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**AN INTEGRATED WATER LAW FRAMEWORK TO
IMPLEMENT THE PEACEFUL USE OF
TRANSBOUNDARY WATERS IN LINE WITH THE
SDGS – THE CONTRIBUTION OF CENTRAL ASIA.**

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INTRODUCTION

Central Asia comprises five countries – Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan, with a total population of more than 72 million people, sharing major transboundary waters across diverse landscapes with a continental climate. .

The major transboundary waters include the Amudarya, Syrdarya, Chu (Shu), Talas, Zeravshan, Tedzhen (Herirud), and Murgab rivers. These are used mainly for irrigation and energy production, regulated through flow regulation schemes, which were designed to meet competing sectoral needs and to enable the sharing of costs and benefits.

Significant natural and anthropogenic challenges means that the water resources are managed with the goal of achieving important social, economic and environmental objectives across the five countries. According to what (Source)The water stress in CA (SDG 6.4.2) exceeds 71%. While the level of household and drinking water supply and sanitation is relatively high, aging infrastructure now requires considerable investment and upgrade. The growing adverse impacts of climate change call for improved adaptation measures so as to sustain water-related ecosystems (SDG indicator 6.6.1), and to combat desertification and land degradation, especially with the continued drying up of the Aral Sea, deterioration of mountain ecosystems, decreasing quantities and qualities of water resources and declining aquatic biodiversity.

Many actions are required to address these compelling challenges, including innovative and joined-up legal and regulatory regimes to ensure the equitable and reasonable use of the shared water resources across CA at international, regional and national levels. Identifying and implementing agreed rules of law across the regulatory implementation levels will contribute to the sustainable development of the transboundary waters shared across CA in line with the UN SDGs in ways that address current hard challenges.

The next sections identify the key water law issues and approaches relevant to the use of transboundary water resources aligned with the overarching goals of sustainable water development with a view to introducing an integrated Water-Law regulatory framework.

AN INTEGRATED WATER LAW FRAMEWORK TO SUPPORT THE UN SUSTAINABLE DEVELOPMENT GOALS

Attaining the key objectives advanced by the ‘Water for Sustainable Development,’ central to the UN Decade for Action on Water and Sanitation, requires a robust and joined-up regulatory regime.



This is especially important in the context of transboundary waters, which cross national borders and provide sustenance for a majority of the world’s human and environmental populations. Today, when the significant adverse impacts of climate change exacerbate already difficult national social, economic, health and

environmental policy objectives, the question of how to peacefully manage diminishing qualities and quantities of shared fresh water resources is of critical importance for regional stability and security. Water law, across its broad regulatory reach, plays a key role in increasing the opportunities for improved transboundary water cooperation, aligned with sustainable development goals implemented at the national level.

This policy brief provides an overview of applicable legal frameworks that govern interstate water management across three principal layers of governance: international, national and transnational (economic) - the so-called 'regulatory implementation horizon', integral to effective transboundary water cooperation. With a focus on Central Asian state practice on transboundary water resources, the policy brief identifies and elaborates the key water law issues central to enabling enhanced transboundary water cooperation and thus meeting the objectives of "Water for Sustainable Development," essential to the UN Water Decade.

The sustainable development of the region's shared freshwater resources is central to securing social, economic, and environmental issues across CA. The UN Sustainable Development Goals (SDGs), notably Goal No. 6 aimed at ensuring the availability and sustainable management of water and sanitation for all, are indivisible and mutually complementary. The sustainable and integrated management of water resources, as well as the furtherance of cooperation and partnerships at all levels with the view of achieving internationally agreed water-related goals and targets are clear objectives of the International Decade for Action, "Water for Sustainable Development", 2018–2028 (A/RES/71/222, No. 4). The Final Declaration of the Second High-Level International Conference on The International Decade for Action adopted in June 2022 in Dushanbe, Tajikistan, emphasized the importance of legal instruments and guidelines that can offer inter alia frameworks for multi-sectoral cooperation, setting national targets and reaching SDG 6. This key objective forms the topic for this policy brief.

