



10. Opportunities for Just Global Water Governance

Key takeaways

Acknowledging and promoting the hydrological cycle as a global common good requires just water governance that acknowledges global-local linkages and serves a multi-scale framework for action.

Water should be considered as an organising principle to successfully implement sustainable development. We must adopt a “water and beyond” perspective across all agendas and domains.

The international community must construct a fit-for-purpose governance architecture that facilitates collective and mission-centred action on water, and accounts for the major legal and institutional implications of changes in atmospheric moisture flows and their differentiated welfare consequences for communities around the world.

Instituting a just, global water-governance mechanism at the UN would incorporate a process of inclusive, multi-stakeholder dialogue and an agenda for collective action to accelerate impact. The ultimate ambition is to negotiate a global water pact with clear and measurable goals to stabilise the hydrological cycle and recognising it as a global common good. Leveraging the UN's legitimacy and structure to consolidate the Global Water Agenda, the recent appointment of a UN Special Envoy for Water (United Nations, 2024a) could structure leadership and we recommend appointing a youth water envoy to ensure an intergenerational approach. This could lead to creating a Governing Board consisting of key UN leaders to guide the Global Water Agenda and coordinate UN agencies' water-related work.

Implementing collaborative water governance involving multiple stakeholders, including (local)

government agencies, NGOs, indigenous peoples, community groups, and business entities, in an intra- and inter-generational approach, would establish a collaborative process and engagement space connected to the global governance architecture, for consistent and continued accountability and engagement, and develop comprehensive understanding of water needs at all levels, aligned with the Just Water Partnerships objectives.

A strong and unified global water forum would provide a safe space for research, trust-building, capacity development, and accountability. Such a space would bring together all green and blue water processes and partners, and support political, cultural and policy dynamics.

We must improve education, knowledge, and awareness about: the hydrological cycle and water scarcity; agency for action at individual, institutional, and governmental levels; valuing water, acknowledging the spectrum of relationships between water and people, and linkages across sectors, geographies and generations; the major legal and institutional implications of changes in atmospheric moisture flows and their differentiated welfare consequences for communities around the world.

Strengthening water governance and establishing water authorities, where absent, would meet the overarching need to stabilise the hydrological cycle, with blue and green water governance at the heart of their missions.

Focusing on transboundary co-operation for both blue and green water would enhance collaboration and construct fit-for-purpose governance architecture to manage shared blue and green water resources sustainably and equitably.

Water challenges hurt most at the local level. Yet, the drivers of these local issues are increasingly global in nature. In the Anthropocene, even local water bodies are influenced by the hydrological cycle, and vice-versa. Human activities compromise the stability of the hydrological cycle, calling for a new approach to water governance that acknowledges these global-local linkages and serves a multi-scale framework for action.

We need to acknowledge the hydrological cycle as a global common good: it links countries and communities; it is deeply interlinked with the climate and biodiversity crises; and blue and green water play a distinct role in achieving almost all the United Nations (UN) Sustainable Development Goals (SDGs). With this acknowledgment comes an understanding and need to strengthen the architecture, institutional capacity, and interface of several global agendas, most profoundly: the three Rio Conventions on climate change, biodiversity, and desertification; the 2030 Agenda for Sustainable Development and the aligned Sendai Framework for Disaster Risk Reduction; the Addis Ababa Action Agenda on financing for development; and the Quito Declaration's New Urban Agenda.

Water as an organising principle

Water should be considered an organising principle for just sustainable development. Rather than each sector viewing water through its own narrow lens – which increases fragmentation, undermines water security, and hinders progress towards sectoral goals – we must adopt a perspective of “water and beyond”, across all agendas and domains. A siloed approach fails to capture the many, multifaceted roles of water, and misses opportunities for synergistic solutions that fully address water's political and geopolitical ramifications. By redefining the world's relationship with water, we can more effectively address inconsistencies and trade-offs across interests and scales, and better navigate the delicate balance between environmental sustainability, social equity, and economic development towards transformative action.

