsiya qilish hamda "Suv va salomatlik to'g'risida"gi protokolga qo'shilishi baholangan. Nihoyat, suvdan foydalanish imkoniyatlari xalqaro inson huquqlari me'yorlari nuqtayi nazaridan ko'rib chiqilib,

samaradorlikni oshirishga qaratilgan islohotlar bilan bir qatorda huquqiy himoya yondashuvi ham qo'llab-quvvatlangan. Muallif Markaziy Osiyoning kelajakdagi barqarorligini ta'minlash milliy qonunchilikni jadal takomillashtirish hamda havza miqyosida yagona hamkorlikni yo'lga qo'yish bo'yicha parallel sa'y-harakatlarni talab etadi, degan xulosaga kelgan.

Kalit so'zlar: Markaziy Osiyo, suv xavfsizligi, transchegaraviy suv oqimlari, Orol dengizi, iqlim o'zgarishi, xalqaro suv huquqi, suvga bo'lgan huquq, suv resurslarini boshqarish

УГРОЗА ДЕФИЦИТА ПИТЬЕВОЙ ВОДЫ В ЦЕНТРАЛЬНОЙ АЗИИ

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Аннотация. В статье исследуется нарастающий дефицит питьевой воды в Центральной Азии как многомерный вызов, затрагивающий экологическую, демографическую, сельскохозяйственную и управленческую сферы. Обосновывается, что региональный водный кризис представляет собой не только техническую проблему, но и структурную угрозу общественному здоровью, социальной стабильности и региональной безопасности. На примере экологической катастрофы Аральского моря показано, что современный дефицит водных ресурсов в бассейнах Амударьи и Сырдарьи обусловлен как изменением климата, включая таяние ледников, так и институциональными проблемами, в частности использованием устаревших моделей ирригации. Особое внимание уделено Узбекистану как государству нижнего течения, наиболее уязвимому к изменениям трансграничных водных потоков. В статье анализируются развитие региональных правовых механизмов, системы распределения водных ресурсов и взаимосвязь водной и энергетической безопасности. Также рассматриваются последние изменения государственной политики Узбекистана, включая принятие нового Водного кодекса, модернизацию инфраструктуры и присоединение к Протоколу по проблемам воды и здоровья. Рассматривая доступ к воде через призму международного права прав человека, автор обосновывает необходимость применения правозащитного подхода наряду с мерами по повышению эффективности водопользования. Сделан вывод о том, что обеспечение устойчивого будущего Центральной Азии требует одновременного совершенствования национального законодательства и развития согласованного сотрудничества государств региона на уровне речных бассейнов.

Ключевые слова: Центральная Азия, водная безопасность, трансграничные водотоки, Аральское море, изменение климата, международное водное право, право на воду, водное управление

Introduction

There is a frequent tendency to perceive natural environmental or even technical challenges as being outside the remit of legal concerns. Freshwater resources in Central Asia have long been under pressure, but the region's water crisis has now evolved from a structural environmental problem into a legal, social, geopolitical, and human-rights challenge of vast proportions. This transformation is powerfully exemplified by the plight of the Aral Sea, once one of the world's largest inland water bodies and now reduced to a fraction of its historical size. The so-called "Aral crisis" has developed from an environmental problem

into a full-scale ecological disaster affecting public health, livelihoods, migration patterns, and the dignity of millions of people across the region. The lessons of the Aral Sea are therefore not merely historical. They reveal the dangers of unsustainable water governance under conditions of climate stress, institutional weakness, and excessive exploitation of available resources. These pressures are further intensified by agricultural expansion, demographic growth, industrialization, and increasing developmental demands (World Meteorological Organization, 2021).

The problem is not simply that water resources are becoming scarcer. It is also

that the existing legal and institutional arrangements are being tested by a scale of demand for which they were not designed. Climate projections for Central Asia indicate that water availability in the Amu Darya and Syr Darya basins is likely to decline, while the population and economy of the region continue to grow. In Uzbekistan, whose permanent population exceeded 37.5 million by early 2025, demographic growth has been particularly rapid since independence. In a water-stressed country, such growth increases demand for drinking water, intensifies pressure on irrigation systems, and deepens competition among agricultural, industrial, energy, and extractive uses of water. Both urban and rural communities are becoming increasingly vulnerable (National Statistics Committee of the Republic of Uzbekistan, 2025).

The issue should therefore not be reduced to hydrological calculations alone. Shortages of drinking water affect not only health and well-being, but also hygiene, nutrition, energy production, ecological sustainability, and broader conditions of social stability. The risk of disputes over water, both between and within states, inevitably increases under such circumstances. Water scarcity in Central Asia is thus as much a legal and political issue as it is a hydrological one. For a relatively arid and highly interdependent region, and for Uzbekistan in particular as a downstream state deeply affected by upstream decisions, the crucial question is whether law and institutions can adapt rapidly enough to prevent environmental stress from developing into deeper humanitarian and interstate instability. This article addresses that question by examining the factors driving the regional water crisis, the international and regional legal frameworks governing shared rivers, Uzbekistan's domestic legal and policy response, and the role of the right to water in framing the issue as one of international legal significance (World Bank, 2019).

The existing academic literature provides several important points of departure, but it has not yet been sufficiently integrated into the present article's line of argument. Dinara Ziganshina has shown that the Central Asian basin is not devoid of legal norms; rather,

it is governed by a complex interaction of substantive principles of international water law, above all equitable and reasonable utilization, prevention of significant harm, and cooperation (Ziganshina, 2012). Teresita Cruz-del Rosario, in turn, interprets Central Asian water governance through the concept of shared risk and demonstrates that cooperation in the region has often remained fragile because it depends heavily on shifting political calculations rather than on deeply internalized legal commitments (Cruz-del Rosario, 2009). Anatole Boute has convincingly argued that any serious legal analysis of water governance in Central Asia must also take account of the water-energy nexus and the reciprocal legal-economic bargains surrounding storage, release, fuel, and electricity exchange (Boute, 2017). More recent review studies further emphasize that climate-induced variability, fragmented institutions, weak implementation, and the growing significance of Afghanistan as an external hydraulic actor require adaptive and basin-wide legal responses rather than reliance on static post-Soviet arrangements alone (Isakov et al., 2025; Pirniyazova et al., 2025).