INTEGRATED WATER LAW CREATES THE SPACE NEEDED FOR EFFECTIVE IMPLEMENTATION OF THE SDGS

Law operates through a system of norms and processes establishing and regulating legal relationships among actors and serving as a medium through which they communicate. It provides the 'space' for stakeholders' interaction, thus enabling and sustaining their cooperative efforts. In the context of transboundary waters, the most effective forms of such interaction are institutionalized forums, such as river commissions, joint bodies, and other permanent bodies of cooperation.

In many river basins, such institutions create and facilitate enabling conditions for forming pragmatic communities that collaborate in planning and monitoring the utilization, protection, and development of their common waters through data sharing, studies, analysis, projects and programs. In 1992, the Central Asian States established the Interstate Commission for Water Coordination (ICWC) as a framework within which their representatives could jointly consider and make binding decisions on water-related issues, including allocation. Regular meetings of the ICWC as well as the daily operations of its executive bodies have enabled riparian countries to ensure relative stability in transboundary water resources management and adapt the water allocation system, set up during the Soviet era, to new conditions in extremely difficult political, economic, and hydrological circumstances that emerged over the last decades. For the on-going process of improvement of another regional institution – International Fund for Saving the Aral Sea (IFAS) and its bodies, practice and

experiences from other international basins may become useful. These bodies have been established through legal frameworks and supported by a series of regional and bilateral transboundary water agreements.

The UNECE Conventions, as well as other multilateral environmental agreements (MEAs), through meetings of the Parties, task forces and working groups, provide the space for their participants and other interested stakeholders to meet regularly and deliberate on scientific, policy and legal issues, continuously reinforcing the substantive and procedural requirements of the relevant water-related treaties and advancing their implementation. Many MEAs have specific institutional mechanisms to facilitate implementation and compliance. For example, the Implementation Committee under the UNECE Water Convention provides a forum for the Parties to get competent advice for any request relating to specific issues concerning difficulties in implementing the Convention. The first advisory procedure initiated in 2020 upon a request from Montenegro on the Cijevna/Cem River in Albania demonstrated that the Implementation Committee's facilitative and result-oriented approach enables the countries themselves to initiate solutions and gradually move from less to more complex issues. Also, the advisory procedure shows that the Water Convention and its Implementation Committee play an important practical role in multi-level water governance, complementing a bilateral agreement and commission between Montenegro and Albania as well as basin cooperation on the Drin. The institutional 'space' for cooperation reinforces implementation opportunities for the peaceful management of transboundary waters across CA.

INTERNATIONAL RULES GOVERNING TRANSBOUNDARY WATER RESOURCES

The rules of international law that govern international freshwaters are derived from foundational instruments such as the UN Charter and a very considerable number of interstate conventions and agreements, global, regional, and bilateral. In addition, there is a body of customary legal principles that contribute to international water law, supplemented by soft-law provisions stemming from numerous declarations, guidelines and other non-binding instruments. The central principles of this legal system include the duty to cooperate, the governing rule of equitable and reasonable use of the shared freshwaters, and the due diligence rule of conduct that requires watercourse states to act in such a manner as to prevent the causing of significant harm to their neighbors. The core substantive rule of equitable and reasonable use is implemented on a case-by-case basis, with all relevant factors considered. This would include the duty to protect environmental flows and ecosystems dependent upon the watercourse, in addition to all other economic, social and environmental issues. Due diligence is a rule governing the conduct of watercourse states in their use and development of the shared freshwaters, encouraging 'best practice'. Together the rules of equitable and reasonable use and due diligence contribute to normative guidance on lawful transboundary State actions.

