

SYMPOSIUM ON INTERSTATE DISPUTES OVER WATER RIGHTS
INSTITUTIONAL MECHANISMS FOR PREVENTING AND RESOLVING
CROSS-BORDER WATER DISPUTES

*Dinara R. Ziganshina**

The fundamental role of international law is to provide a framework for the coexistence of and cooperation among states. If international law and institutions work well, their contribution to the management of international affairs remains in the background. This essay seeks to illuminate the largely unnoticed work of river commissions¹ in preventing and resolving cross-border water disputes. Among the oldest of international organizations, river commissions have long been at the forefront of technical and diplomatic interactions between countries. Similar to other international organizations, river commissions were created to better coordinate interstate interactions and more efficiently pursue common goals. They differ from other international organisations in the focus on water, a unique substance that cuts across so many aspects of human existence and requires specific treatment depending on the hydrological, political, social and economic context. Given the diversity of the contexts, river commissions differ from each other in their design and the tasks assigned to them. Therefore, a river commission is an umbrella term that encompasses a diversity of joint arrangements for cooperation between the riparian countries over their shared waters. This essay argues that river commissions helped to prevent, mitigate, and resolve many cross-border water disputes by building communities over water, enhancing technical knowledge and routinizing organisational transformations.

Diversity in Action and Fit for Purpose

With more than 120 international river commissions around the world, we are witnessing marvelous multiplicity among their goals and design.² Following the establishment of the Central Commission for Navigation on the Rhine in 1815, river commissions have been formed in other parts of the world to accomplish different goals, from navigation, agriculture, and power generation to economic development and poverty alleviation. They also serve diverse functions, ranging from informational (gathering, analyzing, disseminating data), operational (actual water allocation, dealing with waterworks, construction, operation, and maintenance), normative (establishing joint or harmonized water quality objectives and standards, setting water allocation limits, developing procedures, guidelines, and other regulations), control (establishing observation and control on water quantity and quality), coordination (aligning national plans and measures), scientific and technical (conducting research,

* *Deputy Director, Scientific Information Center of Interstate Commission for Water Coordination in Central Asia; Associate Professor, Tashkent Institute of Irrigation and Agricultural Mechanization Engineers, Tashkent, Uzbekistan.*

¹ Terms “river commissions,” “river basin organisations,” “joint bodies,” and “joint watercourse institutions” are used interchangeably in this essay.

² [International River Basin Organization Database](https://www.internationalriverbasinorganization.org/).

assessments, and other studies), forum (providing a place for exchange of views, experiences, consultations, and decision-making), and dispute resolution (facilitating initial examination of issues, fact-finding, and settling disagreements). The relevance of each of these functions depends on the context and the objectives the basin countries are pursuing.

While there is a temptation to establish an authoritative, all-encompassing, and multifunctional institution to resolve river disputes, individual river commissions can be tailored to address specific problems in a given period of time within the existing overall governance structure, and these individual approaches can bring more benefits than a one-size-fits-all solution. Failure to achieve institutions that are fit-for-purpose and context may create unrealistic expectations and undermine the potentially positive role of river commissions in dispute prevention and resolution.

Ability to Transform

Another key feature that helps river commissions prevent disputes relates to their ability to evolve in response to the external environment. Without this ability to transform, river commissions risk obsolescence and irrelevance. Specific forms, functions, and powers of river commissions are not only tailored to the subject matter of the individual agreement or arrangement and depend on the circumstances at hand, but also may change over time if the conditions and contexts so require. For example, in less than twenty years, the mandate of the International Commission for the Congo-Oubangui-Sangha Basin, established in 1999 by four riparian states, has evolved from a narrow focus on navigation to encompass integrated water resources management and climate change adaptation and is likely to expand to include other riparian states.³ Similarly, the Organisation for the Development of the Senegal River, established in 1972, has since 2002 moved from pure infrastructure development to an approach that takes integrated water resources management into account in developing and managing infrastructure.⁴ In the last decade before this writing, the Lake Chad Basin Commission evolved unprecedentedly from a commission managing shared waters into a regional development organization addressing the root causes of the emergence and expansion of the Boko Haram terrorist group and into a collective security tool coordinating military operations with a view to restoring regional peace and security.⁵ In Europe, the Finnish-Swedish Transboundary River Commission, established in 2010, replaced the former commission established in 1972, which had a powerful mandate to issue final permits (not subject to appeal), supervise water use and emissions, and control fisheries. The new commission is comprised of representatives of water authorities, municipalities and the local business community, and focuses on the coordinated implementation of European Union legislation and international treaties in the frontier region.