Multilateralism faces significant hurdles. Shifting economic powers and geopolitical rivalries strain traditional co-operation frameworks. Growing emphasis on domestic priorities challenges

the ethos of international collaboration. Still, multilateralism remains critical for solving the most pressing global challenges of our time – challenges that individual countries, cities, academic institutions, NGOs, or the private sector cannot address alone. Coordination among institutions, sectors, and actors on policy, regulation, and investment is meagre and stems from the complexity and diversity of local water contexts, since rights, perspectives, and interests regarding blue and green water can conflict. Coordination also lacks purpose and common ground. The call, therefore, is to reimagine mechanisms for dialogue, negotiation, and conflict-resolution – essential for securing peace, stability, and prosperity – where water and the protection of the hydrological cycle are front and centre.

Historically, compromise at the global scale has never been easy. But we must act now for the sake of the hydrological cycle's balance and all it entails. By being proactive rather than reactive, the international community can do much more than avoid the costs of constantly abusing its blue and green water (re)sources.

Improved understanding of the hydrological cycle creates a new and level playing field, positioning us to (re)shape our relationship with the natural world. Understanding and valuing blue and green water can structure efforts to put the necessary changes into practice.

Prosperity hinges on stabilising the hydrological cycle, with local success contingent on collective action at multiple scales. There is no one-size-fits-all solution to worldwide water challenges, and implementation will occur locally, guided by context-specific factors, management practices, cultures, and values (World Water Assessment Programme, 2019). . However, a fragmented approach will be inefficient to achieve change; addressing a global issue effectively requires coordinated action at regional and international level.

Cross-cutting and complementary solution frameworks applied to multiple jurisdictions, scales, and locations will be needed. Let us remember that many building blocks already exist: local, national, transboundary, and regional levels offer numerous examples of water governance systems, diplomacy, partnerships and coalitions, and social movements.

At the UN level, the 2023 UN Water Conference laid an ambitious groundwork for global water

governance. On 13 September 2024, the UN Secretary-General (UNSG) appointed a UN Special Envoy on Water (United Nations, 2024). A UN System-wide Strategy for Water and Sanitation was launched in July 2024, and follow-up UN Conferences on Water were agreed upon (Resolution A/77/L.106⁷²) and scheduled for 2026 and 2028. These conferences and their preparatory processes are critical opportunities to anchor water issues across the UN system, its agencies, and leadership.

In the past, many often-fragmented efforts were made to address the need for global water action. The 1977 UN Water Conference never had institutionalised follow-up, although its recommendations influenced many local to global policies and actions. Today momentum for global water governance and action is building. The UNSG's Advisory Board (UNSGAB) on Water & Sanitation and its role in scaling up actions for drinking-water and sanitation, followed by the High-Level Panel on Water, paved the way for global initiatives aimed at addressing water challenges and promoting sustainable water management. These include the Water Action Decade championed by the Republic of Tajikistan, the Kingdom of Saudi Arabia's Global Water Organisation, the United Arab Emirates' Mohamed bin Zayed Water Initiative on scarcity, and Senegal's Blue Fund for Development and Peace.

The momentum must be sustained, efforts integrated, and gaps addressed through a water-governance mechanism on the global agenda, with water positioned institutionally, accompanied by an organising and convening mandate, and capacity, with clear accountability standards. Existing initiatives must be expanded and supplemented to look beyond water supply, sanitation and hygiene (WASH), and water scarcity to consider the hydrological cycle as a global common good. A global water-governance mechanism is necessary to achieve a continuous and robust multilateral process, provide support and strategic guidance at all levels of implementation, and enable existing building blocks to yield collective action: local actions reinforcing national efforts; national actions empowering regional initiatives; and regional actions driving global progress. The international community must construct a fit-for-purpose governance architecture that facilitates collective and mission-driven action on water, and

accounts for the legal and institutional implications of changes in atmospheric moisture flows, and their differentiated welfare consequences for communities around the world.

Opportunities to redesign water governance

Water at sub-national and sub-global levels

Achieving sustainable national and international governance of water is challenging due to its complex, interconnected nature and its spatial and temporal dynamics transcending geographic, administrative, and sovereign boundaries, compounded by the valuation of water as a natural resource – beyond a commodity – and as a human right.