Against this background, the purpose of this article is to determine whether the existing combination of international legal principles, regional cooperative frameworks, and ongoing domestic reforms in Uzbekistan is capable of responding adequately to the growing threat of drinking water insecurity in Central Asia. The scientific hypothesis of the article is that the principal danger for the region lies not in physical scarcity alone, but in the widening gap between rapidly changing hydrological realities and an insufficiently adapted legal and institutional architecture for governing shared water resources. On that basis, the article argues that only a combined model of rights-based domestic reform, stronger implementation of international legal principles, and adaptive basin-wide cooperation can reduce the risk that water scarcity in Central Asia will evolve into a new ecological and humanitarian catastrophe.

Methods

This article employs a doctrinal legal methodology characteristic of research in the

field of international law. The primary objects of analysis are the principles and norms governing transboundary watercourses under international law, the regional agreements and institutional arrangements applicable to Central Asia, and the domestic legislation and policy documents of Uzbekistan relating to water use, drinking water security, and environmental governance. These materials are interpreted not only formally, but also functionally, that is, from the standpoint of their normative coherence, legal effect, institutional design, and practical enforceability.

In addition, the article uses a comparative-functional and problem-oriented method. Comparative analysis is applied to identify the gap between universal legal standards of international water law and the specific institutional configuration of water governance in Central Asia. A case-study method is used in relation to Uzbekistan as a downstream state whose legal reforms can be assessed against broader regional dynamics. Finally, selected hydrological, demographic, climate, and infrastructure data are used as contextual material to evaluate whether existing legal mechanisms remain adequate under conditions of increasing scarcity and volatility. This combined methodology makes it possible to move beyond description and toward a specifically legal assessment of rights, obligations, institutional deficits, and feasible regulatory responses.

Results

Climate change and hydrology

One of the deepest structural causes of water deficiency in Central Asia is climate change. The region is warming up faster than the global average. The alterations in hydrological cycle affect directly the livelihoods of millions of people. Most of river runoff in the region originates from mountainous river basins, primarily located in Tajikistan and Kyrgyzstan. Glaciers and seasonal snow cover act as natural reservoirs storing water for dry periods, especially for summer irrigation. The water deficit in agriculture can thus increase significantly due to the warming of the environment, as meltwaters from glaciers in the short run can even slightly increase river runoff, whereas in the longer run, glaciers

can serve as a reservoir of water for future generations. However, as these glaciers are melting due to warming, the reserve base for increased runoff to sustain water supply during the warm season for irrigation will weaken (World Bank, 2014).

Glacier loss in the Tien Shan and Pamir Mountains is severe and well documented. Since the mid-twentieth century many glaciers have retreated more than 14% on average and up to 30% in some basins. There are major changes now taking place in river regimes and seasonal flows in the watersheds of the Amu Darya and Syr Darya rivers. These changes are referenced in development and climate assessments written for environmental, policy and strategic purposes. They project that by mid-century both rivers will have substantially decreased in flow with particularly serious implications for irrigation, food production and the current system of allocation among states (Diebold, 2013).

While the climate change will increase the amount of water in the water cycle, the impact on the hydrological cycle will increase the frequency and magnitude of droughts, heat-waves and variable seasonal precipitation. These implications of climate change thus are “not only less water” but also “unpredictable water.” Central Asia needs, therefore, a shift from the focus on ensuring “sufficient water quantity” to meeting a new set of challenges created by impacts of climate change that requires new legal tools, institutions and Water Governance arrangements to manage and share use of water resources. This implication is critical because, while climate change increases the intensity of water scarcity, it also undermines the foundational assumption of current Water Management and Water Governance models that relies on the ongoing stability of past climate conditions and therefore makes legal framework and existing water Management and Water Governance arrangements ineffective to meet the challenges of climate change (World Bank, 2023).

Population growth and agriculture

Demographic pressure is the second key factor which influences access to water resources

across Central Asia. The rapidly increasing population, both currently and projected, demands larger amounts of water for human needs and food security. However, the overall water economy across the region remains dominated by agricultural use for irrigation purposes. Agricultural water consumption in Uzbekistan is approximately 90 percent of national total consumption. In view of this very high percentage, agriculture remains a sensitive sector to decreased amounts of flow, especially given the national trend towards economic development. Climate change and differences in water use at the upstream end of the river could potentially have a greater impact at the downstream end given current sectoral distribution (World Bank, 2025).

While weather variability does play a role, the agricultural structure itself is equally pertinent. The irrigation model inherited from the Soviet era was designed to provide massive space for extensive, centrally managed farming of a few water-hungry crops, most notable among them cotton. Even after Uzbekistan carried out fundamental transformations in its agricultural policy and began to strive to more widely diversify its crop selection, the irrigation infrastructure and related water institutions inherited from the Soviet past persist and have a profound effect on agricultural water consumption. As such, the “water crisis” in the region cannot be attributed solely to the “lack of water resources,” but rather must be viewed in light of the natural and economic development “scarcity” created by historically embedded economic choices and technology lock-in (World Bank, 2025).

Due to its geographical position, per capita water consumption in Uzbekistan is still among the highest in the world. While water consumption for drinking water supply and use in household purposes is rather moderate, water consumed in agriculture mainly through irrigation is very high. Thus, the problem of Uzbekistan is not so much the search for additional water resources, but rather the use of currently available resources in a more rational way. Without substantial transition to more efficient irrigation technologies, agro-production planning and crop selection, as well as water metering

and payment for its consumption, the growing population pressure will make water one of the major sources of new conflicts in the country, further exacerbating the already critical condition of the environment (World Bank, 2025).