In other river commissions, incremental change seems to be a more workable solution. For example, the United States-Canada International Joint Commission's role and function has changed over time as goals for shared water management have evolved, without formal modification of existing treaty language. Another example is the Mekong River Commission, which in the last decade has moved away from being a donor-driven organization to becoming a leaner riparian-owned institution. Since 2016, the Commission became fully led and staffed by riparian representatives and, as of 2020, the member countries contributed 40 percent of its annual budget.

³ Alfonso Medinilla, *Understanding the International Congo-Ubangui-Sangha Commission (CICOS): Going with the flow: from navigation to climate finance in less than 20 years?* (ECDPM, 2017).

⁴ [ORG. FOR THE DEV. OF THE SENEGAL RIVER BASIN](#).

⁵ Laurence Boisson de Chazournes & Komlan Sangbana, *Basin Commissions, Dispute Settlement and the Maintenance of Peace and Security—The Case of the Lake Chad Basin Commission*, in *A BRIDGE OVER TROUBLED WATERS* 220 (Helene Ruiz Fabri et al., eds., 2020).

In some basins, change does not come easily. The Interstate Fund for Saving the Aral Sea (IFAS) and the Interstate Commission for Water Coordination in Central Asia are overdue for institutional renovation that would enhance their effectiveness, while harnessing legitimacy, trust, and equity to better accommodate the existing and emerging challenges. Central to this renovation is the widening scope of this multilateral cooperative framework toward a whole-basin approach that would encompass different water users (agriculture, hydropower, drinking supply, and ecosystems) and missing basin countries. As a consequence of its frustrations with the lack of reform process and perceived neglect of its interests in hydropower development, Kyrgyzstan officially froze its participation in the IFAS and its commissions in May 2016. Afghanistan, a riparian country to the Amu Darya river, has never been a part of the regional cooperative framework but making politically feasible initial steps towards Afghanistan is of great importance.

Strength in Technical Expertise

The success of many river commissions in preventing and mediating controversies can be attributed to their technical knowledge. Given the often highly technical nature of water related issues, expert fact-finding with a significant element of scientific expertise is most important in preventing and resolving water related differences.⁶ Therefore, technical cooperation within joint bodies is of great consequence.

Most joint bodies intend to stay apolitical, even operating in the political environment, and build on their strength in bringing together the best technical expertise from riparian countries to put forward workable solutions. Staying some distance from political agendas allows river commissions to be more creative in using science to assist governments to solve water related issues.

For example, the United States-Canada International Joint Commission (IJC) established in 1909 functions as a non-political research, advisory, and mediation body for the two countries. From its early focus on apportioning water resources, its middle period of increasing politicization over large-scale water control projects, and its current emphasis on water pollution and ecosystems, the IJC has provided a platform to “draw disparate interests into science-based, solution-focused binational discussions.”⁷ The IJC helped the countries to mediate a large number of potential disputes by providing fact-finding and investigation into important water and environmental issues.

Operation outside the political arena, professionalization of its commissioners and personnel, and openness to innovative and experimental approaches are among the key features contributing to the functionality of the International Boundary and Water Commission (IBWC) of the United States and Mexico.⁸ In the last decade, the IBWC demonstrated the significance of strong, committed, transparent, and flexible institutions in managing complexity in transboundary basins through its leadership in helping the two countries devise and implement innovative solutions to rejuvenate the Colorado River Delta.⁹ A binational stakeholder process under the IBWC brought together agencies, universities, and environmental NGOs to conduct research and monitoring, and was instrumental in showcasing the benefits of a more open and participatory process.

In Asia, thanks to extensive technical work (data collection, monitoring, assessments, and scenario building) and continuous dialogue within the Mekong River Commission, Cambodia, Laos, Thailand, and Vietnam are fostering cooperation in the lower Mekong basin, despite challenges arising from large-scale water infrastructure

⁶ *Id.* at 66.