The implementation of the core principles governing international waters usually requires more concrete rules and provisions which fall within five distinct categories: (i) scope; (ii) substantive rules; (iii) procedural rules; (iv) institutional mechanisms; and (v) dispute prevention/settlement. The strength of any international water regime can be evaluated using this legal analytical framework. Ideally, international basins or watercourses should be governed by international water agreements that incorporate each of these categories of provisions. In the absence of such water treaties rules of customary law apply. How customary law has evolved in this field has been seen in

arbitral and judicial decisions, such as the Baglihar and Kishenganga awards under the Indus Treaty, and ICJ decisions on the Danube (Gabcikovo case), in Pulp Mills (Pulp Mills on the River Uruguay (Argentina v. Uruguay); the San Juan River (Nicaragua v. Costa Rica) and under the pending Silala case (Chile v. Bolivia). These series of dispute settlement cases demonstrate how international water law continues to evolve to meet contemporary challenges.

Legal Analytical Framework: TB waters

Key Elements	Details
1. Scope	<ul style="list-style-type: none"> • Legal reach (what waters?) • Definitions (watercourse; uses) • Parties (States; RIEOs)
2. Substantive Rules	<ul style="list-style-type: none"> • Legal duties & entitlements (equitable and reasonable utilisation; due diligence; protection) • Rules of substance (general or precise)
3. Procedural Rules	<ul style="list-style-type: none"> • Rules of procedure (duty to cooperate as bridge) • Notification / exchange of information
4. Institutional Mechanisms	<ul style="list-style-type: none"> • Joint bodies (RBOs) • Conference of the Parties (MoP) • Organisations / organs (Ministerial level; other)
5. Dispute Settlement	<ul style="list-style-type: none"> • Dispute avoidance (consultation) • Dispute settlement (Art. 33 UN WC; other) • Compliance verification (reporting; facilitation)

NATIONAL WATER LAW - LOCAL IMPLEMENTATION OF INTERNATIONAL WATER REGIMES

Regardless of the legal nature of the applicable rules (whether treaty or customary international law), States sharing the same waters ultimately retain the responsibility for managing water resources within their respective territories. To a large extent therefore, the effectiveness of operational international cooperative arrangements depends on the quality of the national water law frameworks in respective basin states and their capacity to fulfil their international obligations.

This capacity, however, may be compromised in a number of different ways and aspects.

The first relates to the quality of the law itself. It needs to be comprehensive and adaptable enough to accommodate and fulfil the State’s international obligations as set out above. Where policy priorities have changed over time, legal frameworks must be reconciled with these policies in such a way as to reflect and support the latter. The law must also be sufficiently coherent, thus ensuring that rights of water use are aligned with the demands of IWRM, and therefore avoiding fragmentation across sectors and scales.

The second aspect concerns the extent to which legal frameworks can be implemented in practice. This is much more related to the effectiveness of the rule of law, but is also a function of wider matters, such as enforcement capacity, and the existence of appropriate infrastructural, technical, financial, and human resources. It is also dependent on the availability of data and scientific understanding of the hydrological and hydrogeological system. Enforcement capacity is related to the quality of monitoring networks, as well as administrative capabilities (e.g., with respect to the upholding of water use rights), and access to remedy and redress through efficient judicial processes. Finally, implementation strongly correlates with governance quality more generally. While this can be difficult to assess, there are a number of governance indicators now available.

Thirdly, where, as in most instances, equitable and reasonable use is required, national

legal frameworks must be able to accommodate changes in the application of this standard across the basin. It should not be fixed in a static volumetric entitlement and must be capable of evolving over time. In addition, other pressures may affect the continuation of existing water use entitlements: these might include changing resource availability, improvements in the understanding of hydrological (and hydrogeological) system; and changes in national social, environmental or security priorities.