Discussion

Infrastructure and mismanagement

Water scarcity in Central Asia is influenced not only by climate change and increased demand for water resources. Furthermore, the state of water infrastructure as well as prevailing institutional inefficiencies are sources of additional water losses. In Uzbekistan, large losses occur before water is distributed to agricultural fields and urban populations. Official texts and reports from the sector repeatedly report on the need to modernize and operate outdated canals and drinking water supply networks, speak of excessive water losses due to leaks in pipes, irrigation channels and reservoirs, high evaporation from water surfaces, and a lack of regulation instruments. In discussion among experts in Uzbekistan, irrigation water losses in agriculture are estimated to be up to 50%, primarily because of inefficiencies in the water delivery system. Thus, a major component of the water problem in Central Asia is not solely the absence of sufficient water resources, but also the failure of existing irrigation systems to meet their potential (Daryo.uz, 2023).

In addition to the direct loss of water and associated yield, the inefficient use of water has a series of secondary affects. Firstly, it reduces the real level of availability and puts both government agencies and farmers under greater pressure to seek additional supplies, supplies which may already be under considerable stress. Secondly, it can lead to waterlogging and salinisation of highly cultivated irrigated land, particularly in low-lying areas, with consequent loss of soil resource. Thirdly, it can lock farmers into a cycle of declining productivity that forces them to resort to increased irrigation to maintain or increase production, with the net result of greater loss, greater inefficiency and greater environmental damage. Legally, chronic failure of infrastructure requires water law to move on from abstract statements on allocation and embrace issues of monitoring, measurement,

accountability, investment and modernisation technology (World Bank, 2022).

To manage its water resources more effectively, Uzbekistan is gradually advancing the digitalisation and modernisation of the water sector. Since the 1990s, official reform agendas have introduced a range of measures aimed at improving water management, including the metering and accounting of water consumption, the lining of irrigation canals, and the adoption of water-saving and modern irrigation technologies. In recent years, international financial institutions have also begun supporting Uzbekistan's efforts to reform the water sector. In June 2025, the World Bank announced its support for the modernisation of the country's irrigation system and initiatives to improve water-use efficiency. Agriculture in Uzbekistan accounts for approximately 90 per cent of total water consumption, making this sector critical to the country's water security. Although awareness of water wastage has existed for many years, systematic efforts to reduce avoidable water losses have emerged only relatively recently (World Bank, 2025).

Transboundary and political tensions

In order to deal with the problem of water scarcity in Central Asia, it is necessary to take into account the transboundary characteristics of the region's major rivers, which cross borders of upstream and downstream states in consistent and obligatory forms and connect their territories and interests. The territory of Tajikistan and Kyrgyzstan includes major sources of water and the principal hydropower resources of the region. Uzbekistan, Turkmenistan, and Kazakhstan, which are downstream states, rely on the regular annual flood flows of these rivers in order to meet the irrigation needs of their populations and to ensure their drinking water supply. However, on the other side of the border, the needs of these downstream states often conflict with the interests of the upstream states, particularly when the latter choose to generate energy instead of fulfilling their commitments in accordance with previously signed water-sharing agreements.

In the post-independence period, repeated attempts by the four Central Asian states to reach agreements on the sharing of

transboundary river waters, particularly those of the Amudarya and Syrdarya, have yielded limited results. The water and energy-sharing agreements concluded among the former Soviet republics in 1992 proved insufficient to prevent disputes over the management of reservoirs. Even during years of normal water availability, decisions concerning reservoir water releases and energy compensation payments between upstream and downstream states have frequently generated tensions. These tensions intensify considerably during periods of drought. Furthermore, disagreements often arise regarding the extent of winter energy generation that upstream states should undertake and the allocation of irrigation water during the summer season.

The legal challenge in this context lies not merely in the absence of adequate rules and regulations but, more importantly, in their weak implementation and enforcement. As a result, water has become a highly sensitive issue for all stakeholders in Central Asia. It has evolved into a strategic resource and a complex factor in environmental and political decision-making, closely linked to questions of sovereignty, economic development, and regional security.

Pressure for change in the five-state regional framework for cooperation on Central Asian water issues is increasing. Afghanistan is developing the proposed Qosh Tepa Canal that is expected to alter the flow regime of the Amu Darya River basin significantly. As reported in regional sources, the volume of water diverted from the basin by the planned canal is likely to reduce supplies for use in Uzbekistan and Turkmenistan. The fact that a major new water facility is being developed in Afghanistan, a country that is outside the institutional framework under which most water cooperation has occurred in the post-Soviet era, raises special concerns (The Jamestown Foundation, 2023).

Transboundary water scarcity in Central Asia should be understood not only as a hydrological challenge but also as a legal and political one. As water shortages become more severe, the importance of legal certainty, transparent information exchange, prior notification, and

effective dispute-prevention mechanisms correspondingly increases. In a region increasingly threatened by the impacts of climate change, projects that may otherwise appear to be purely domestic matters can generate consequences extending far beyond national borders.

The relevance of law in this context does not lie in its ability to create additional water resources or offset the physical effects of climate change. Rather, its significance stems precisely from its inability to do so. Law can establish reasonable expectations among states, prevent unilateral actions and faits accomplis, and provide procedural frameworks for the peaceful management of competing national interests. In doing so, it contributes to stability, predictability, and cooperation in the governance of shared water resources. (United Nations Sustainable Development Goals, 2024).