⁷ [THE FIRST CENTURY OF THE INTERNATIONAL JOINT COMMISSION](#) (Daniel Macfarlane & Murray Clamen eds., 2020).

⁸ Margaret O. Wilder et al., [Hydrodiplomacy and Adaptive Governance at the U.S.-Mexico Border: 75 Years of Tradition and Innovation in Transboundary Water Management](#), 112 ENVIRON. SCI. POL'Y 189 (2020).

⁹ *Id.* minutes 319 (2012) and 323 (2017).

development, climate change impacts and increasing population.¹⁰ Although the Mekong River Commission-led prior consultation process over the construction of the Xayaburi Dam in Laos ended without agreement in 2011, the Commission made a strong technical assessment and provided a set of recommendations. Despite significant opposition from Cambodia, Vietnam, and NGOs, Laos proceeded with the construction of the Xayaburi project. However, there is evidence that the Lao government and developer made significant investments in the fish pass and sediment transport related mitigation measures to address the recommendations provided in the Commission's technical review report. Also, the Mekong River Commission is partnering with the Lao government and the developers of the dam to monitor its transboundary environmental impacts through a Joint Environmental Monitoring Program.¹¹

Continuous Interactions

Another feature of river commissions that contributes to their dispute prevention function is the ability to enable continuous dialogue and interactions among key stakeholders. River commissions foster evidence-based dialogue, build trust and promote sound decision-making by combining the creation of an enabling framework for policy dialogue at the government level with projects on data and knowledge management. Work within the river commissions enables continuous interactions at the professional level to produce knowledge and understanding, and build durable relationships and a habit of cooperation. Politics and formal negotiations matter but without continuous interactions among professionals, confidence, trust, and respect will not be nourished.

In many river basins, joint bodies provided a space and enabling conditions for forming pragmatic or functional communities over shared waters. For example, linked by geography and the complex water management system put in place in the Soviet time, the Central Asian countries immediately after gaining independence in 1991 established the Interstate Commission for Water Coordination (ICWC) as a forum where representatives of the basin states could meet, discuss, and make binding decisions on water allocation. Regular meetings of the ICWC as well as the daily operations of its executive bodies have enabled riparian countries to build relative stability in transboundary water management and adapt the water allocation system, set up during the Soviet era, to new conditions even under the extremely difficult hydrological, political, and economic circumstances that occurred over the last three decades.¹² These practices have been dominated by strong connections among water professionals, especially water engineers, established in the pre-independence time.

Many pan-European countries in their national reports submitted under the UNECE Water Convention highlighted the contribution of joint bodies to the maturity of transboundary interactions. Joint bodies are seen as playing “leading role in [the] whole process of co-operation” (Slovakia), ensuring “maintenance of regular interaction among the countries in the region” (Uzbekistan), and “consistent present cooperation on working groups level” (Poland), as well as enabling “direct contact and communication between the parties at different levels” (Austria). Also recognized were the specific achievements of the joint bodies in “communication and arrangement of open forums for discussion” (Finland), and “open consultation and discussion on specific emerging water issues to identify shared solutions and prevent disputes” (Italy).

¹⁰ An Pich Hatda et al., *25 Years of Mekong Cooperation: Achievements, Challenges and the Way Ahead*, 2(1) MEKONG CONNECT 1 (July 2020).

¹¹ Mekong River Comm'n, [Stakeholders Visiting Xayaburi Dam Continue Calling for the Developer to Share Operation Rules, Environmental Monitoring Data](#) (Feb. 20, 2020).

¹² The ICWC decisions are available online at <http://icwc-aral.uz/>.

Settling Controversies

In addition to dispute prevention, joint commissions have played a prominent role in settling disputes in different parts of the world. Two examples are illustrative.

In South Asia, India, and Pakistan created the Permanent Indus Commission (PIC) to promote cooperation in the development of the Indus waters, which has managed to survive wars, military stand-offs and the recent rise of water nationalism between the two countries. Commissioners are high-ranking engineers who represent their respective governments and serve as the regular channel of communication for all matters related to implementation of the 1960 Indus Waters Treaty. According to the Indus Water Treaty's multi-tiered conflict resolution mechanism, the PIC has to undertake initial examination of any "question" that might arise between the countries relating to the Treaty. Since its inception, the PIC resolved most questions submitted to it, with few exceptions. Thus, many Indus River disputes between India and Pakistan have been resolved through initial assistance from the Commission.