Solutions to these issues may include, e.g. expectation management; ‘good enough’ governance; focus on issues that are particularly problematic before addressing other issues; leaving fragmented institutional frameworks in place, but concentrating on developing communication / coordination procedures to bring them together; development of water use rights allocation systems that are commensurate with administrative capacity (e.g. like Scotland); dynamic legal frameworks that can embed broad objectives but adapt over time to accommodate change through primary and secondary legislation. Some of these options have been used in CA. Numerous amendments to the Water Code of Kazakhstan are a good indication in some ways. It shows that it is an evolving and learning legal framework that can improve over time.

REGULATORY FRAMEWORKS FOR PRIVATE INVESTMENT IN SUSTAINABLE WATER INFRASTRUCTURE: TRANS AND INTERNATIONAL ECONOMIC LAW



Investment is key to develop secure water infrastructure that serves key sectoral demands such as irrigation, energy, sanitation, and environmental protection. The legal regulatory regime that governs this aspect of transboundary water is a combination of transnational and international economic law. Securing stable sources of investment in legal arrangements that align with international obligations and national policy goals is a complex task. As with many developing regions, the CA region is lagging in securing stable sources of investment to meet its burgeoning infrastructure needs, especially in the context of contemporary challenges. It is reported by the World Bank that US\$26 trillion is required between 2016–2030 or US\$1.7 trillion per year, to improve people’s livelihoods across the region. Figure 1 shows the level of private investment in CA in comparison to other regions.

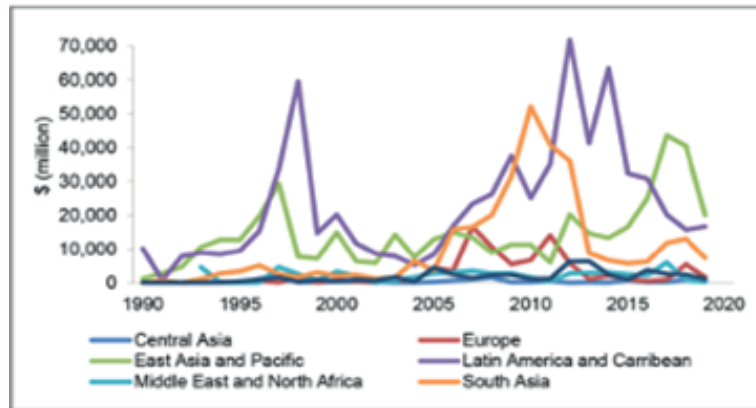


Figure 1: Investments by region (1990 – 2019)

Source: World Bank. Private Participation in Infrastructure 2019.

This diagram shows that - at the highest level of investment in 2011- Central Asia's share only reached US\$ 0.8 billion, of which around 3 percent was devoted to water and sanitation infrastructure.[4] Attracting private investment, both domestic and foreign, in the context of water resources requires: (i) clear legal frameworks and agreements; (ii) transparent pre/post investment establishment rules; (ii) independent institutional and regulatory structures; and (iii) adequate dispute prevention/resolution mechanisms. In summary the effective development of transboundary water resources across CA is unlikely to progress without clear and reliable legal frameworks to promote and protect private investment. However, this should not deter the CA countries from implementing their international water management obligations and from clearly defining the scope and nature of the -water- property rights allotted to investors, such as water licenses, allocations, and pollution permits affecting water resources. Domestic frameworks should consider the Central Asian countries' sustainable development strategies, which in some cases might trump the enjoyment of investment rights. Following examples of regions like South America, CA states could further integrate their trade, water management and sustainable development objectives in a comprehensive free trade agreement. This integration across international, national and transnational regulatory regimes provides the platform for the sustainable development of the transboundary waters across CA.