Transboundary Legal Frameworks

International law regulating the use of transboundary freshwater resources is built around a core triad of principles: equitable and reasonable utilization, the duty to prevent significant harm, and the duty of cooperation. These principles do not eliminate disputes, but they provide the normative grammar by which competing claims can be assessed, justified, and limited. They are especially important in Central Asia, where the same river systems support irrigation, drinking water supply, food security, energy production, and environmental sustainability across several sovereign states. Even where all states are not parties to the same treaty instruments, these principles remain central to any legal evaluation of responsible conduct in the basin (United Nations, 1997).

Academic scholarship on Central Asia broadly converges on one crucial point: the region does not suffer from a complete absence of law, but from fragmented legalization and uneven implementation. Ziganshina demonstrates that the substantive norms of international water law are already sufficiently developed to guide conduct in the Aral Sea basin, even in the absence of universal adherence to a single multilateral regime (Ziganshina, 2012). Rosario, however, shows that cooperation in

Central Asia has often remained precarious because it has been sustained less by firm institutionalization than by changing perceptions of shared risk and political convenience (Cruzdel Rosario, 2009). Boute further argues that the legal analysis of water allocation in Central Asia remains incomplete unless it incorporates the water-energy nexus and the reciprocal arrangements surrounding reservoir operations, electricity exchange, fuel compensation, and seasonal balancing (Boute, 2017). Recent review literature has reinforced this diagnosis by linking water insecurity not only to climate stress, but also to institutional fragmentation, insufficient adaptive governance, and the need to involve Afghanistan more seriously in the legal and political architecture of regional water management (Isakov et al., 2025; Pirniyazova et al., 2025).

Contrary to the simplified depiction of Central Asian water governance as operating under a single coherent “treaty regime,” the region in fact functions through a layered and partly fragmented framework composed of Soviet-era legacies, post-independence agreements, annual protocols, and institutional practice. The 1992 Almaty Agreement was a pivotal moment in regional cooperation: the Central Asian states agreed to cooperate in the “joint study, use and protection of interstate water resources” and to preserve the existing allocation pattern until a broader framework could be developed. The establishment of the Interstate Commission for Water Coordination (ICWC) was one of the most important institutional consequences of that agreement. Yet the legal significance of the Almaty framework lies not only in its historical role, but also in the fact that it preserved the recognition of interdependence as a continuing legal and practical reality.

The 1998 Agreement among Kazakhstan, Kyrgyzstan, and Uzbekistan concerning the use of water and energy resources of the Syr Darya basin, later joined by Tajikistan, illustrates another important feature of the regional legal order: in Central Asia, water law cannot be meaningfully separated from energy law and the economics of reciprocal compensation. The Agreement sought to formalize the relationship

between upstream reservoir management and downstream irrigation demand through energy and fuel arrangements. Its legal significance is therefore not merely technical. It demonstrates that stable transboundary governance in the region depends not on unilateral claims to control, but on institutionalized forms of reciprocal advantage capable of making cooperation materially viable (CAWater-Info, 1998).

A complementary framework has been provided by the International Fund for Saving the Aral Sea (IFAS) and the Aral Sea Basin Program (ASBP). These initiatives are important because they move the regional agenda beyond simple allocation disputes and connect water governance with environmental restoration, public health, socio-economic stabilization, and institutional modernization. In this respect, they reflect an important shift from a narrow understanding of water as a distributive resource toward a broader conception of basin governance as a multidimensional legal and developmental issue (Executive Committee of the International Fund for Saving the Aral Sea, 2021).

At the same time, it would be incorrect to assume that the current legal regime of the region is already complete, coherent, and fully capable of addressing the emerging challenges. Its deficiencies are evident in at least three respects. First, many rules remain weakly institutionalized and continue to depend on annual bargaining rather than on durable compliance procedures. Second, the legal regime was largely shaped by older hydrological expectations and is increasingly strained by climate-induced variability. Third, the regional framework has not yet fully adapted to the growing significance of Afghanistan as a hydraulic actor capable of affecting downstream conditions. Accordingly, the principal legal problem in Central Asia is not the absence of norms as such, but the widening gap between existing principles and their effective operationalization under new ecological and geopolitical conditions (Pirniyazova et al., 2025).

Uzbekistan's National Laws and Policies

Legislation and policy addressing water scarcity have become increasingly important

areas of development in Uzbekistan. For many years, the principal legal instrument governing water management was the 1993 Law "On Water and Water Use," which served the country during its post-Soviet transition. However, evolving challenges—including the growing impacts of climate change, the need to modernise management practices, increasing competition for limited water resources, and the demand for clearer institutional responsibilities—have necessitated a more comprehensive legislative framework (Republic of Uzbekistan, 1993).

A new chapter in water governance began in 2025 with the adoption of the Water Code of the Republic of Uzbekistan. Approved by Law No. LRU-1076 on 30 July 2025 and entering into force on 31 October 2025, the Code aims to establish a unified legal framework through the codification and modernisation of existing water legislation. It regulates water use and protection, management, oversight mechanisms, and the powers of competent authorities. By replacing a fragmented body of legislation with a coherent system, the Code provides a legal basis for the rational use and sustainable management of water and land resources. It also clarifies the responsibilities of state bodies and strengthens the legal foundation for developing and implementing sustainable environmental policies (Republic of Uzbekistan, 2025).

Alongside fundamental changes in the perception of water as an essential component of the environment, the new Water Code signals a broader policy shift: from viewing water primarily as an agricultural resource managed within sectoral boundaries to recognising it as a strategic national asset linked to state security, public welfare, environmental protection, and investment objectives (Republic of Uzbekistan, 2024).

Contemporary water policy in Uzbekistan places greater emphasis on the rational use of water resources and hydraulic infrastructure, the prevention of water losses, the modernisation of water management systems, and the attraction of investment into the sector. Reports issued in 2025 identified the expansion of canal lining, the improvement of irrigation and water supply networks, and the prevention of losses

amounting to billions of cubic metres of water as key policy priorities. These developments suggest a gradual transition from policy declarations to substantive reforms.