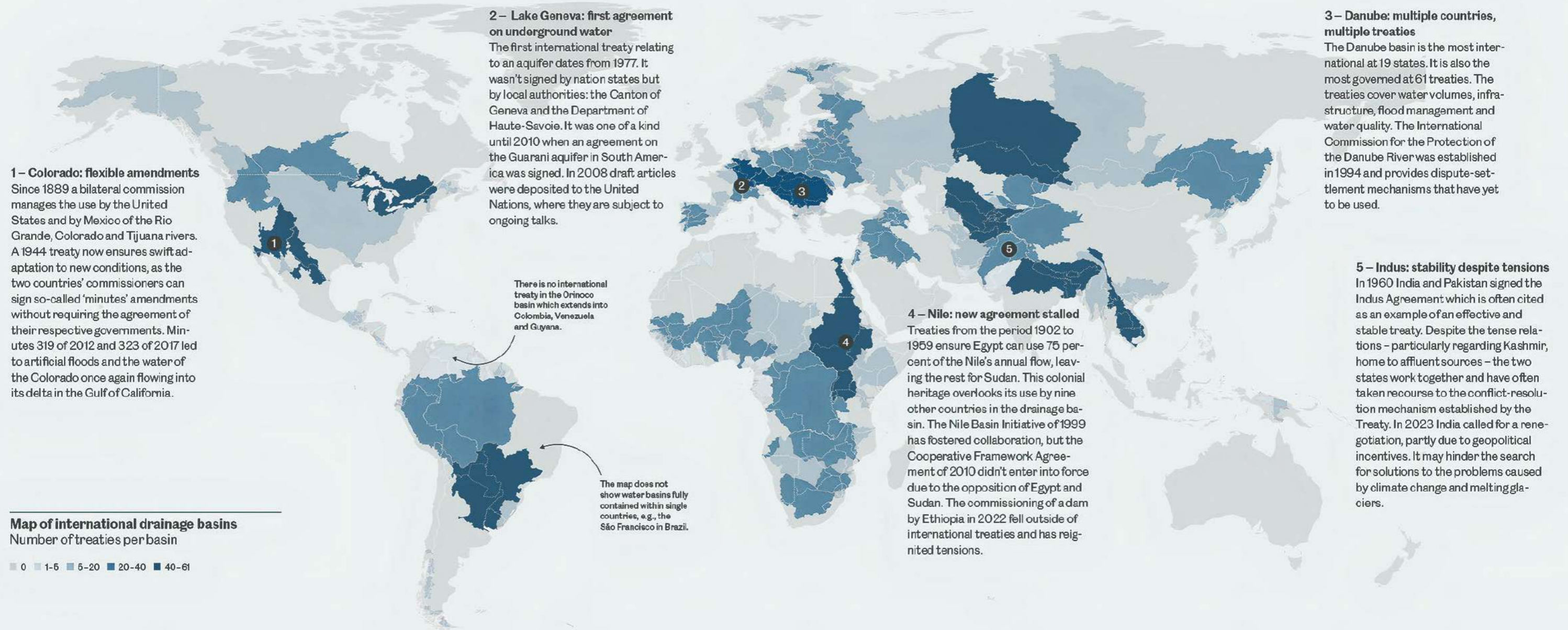
Consequently, water governance has operated across multiple scales, from river basins and aquifers to regional levels, encompassing a diverse array of structures and diplomatic initiatives. The remit and capacity of existing institutions, the value of context-specific experiences, and the presence of various governance arrangements should not be overlooked. These provide a wealth of knowledge – culturally, economically, and institutionally – and capacity that efforts on any scale can learn from and build on.

However, water governance, at regional and sub-national levels faces three grave challenges: fragmentation, failed coordination, and a lack of capacity (institutional, professional, and in partnerships), which can lead to inconsistent policies, overlapping jurisdictions, inefficient resource allocation, and communication gaps between stakeholders.

Water governance is also compartmentalised across different types of water, with most mechanisms designed for blue water and focusing on surface water. There is a lack of strategic orientation to address other forms of water, particularly green water. This misses the complex and dynamic relationship between blue and green water governance, including local perspectives on equity and justice, often linked to land and property rights (Groenfeldt, & Schmidt, 2013).