Another example is the long-standing cooperation of the United States and Mexico within the International Boundary and Water Commission, which is tasked with settling the differences that occur between the countries concerning the interpretation or application of the 1944 Water Treaty, subject to the approval of both countries. Over the years, the Commission helped to address a range of water related controversies, including the salinity crisis on the Colorado River, the United States' plan to line the All-American Canal, Mexico's fulfillment of agreements to deliver Rio Grande water to Texas, and the difficulty in securing ecological values in the Colorado River Delta groundwater disputes. In late 2020, the Commission settled the Mexican water debt crisis on the Rio Grande.¹³

Challenges and Future Outlook

River commissions continue to be as relevant today as they were two centuries ago, when they were first established in Europe. For more than two centuries, river commissions have provided a platform where riparian countries can work together to plan and monitor the utilization, protection, and development of their shared waters through data sharing, studies, analysis, and projects and programmes. River commissions, as "veteran" international organisations can teach us a great deal about how community, leadership, and transformation are essential preconditions of peace and stability. River commissions evolved around regular interconnections and interrelations among actors over shared waters, accumulating their wealth of experiences, shared values, culture, norms, interests, knowledge, and beliefs. All these factors are central for building a sense of community that gives rise to sustained relationships between actors within and across countries, which is ultimately what international law and institutions are intended to produce. The leadership role of river commissions is evident in their influence on hydro-diplomacy processes in many transboundary basins as well as in scientific leadership pushing forward innovative solutions, despite the challenges of managing sovereign control over rivers. Lastly, river commissions' daily operations teach us that transformation often is the result of a series of small, incremental, repeated steps. A "habit" of technical cooperation on small things pursued over time has brought about tremendous changes in many river basins. As we have seen, while inducing changes, most river commissions are also able to transform themselves.

¹³ Int'l Boundary & Water Comm'n, [Minute No. 325](#) (Oct. 21, 2020): "Measures to End the Current Rio Grande Water Delivery Cycle without a Shortfall, to Provide Humanitarian Support for the Municipal Water Supply for Mexican Communities, and to Establish Mechanisms for Future Cooperation to Improve the Predictability and Reliability of Rio Grande Water Deliveries to Users in the United States and Mexico."

However, much remains to be done. Many existing joint bodies experience difficulties in funding, shortage of personnel, turnover of people in charge, deficiencies in staff composition, and a lack of responsiveness to local constituencies as well as decreasing scientific capacities. This is the case even for developed nations. Often river commissions have been criticized for inadequacies in their scope, mandate, and procedures to meet contemporary standards. Indeed, growing water insecurity and the continuous changes in political, economic, social, and hydrological contexts require the further development of legal, institutional, and technical attributes of existing joint bodies to meet the new challenges.

Many river commissions face a challenge of involving all riparian countries in their activities and basin-wide water management. For example, China and Myanmar have the status of dialogue partners in the Mekong River Commission. However, a more active cooperation is observed through the China-led Lancang-Mekong Cooperation Mechanism (LMC). In 2015, China launched the LMC, comprising all six riparian countries (China, Myanmar, Thailand, Laos, Cambodia, Vietnam) as a part of its Belt and Road Initiative. Since then, the LMC has regularly organized various meetings, established joint working groups, launched different thematic centers, developed strategies, and action plans to build trust and speed up cooperation.¹⁴ It remains to be seen whether and how this institution and the Mekong River Commission will work together to increase benefits for all riparians and the river ecosystem.

Another aspect that needs to be better addressed in the future relates to the roles of actors other than nation-states. Sub-national entities, local communities, Indigenous communities, NGOs, and the private sector have significant influence on water management policies and outcomes. Joint bodies can not only contribute to enhanced trust between riparian countries but also between national, regional, and local stakeholders. However, a lot should still be done in many commissions and regions to enable a more inclusive approach to shared water management.

Finally, riparian basins without joint institutions should explore establishing their own joint mechanism to better coordinate water management. Designing institutions for shared water management can draw on the legacy of other commissions but should be essentially based on the facts and circumstances of each individual case.

¹⁴ David J. Devlaeminck, [Timeline of the Lancang-Mekong Cooperation \(LMC\) Mechanism](#) (2021).