An equally important aspect of the evolving legal framework is its connection to constitutional and environmental obligations. Although the Constitution of Uzbekistan does not explicitly recognise a right to water, it guarantees the protection of a favourable environment and conditions necessary for human and animal life. Public health, sanitary, and environmental legislation further establish the State's responsibility to ensure the safe provision and protection of water resources. As a result, the regulation of water resources is increasingly linked to broader questions of rights and governance. In a context of growing water scarcity, the challenge cannot be addressed solely through expanding supply. Instead, it requires integrated legal management that brings together environmental, public health, agricultural, infrastructural, and international dimensions of water governance.

The Right to Water as a Human Right

Central Asian water discourse has often naturalised drinking water scarcity by framing it primarily as a technical and inter-state management issue. In this perspective, water is regarded as more than an economic input but less than a human right: a resource to be allocated rather than a prerequisite for human dignity, survival, health, and participation in social life. To move beyond this limited understanding, the legal dimensions of water scarcity must be examined, recognising access to safe drinking water as a fundamental aspect of personhood.

Contemporary legal scholarship suggests that the right to water has gradually evolved from an implied entitlement derived from other socio-economic rights into a more visible and increasingly autonomous normative claim. As Chirwa observes, international, regional, and comparative constitutional practice demonstrates a growing tendency to treat access to water as a rights-based issue, even though the precise legal status and degree of autonomy of this right remain contested (Chirwa, 2020). This debate is particularly relevant in Central Asia because it shifts the analytical focus from water as an object

of interstate allocation to water as a precondition for human dignity, public health, and equal citizenship within domestic legal systems.

International human rights law provides important support for this approach. Although the International Covenant on Economic, Social and Cultural Rights (ICESCR) does not explicitly recognise a separate right to water, the Committee on Economic, Social and Cultural Rights has derived such a right from Articles 11 and 12 of the Covenant, which protect the rights to an adequate standard of living and to the highest attainable standard of physical and mental health. In General Comment No. 15, the Committee affirmed that everyone is entitled to sufficient, safe, acceptable, physically accessible, and affordable water for personal and domestic use. It further emphasised that water is indispensable for life, health, and the enjoyment of an adequate standard of living (Committee on Economic, Social and Cultural Rights, 2002).

This understanding received further normative reinforcement in 2010 through United Nations General Assembly Resolution 64/292 on the human right to water and sanitation. The Resolution recognised access to safe drinking water and sanitation as indispensable to the full enjoyment of life and all human rights. Beyond expressing a general principle, it consolidated an emerging rights-based approach that places obligations on states to ensure minimum access to water without discrimination. Consequently, governments are required to move beyond a narrow emphasis on efficient resource management and regulation, and instead prioritise guaranteeing access to the minimum quantity of water necessary for a life lived in dignity, on the basis of equality and fairness (United Nations General Assembly, 2010).

For Uzbekistan, the human right to water has particular significance. As a party to the International Covenant on Economic, Social and Cultural Rights (ICESCR), the country is already obliged to ensure access to water as an integral component of the rights to health and an adequate standard of living. Uzbekistan has gone further by becoming, in January 2024, the first Central Asian state to accede to the UNECE–

WHO/Europe Protocol on Water and Health. The Protocol is the first legally binding international instrument specifically dedicated to protecting human health and well-being through improved water resource management, investment in water supply and sanitation systems, and the prevention and control of water-related diseases. Its significance lies in recognising that water governance cannot be confined to technical or agricultural considerations alone; failures in water supply and sanitation systems have direct public health consequences (UN Economic Commission for Europe, 2024).

The Protocol also promotes a culture of accountability by encouraging states to establish targets and monitoring mechanisms and to strengthen coordination between water, sanitation and hygiene (WASH) policies and health policies. Through its accession, Uzbekistan has committed itself to aligning national water governance with international standards aimed at improving public health and enhancing resource efficiency. This marks a departure from the predominantly administrative and agricultural orientation of water legislation common in many post-Soviet states. Under this emerging approach, water law becomes not only an instrument of resource management but also an important component of social policy, environmental protection, and human rights (UN Economic Commission for Europe, n.d.).

Although Uzbekistan does not explicitly recognise an autonomous constitutional right to water, domestic legislation provides a foundation for corresponding state obligations. Constitutional guarantees relating to environmental protection, together with legislation on public health, sanitary safety, environmental protection, and water management, collectively establish responsibilities regarding access to safe water. Policies aimed at expanding piped water supply, modernising infrastructure, reducing water losses, and introducing universal metering should therefore be understood as practical measures implementing these human rights obligations. The absence of an explicit constitutional provision does not absolve the State of responsibility, as existing legislation contains concrete safeguards designed to protect human life, health, and

adequate living conditions (Republic of Uzbekistan, 2023).

A human rights perspective also transforms the way water scarcity is understood and addressed. Beyond technical questions concerning seasonal availability, irrigation demands, and reservoir management, it asks how the burdens of scarcity should be distributed and who should receive priority access to limited supplies. It raises concerns about balancing the needs of rural and urban populations, ensuring the affordability of water services, and protecting vulnerable groups from exclusion. In this way, a rights-based approach disciplines water governance by requiring it to be not only efficient but also equitable and just. In Central Asia, where environmental degradation and social inequalities frequently intersect, this perspective is particularly important.

Uzbekistan Case Studies: Stress, Disputes, and Reform

The abstract notion of water scarcity, when framed in purely hydrological terms, translates into concrete developmental challenges in Uzbekistan. These challenges are partly determined by objective geographic and environmental conditions typical of arid and semi-arid regions. However, they are intensified by rapid population growth and a high level of irrigation intensity. Uzbekistan, being a landlocked country, generates only a small portion of its water resources domestically, while approximately 80% originates from transboundary rivers in neighbouring states. In other words, around one-fifth of available water is internal, while the remainder is formed outside the country's borders and flows into Uzbekistan. Consequently, policy discourse consistently emphasises that domestic water management reforms alone cannot ensure long-term stability without effective regional cooperation in transboundary water governance (Kun.uz, 2023).