72 The Resolution was agreed upon at United Nations General Assembly September 1, 2023 (2023a)

FIGURE 10.1: Agreements in international transboundary river basins



Source: Oregon State University (2024)

While there is a shift in water governance in riparian states from a state-led hierarchical approach to more hybrid approaches incorporating participatory methods (Gupta & Dellapenna, (2009), there is a need for greater integration of these processes across scales (involving local and regional actors) and places (across the rural-urban continuum). Fractured governance remains a pressing issue, particularly in rapidly urbanising regions, and fragmentation within sub-national governance requires urgent attention.

At national level especially, it is crucial to expand notions of water governance and management to include land use, land management, and allocation activities, examining the implications of water and nature conservation hotspots beyond the conventional scope of (blue) watersheds.

At the sub-global level, governance faces obstacles due to the mismatch between political boundaries and hydrological cycles, though many examples of regional and transboundary water governance frameworks exist (Figure 10.1).

Globally, more than 263 river basins and 300 aquifers span the political borders of two or more countries (Global Water Partnership, 2015). . In the absence of coherent institutional frameworks to manage these shared water resources, local to regional conflicts over water allocation, pollution control, and infrastructure development have risen in the past, and if unchecked, this reality will become even more common. Sub-global water

governance is necessary and requires effective coordination across multiple jurisdictions and country stakeholders – a need emphasised by the inherently global physical nature of the hydrological cycle.

Another issue arises from disparate capacity and resources among different actors involved in transboundary water governance. Upstream and downstream countries often have divergent interests and unequal power dynamics, which can lead to inequitable water use and management practices. Additionally, the lack of standardised data collection and sharing protocols across borders can impede effective and transparent decision-making and planning for shared water resources. Consequently, the need for a global water data infrastructure is one of the key recommendations of this report (Chapter 9).

There is a lack of principles to guide collective action across scales towards enhanced stewardship of the hydrological cycle – especially the generative capacity of the water system, including green water, which is inherently tied to land-use patterns, property rights, and dimensions of sovereignty. This adds complexity to water governance, warranting a global dimension. As a major governance gap, moisture recycling offers an opportunity for institutional innovation, international laws, and regulation. Countries should focus on understanding their role in the global and regional moisture cascade and dynamics,



and expand notions of water governance and management to include the influence of land use, land management, and allocation activities, examining the implications of water and nature conservation hotspots beyond the conventional scope of blue watersheds. Failure to address the full hydrological cycle would overlook its role in ecosystem and climate regulation, agriculture, and its feedback with blue water. Groenfeldt, & Schmidt, 2013). .

Developing global water governance structures that reflect evolving value systems while respecting national sovereignty and integrating the specifics of local dynamics and relationships, including local knowledge, remains a challenge. It will require dialogue, an action agenda, multilevel and multi-stakeholder working methods and institutional innovation – and the capacity to see it through.