CASE STUDY - CENTRAL ASIA AND WATER LAW

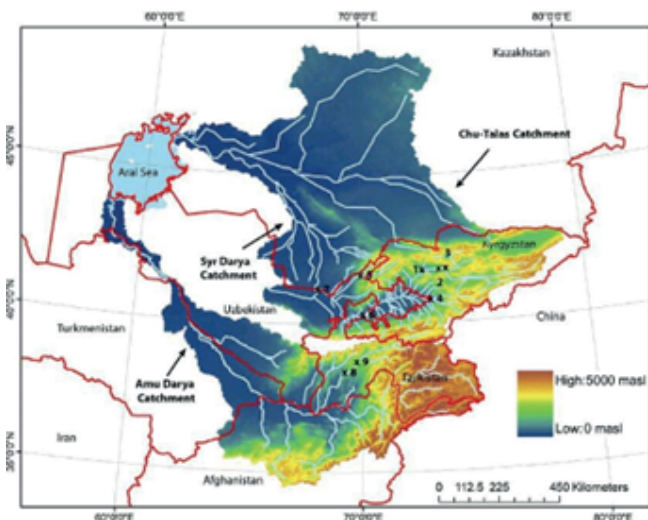
At the international level, regional, basin and bilateral treaties along with customary norms provide the legal framework for addressing transboundary water issues in an integrated manner. They define the rights and duties (legal entitlements), provide tools for regime integrity (monitoring, compliance, dispute resolution) and allow for peaceful modification and adaptation of the regime, when it is needed. On the global level, there are two main framework instruments that offer guidance on the rules of international law that apply in this field – The 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes (UNECE Water Convention) and the 1997 Convention on the Law of the Non-navigational Uses of International Watercourses (UN Watercourses Convention). Out of the countries of Aral Sea Basin the 1992 Water Convention has been adopted by downstream countries Kazakhstan, Turkmenistan, and Uzbekistan, whereas the 1997 Water Convention was adopted by Uzbekistan only. These framework global conventions complement the body of

regional and bilateral treaties concluded across CA, by offering guidance and examples of best practice on issues related to implementing equitable and reasonable use, transboundary harm prevention, protection, and preservation of freshwater ecosystems as well as notification procedures on planned measures. Importantly, recent bilateral treaties signed in CA contribute to the improvement of the legal framework by addressing specific management issues or setting up joint operation of interstate water infrastructure. In this respect, better coordination of law-making, and implementation efforts is becoming increasingly important to enhance coherence, across the various legal layers of implementation, summarised above.



Cooperation at the interstate level is rooted in the extensive legal framework, which forms the basis for conflict-free regulation of water use. It could, however, be strengthened by an operational implementation of the primary norms of equitable and reasonable use, and the due diligence obligation to take measures to not to cause significant harm, considering national interests of the CA countries.

There is a need to broaden the scope of the existing agreements to include Afghanistan as an upstream state in the Amudarya basin, and to effectively reflect the water, energy, and ecosystem nexus. Efficient data and information exchange, monitoring and assessment, as well as coordinated mechanisms for dispute prevention and resolution are to be further developed. This observation applies not only to CA but in many transboundary water regimes across the globe, the majority of which do not have international water agreements in place.



The governments of CA countries actively undertake reforms of national water-law related legislation so as to address the current challenges in implementing international law standards in line with national policy goals. All CA countries have introduced (SDG 6.5.1) principles of integrated water resource management into their national law, where its actual practical implementation presents ongoing issues. The establishment of effective water management

institutions in Central Asian countries, including national councils and other mechanisms for coordination, like basin organizations, has already started and continues to evolve. Existing water users and/or peasant (dehkan) farms organizations ensure participation of water users in the decision-making process at the local level despite difficulties of organizational, legal, and financial nature. Public participation of all stakeholders is a key principle across all levels of water law.

As regards interstate cooperation, the proportion of the international basin areas for

which there are functioning cooperation mechanisms (SDG 6.5.2) lies between 100% and 30% depending on the basin, demonstrated in SDG reporting. There are functioning joint bodies, regular meetings between the riparian countries, and intergovernmental working groups on water. The ongoing reform of the International Fund for Saving the Aral Sea aims at improving its organizational structure and legal framework taking into account the interests and participation of all CA states. Existing institutional structures are well positioned to develop joint regional investment projects tackling regional problems in water, energy, and climate sectors, and mobilizing national and foreign finance.