At the same time, internal pressures continue to increase. Official projections estimate that Uzbekistan may face a water deficit of approximately 7 billion cubic metres by 2030, with higher deficits projected under adverse climate and management scenarios by 2050. While such forecasts are not definitive, they

reflect a growing concern regarding structural imbalance between water supply and demand. It is increasingly evident that traditional patterns of water use will be insufficient to sustain future development (Kun.uz, 2023).

The regional water-energy nexus is particularly evident in the case of the Toktogul reservoir in Kyrgyzstan, which plays a critical role in meeting the irrigation needs of downstream Uzbekistan and Kazakhstan. Historically, weak coordination in reservoir management led to seasonal tensions, as upstream water retention for hydropower generation often reduced downstream availability during key irrigation periods. This long-standing challenge has been addressed through recent legal developments. The 2025 trilateral Agreement on the Joint Use and Protection of Water and Energy Resources of Transboundary Rivers between Kazakhstan, Kyrgyzstan, and Uzbekistan introduced a reciprocal compensation mechanism: downstream states supply electricity to Kyrgyzstan during winter, while Kyrgyzstan ensures agreed water releases during the summer irrigation season. This arrangement institutionalises water-energy interdependence and transforms a source of conflict into a framework for mutual benefit (The Times of Central Asia, 2025).

Within Uzbekistan, responses to water scarcity increasingly combine legal, administrative, and infrastructural reforms. Official reports for 2025–2026 highlight canal lining, water-saving technologies, digitalisation of water management, and the introduction of smart metering systems. These measures are reported to generate substantial water savings and aim to reach up to 15 billion cubic metres by 2030. While the accuracy of such figures may be debated, they indicate a shift in policy perception, where water loss is increasingly treated as a manageable issue through institutional reform and technological investment (Embassy of the Republic of Uzbekistan in Japan, 2024).

Reforms in the agricultural irrigation sector further illustrate this transformation. In 2025, the Asian Development Bank approved a \$125 million programme supporting modernisation of

irrigation services in Uzbekistan. The programme includes digital water accounting, integration of irrigation management systems with GIS, remote sensing, telemetry, and satellite monitoring. These technologies enhance the enforceability of water allocation rules by enabling precise measurement of consumption, identification of losses, and differentiation between legal and illegal withdrawals. In this sense, digitalisation contributes to the broader “juridification” of water management by strengthening regulatory control through data-driven governance (Asian Development Bank, 2024).

Recent state measures in 2026 continue this trajectory, with investments aimed at upgrading canal infrastructure and reducing losses to save hundreds of millions of cubic metres of water annually (The Times of Central Asia, 2026). While these reforms are significant, they should not be overstated: infrastructure improvements alone cannot resolve transboundary scarcity or offset the long-term effects of climate change. Nevertheless, they demonstrate a growing commitment to reducing domestic inefficiencies and strengthening institutional capacity.

Overall, the Uzbek experience illustrates that water scarcity is not a singular phenomenon but a multidimensional challenge shaped by demographic, climatic, infrastructural, and transboundary factors. It requires both national reform and regional cooperation. Uzbekistan’s case demonstrates that these two dimensions are interdependent: while transboundary water dependence necessitates regional coordination, internal inefficiencies also require comprehensive domestic legal and institutional reform.

Toward Cooperation and Conflict Prevention

Central Asia does not begin from institutional emptiness. A relatively dense, though imperfect, architecture of cooperation already exists, including the 1992 Almaty framework, the Interstate Commission for Water Coordination, IFAS, the Aral Sea Basin Programme, basin-specific agreements, and long-standing practices of intergovernmental coordination on reservoir management, seasonal balancing, and energy exchanges. These mechanisms reflect accumulated regional experience and

demonstrate that water cooperation in Central Asia has never been purely rhetorical. However, their effectiveness remains heavily dependent on annual negotiations, political discretion, and informal bargaining rather than on fully institutionalised legal procedures and stable expectations of compliance.

Against this background, the core principles of international water law assume particular importance. The principle of equitable and reasonable utilisation prohibits any riparian state from treating a transboundary watercourse as an object of exclusive sovereign control. The obligation not to cause significant harm limits uses that may generate foreseeable serious adverse impacts on other riparian states. The duty to cooperate—together with obligations of information exchange, prior notification, consultation, and negotiation—provides the procedural framework necessary for managing competing interests. While these principles do not eliminate disputes, they establish a common legal language through which tensions can be addressed before escalating into conflict (United Nations, 1997).

For these principles to be operational, they must be translated into concrete regional practices. This requires, first, regular and verifiable exchange of hydrometeorological data; second, clear procedures for prior notification and consultation on major hydraulic projects; third, strengthened environmental and legal impact assessment mechanisms for activities with transboundary effects; and fourth, structured engagement with Afghanistan in light of the Qosh Tepa Canal and its implications for the Amu Darya basin. A basin-wide legal order cannot remain credible if a major actor capable of materially affecting water availability is excluded from meaningful cooperative arrangements (Pirniyazova et al., 2025).

Domestic reform and regional cooperation must therefore be understood as mutually reinforcing components of a single legal strategy. For Uzbekistan, this implies implementing the Water Code not merely as an internal codification exercise, but as part of a broader regional governance framework combining enforceable metering, water-saving obligations, institutional accountability, and minimum guarantees of

access to safe drinking water. In parallel, the UNECE-WHO/Europe Protocol on Water and Health can strengthen the social dimension of water governance through target-setting and monitoring (Republic of Uzbekistan, 2024). At the regional level, institutions such as IFAS, the ICWC, and the Dushanbe Water Process should function not only as diplomatic platforms, but also as mechanisms for routine reporting, peer review, confidence-building, and dispute prevention.

This article has examined water-related conflict in Central Asia, arguably one of the most complex hydrological systems in the world. The central question is whether legal frameworks can adapt quickly enough to increasingly volatile hydrological conditions. Addressing this challenge requires a strategic reorientation of governance: deeper legal cooperation, data-driven planning, integration of water governance with health and human rights frameworks, and recognition of interdependence as a structural reality rather than a temporary arrangement. Only through such an approach can Central Asian states reduce the risk of escalation and avoid the scenario often described as a “new apocalypse.”

Conclusion

There is little reason today to doubt that Central Asia is entering a period of intensified drinking water insecurity. Glacier retreat, climate variability, demographic growth, irrigation dependence, infrastructural losses, and transboundary asymmetries are all exerting cumulative pressure on regional water systems. However, the central argument of this article is that the emerging crisis should not be understood as a purely natural or hydrological phenomenon. Water scarcity is mediated through law, institutions, administrative capacity, and political decision-making. The core problem, therefore, is not only the physical reduction of water availability, but also the insufficient adaptation of legal and institutional frameworks to changing hydrological realities.

The experience of the Aral Sea remains the most powerful historical warning in this respect. It demonstrates that ecological collapse can result not only from environmental stress, but also from prolonged legal, institutional, and policy failure. Contemporary Central Asia faces a different but related risk: not a repetition of

the Aral catastrophe in identical form, but the gradual convergence of drinking water insecurity, agricultural pressure, public health vulnerability, and cross-border tensions. The prospect of a “new apocalypse” is therefore not rhetorical exaggeration but a legally and politically grounded concern that unmanaged scarcity may deepen internal inequalities while increasing regional instability.

Uzbekistan provides a particularly instructive case. As a densely populated downstream state highly dependent on transboundary inflows, it is exposed to both upstream hydrological decisions and domestic inefficiencies. At the same time, it is among the most active regional actors in pursuing water sector reform. The adoption of a new Water Code, expansion of water-saving technologies, digitalisation of metering and accounting systems, and accession to the UNECE-WHO/Europe Protocol on Water and Health all reflect a growing recognition that water governance extends beyond sectoral administration to encompass strategic governance, public health, environmental security, and international legal responsibility.

Nevertheless, domestic reform alone cannot resolve a fundamentally transboundary challenge. No downstream state, regardless of the sophistication of its legal framework, can ensure water security in isolation if basin-wide cooperation weakens or major upstream interventions occur without meaningful legal coordination. For this reason, the article advances a dual legal strategy. At the domestic level, states should strengthen enforceable water accounting, reduce infrastructural losses, guarantee minimum access to safe drinking water through rights-based regulation, and

integrate public health and environmental standards more fully into water governance. At the regional level, cooperation should evolve toward more operational mechanisms based on prior notification, systematic data exchange, joint monitoring, predictable water–energy compensation schemes, and institutionalised dispute prevention.

Three priority legal directions follow from this analysis. First, major hydraulic projects with potential transboundary impacts should be subject to clearer and more binding procedures of notification, consultation, and environmental assessment. Second, the region requires a more transparent and reliable hydrological data regime to support planning and confidence-building. Third, institutions such as ICWC and IFAS should move beyond coordination functions and develop stronger roles in compliance review, routine reporting, and preventive diplomacy. While these measures will not eliminate scarcity, they can significantly reduce the risk that scarcity escalates into conflict or humanitarian stress.

There is, therefore, no justification for alarmist predictions of inevitable “water wars,” but equally no basis for complacency. What is required is legal realism: recognition of the scale of the challenge combined with sustained investment in law, institutions, transparency, and cooperation. If Central Asian states succeed in translating existing principles of international water law into more stable and adaptive governance practices, the Aral Sea will remain a historical warning rather than a future trajectory. If they do not, drinking water scarcity may become one of the defining legal and political fault lines of the coming decades.

REFERENCES

- Asian Development Bank. (2024). *Sector assessment (summary): Modernization of irrigation services in Uzbekistan*. <https://www.adb.org/sites/default/files/linked-documents/58125-001-ssa.pdf>
- Boute, A. (2017). *Water management in Central Asia: The role of energy, trade, and investment law*. In J. Chaisse (Ed.), *The regulation of the global water services market* (pp. 335–358). Cambridge University Press. <https://doi.org/10.1017/9781316678442.015>
- CAWater-Info. (1998, March 17). *Agreement on the use of water and energy resources of the Syr Darya basin*. https://www.cawater-info.net/library/eng/l/syrdarya_water_energy.pdf

Chirwa, D. M. (2020). *Access to water as a new right in international, regional and comparative constitutional law*. In A. von Arnould, K. von der Decken, & M. Susi (Eds.), *The Cambridge handbook of new human rights* (pp. 55–69). Cambridge University Press.

Committee on Economic, Social and Cultural Rights. (2002, November 29). General Comment No. 15 (2002): *The right to water (arts. 11 and 12 of the International Covenant on Economic, Social and Cultural Rights) (E/C.12/2002/11)*. UN Office of the High Commissioner for Human Rights. https://www2.ohchr.org/english/issues/water/docs/CESCR_GC_15.pdf

Cruz-del Rosario, T. (2009). Risky riparianism: Cooperative water governance in Central Asia. *Australian Journal of International Affairs*, 63(3), 404–415. <https://doi.org/10.1080/10357710903104869>

Daryo.uz. (2023, October 21). *Shavkat Mirziyoyev calls for urgent action on inefficient water use in agriculture*. <https://daryo.uz/en/2023/10/21/shavkat-mirziyoyev-calls-for-urgent-action-on-inefficient-water-use-in-agriculture/>

Diebold, A. (2013). *The impact of glaciers melting on national and trans-boundary water systems in Central Asia*. United Nations Regional Centre for Preventive Diplomacy for Central Asia. https://unowas.unmissions.org/sites/default/files/glacier_melting_brochure_eng.pdf