AN INTEGRATED WATER LAW FRAMEWORK FOR IMPLEMENTING THE PEACEFUL MANAGEMENT OF TRANSBOUNDARY WATERS IN LINE WITH THE SDGS



To implement the core objectives necessary to achieve (UN) “Water for Sustainable Development” requires focused and cohesive efforts on many levels. As regards international water resources, it is important to integrate (connect) the various levels of applicable water law - international, national, and transnational. Water law provides the ‘space’ to identify, empower and enable the broad range of stakeholders engaged

in the management of international water resources. This policy brief has introduced an innovative approach to devising an integrated Water Law model Framework for advancing opportunities for improved transboundary water cooperation, aligned with the UN SDGs. Central Asia provides an excellent case study for demonstrating how this can be achieved.

REFERENCES

1. Towards sustainable renewable energy investment and deployment: Trade-offs and opportunities with water resources and the environment. UNECE, March 2020. Available at https://unece.org/DAM/env/water/publications/ENERGY_127/Towards_sustainable_renewable_energy_investment_and_deployment_small_web_.pdf
2. Financing Climate Change Adaptation in Transboundary Basins: Preparing Bankable Projects (English). Water Global Practice Discussion Paper Washington, D.C.: World Bank Group. <http://documents.worldbank.org/curated/en/172091548959875335/Financing-Climate-Change-Adaptation-in-Transboundary-Basins-Preparing-Bankable-Projects>
3. Words into Action Guidelines Implementation Guide for Addressing Water-Related Disasters and Transboundary Cooperation. UNECE, October 2018. Available at https://unece.org/DAM/env/water/publications/WAT_56/ECE_MP.WAT_56_E_web.pdf
4. Water and Climate Change Adaptation in Transboundary Basins: Lessons Learned and Good Practices. UNECE, April 2015. Available at https://unece.org/fileadmin/DAM/env/water/publications/WAT_Good_practices/ece.

mp.wat.45.pdf

5. The Position paper “9th World Water forum: Central Asia for peace and development. Priorities, actions and challenges for the future” Fund for Saving Aral Sea, D> Ziganshina
6. Implementing Integrated Water Resources Management in Central Asia. Proceedings of the NATO Advanced Workshop on Integrated Water Resources Management in Transboundary Basins - an Interstate and Intersectoral Approach (Bishkek, Kyrgyzstan, 23-28th Feb. 2004) (Springer, 2007). (co-authors A. Allan and V. Dukhovny).
7. Sharing Transboundary Waters – An Integrated Assessment of Equitable Entitlement: The Legal Assessment Model, (co-authors S. Vinogradov, A. Allan, A. Rieu-Clarke, and P. Jones) UNESCO Paris, 2005.
8. “Towards Integrated Catchment Management: Increasing the Dialogue between Scientists, Policy-makers and Stakeholders”, 20:3 International Journal of Water Resources Development (2004) pp. 297-309 (co-authors M. Falkenmark, L. Gottschalk, J. Lundqvist).
9. International Law -- Facilitating Transboundary Water Cooperation, Global Water Partnership TEC Background paper (2013, available at <http://www.gwp.org/en/gwp-in-action/News-and-Activities/Transboundary-Law-and-Economic-Value-of-Water-New-Background-Papers-from-GWP-Technical-Committee/>).
10. Ziganshina D. Water Law Reforms in Central Asian Countries: Recent Trends and Developments. Chinese Journal of Environmental Law 6 (2022) 295–322.
11. Ziganshina D. and Sehring J. Effectiveness, challenges and potential of transboundary water governance institutions in the Aral Sea basin of Central Asia. In International Hydro-diplomacy: Building and Strengthening Regional Institutions for Water Conflict Prevention pre-conference study 2021. Konrad -Adenauer - Stiftung and the Stimson Center.

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