Embassy of the Republic of Uzbekistan in Japan. (2024, May 15). *Official report on Uzbekistan's water-saving policy targets*. <https://www.uzbekistan.jp/news/25312?language=en>

Executive Committee of the International Fund for Saving the Aral Sea. (2021). *Aral Sea Basin Program-4 (ASBP-4)*. <https://ecifas.kz/en/pbam/pbam-4/>

Isakov, Y., Sarkytkan, K., Gajić, T., Akhmetova, A., Berdygulova, G., Zhoya, K., Razia, T., & Matigulla, B. (2025). Climate-induced transboundary water insecurity in Central Asia: Institutional challenges, adaptation responses, and future research directions. *Water*, 17(12), Article 1795. <https://doi.org/10.3390/w17121795>

Kun.uz. (2023, October 23). *Uzbekistan may face water deficit of 7 billion cubic meters by 2030*. <https://kun.uz/en/11484560>

National Statistics Committee of the Republic of Uzbekistan. (2025, July 9). *O'zbekistonning doimiy aholisi soni qariyb 38 mln nafarga yetmoqda [The permanent population of Uzbekistan is reaching almost 38 million people]*.

Pirniyazova, A., Turaeva, S., Turgunov, D., & Jarihani, B. (2025). Sustainable transboundary water governance in Central Asia: Challenges, conflicts, and regional cooperation. *Sustainability*, 17(11), Article 4968. <https://doi.org/10.3390/su17114968>

Republic of Uzbekistan. (1993, May 6). *Law of the Republic of Uzbekistan "On water and water use" (No. 837-XII)*. Lex.uz. <https://lex.uz/docs/93202>

Republic of Uzbekistan. (2023, May 1). *Constitution of the Republic of Uzbekistan*. Lex.uz. <https://lex.uz/en/docs/6453510>

Republic of Uzbekistan. (2024, February 28). *Water resources management and irrigation sector development program adopted*. Government portal of the Republic of Uzbekistan. <https://gov.uz/en/news/view/77473>

Republic of Uzbekistan. (2025, July 30). *Law of the Republic of Uzbekistan "On the approval of the Water Code of the Republic of Uzbekistan" (No. LRU-1076)*. Lex.uz. <https://lex.uz/en/docs/7655857>

The Jamestown Foundation. (2023, June 29). *Central Asia faces potential water shortage as Afghanistan's canal project nears completion*. <https://jamestown.org/central-asia-faces-potential-water-shortage-as-afghanistans-canal-project-nears-completion/>

The Times of Central Asia. (2025, November 25). *Kazakhstan, Kyrgyzstan, and Uzbekistan sign trilateral deal on water and energy cooperation*. <https://timesca.com/kazakhstan-kyrgyzstan-and-uzbekistan-sign-trilateral-deal-on-water-and-energy-cooperation/>

The Times of Central Asia. (2026, March 9). *Uzbekistan allocates \$49 million to prevent water shortages and upgrade canals*. <https://timesca.com/uzbekistan-allocates-49-million-to-prevent-water-shortages-and-upgrade-canals/>

UN Economic Commission for Europe. (2024, January 15). *Uzbekistan's accession to the Protocol on Water and Health opens new opportunities for stronger action on water, sanitation, hygiene and health*. <https://unece.org/climate-change/press/uzbekistans-accession-protocol-water-and-health-opens-new-opportunities>

UN Economic Commission for Europe. (n.d.). *Targets set by Parties under the Protocol on Water and Health*. <https://unece.org/environment-policy/water/protocol-on-water-and-health/targets-set-parties>

United Nations General Assembly. (2010, August 3). *The human right to water and sanitation (A/RES/64/292)*. UN Digital Library. https://digitallibrary.un.org/record/687002/files/A_RES_64_292-EN.pdf

United Nations Sustainable Development Goals. (2024, July 26). *Dushanbe Water Process follow-up mechanism of the UN 2023 Water Conference*. <https://sdgs.un.org/partnership-progress/dushanbe-water-process-follow-mechanism-un2023-water-conference-fri-07262024>

United Nations. (1997, May 21). *Convention on the law of the non-navigational uses of international watercourses*. https://legal.un.org/ilc/texts/instruments/english/conventions/8_3_1997.pdf

World Bank. (2014). *Turn down the heat: Confronting the new climate normal*. World Bank Group. <https://documents1.worldbank.org/curated/en/990301468046859794/pdf/927040v10WP0000sh0Executive0Summary.pdf>

World Bank. (2019, June 28). *No more business as usual: Improving water usage in Central Asia*. World Bank Group. <https://www.worldbank.org/en/news/feature/2019/06/28/no-more-business-as-usual-improving-water-usage-in-central-asia>

World Bank. (2022). *Uzbekistan public expenditure review: Better value for money in human capital and water infrastructure*. <https://documents1.worldbank.org/curated/en/099143503032342898/pdf/P1731400b7033d022087b409217648dc35e.pdf>

World Bank. (2023). *Uzbekistan country climate and development report*. <https://documents1.worldbank.org/curated/en/099111423124532881/pdf/P1790680f452f10ba0a34c06922a1df0003.pdf>

World Bank. (2025, May 21). *Uzbekistan to modernize its irrigation infrastructure with World Bank support*. <https://www.worldbank.org/en/news/press-release/2025/05/21/uzbekistan-to-modernize-its-irrigation-infrastructure-with-world-bank-support>

World Meteorological Organization. (2021, July 14). *The future of the Aral Sea lies in transboundary co-operation*. WMO Bulletin.

Ziganshina, D. (2012). International water law in Central Asia: The nature of substantive norms and what flows from it. *Asian Journal of International Law*, 2(1), 169–192. <https://doi.org/10.1017/S2044251311000087>

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