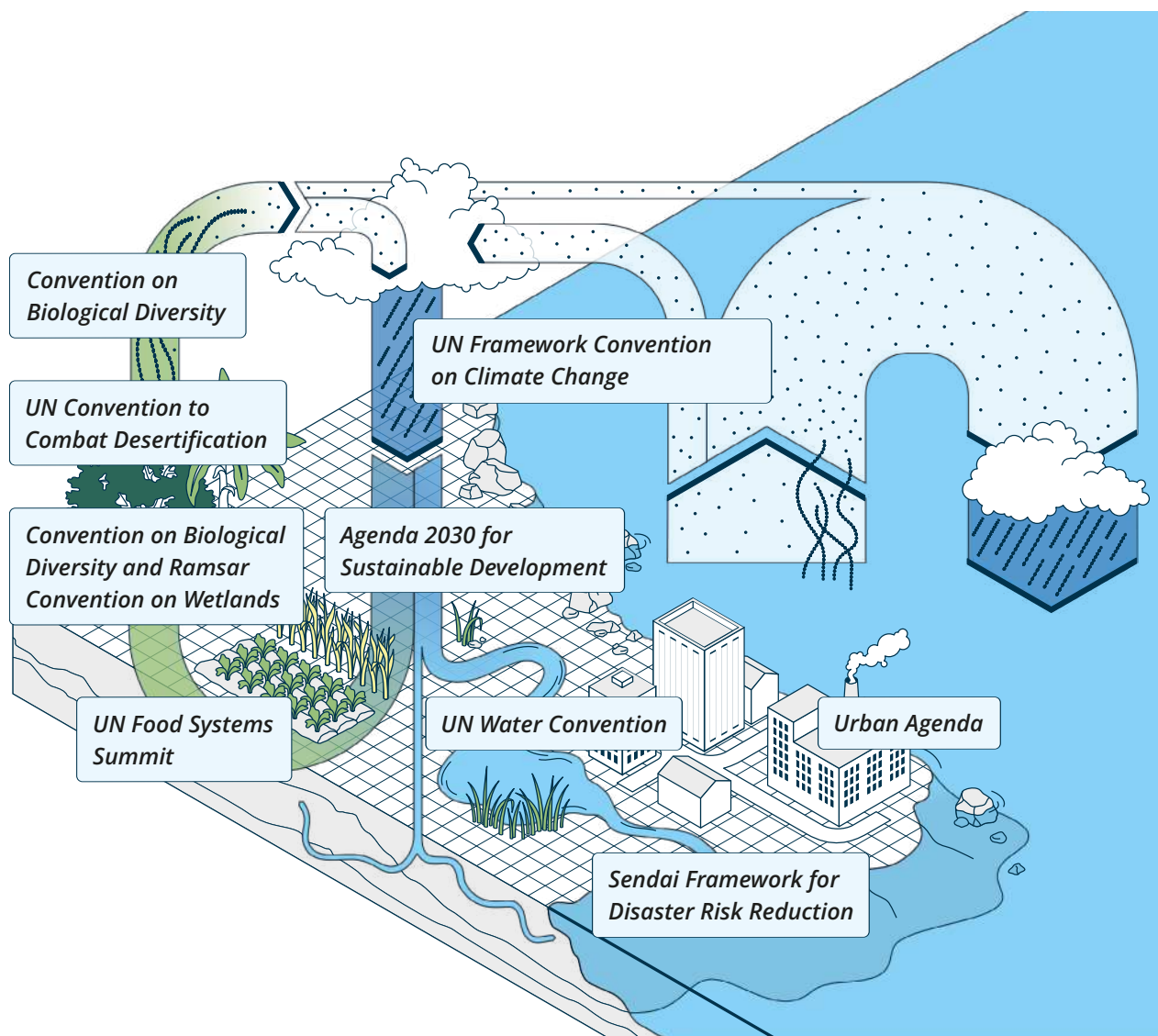
Water in the UN context

There is consensus that the UN system is not fully equipped to support the ambition of global water governance and the full, systemic, economy-wide implications for needed actions – but that it should be. The UN Economic Commission for Europe (UNECE) Convention on the management of transboundary rivers and lakes is a notable achievement, successful in promoting transboundary water co-operation, albeit with too-limited reach. Its slow diffusion and enforcement are encouraging but point to the challenges of international collaboration and collective action on blue water.

Water features across multiple UN conventions and frameworks related to climate, biodiversity, wetlands, health, food systems, and disaster reduction, among others. It is also embedded in broader UN agreements and frameworks, including the 2030 Agenda for Sustainable Development, the UN Framework Convention on Climate Change (UNFCCC), the Convention on Biological Diversity (CBD), the United Nations Convention to Combat Desertification (UNCCD), the UN Food Systems Summit, the Urban Agenda, and the Sendai Framework for Disaster Risk Reduction. Over 30 UN organisations carry out programs related to water and sanitation (UN Water, 2021). However, synergies between the three UN Rio Conventions (UNFCCC, CBD, and UNCCD) and the agricultural community are not fully exploited from the perspective of the hydrological cycle. Strategic alliances and adequate coordination must be strengthened to highlight the global character of precipitation and land interaction, as well as the critical role of green water for climate change.

UN agencies actively working on water are loosely coupled through UN Water, an inter-agency mechanism launched in 2003 with a limited mandate. This means that each agency contributes to UN Water on a voluntary basis, and on the capacity allowed by its own mandate, posing cooperation and coordination challenges due to simultaneous competition for resources and influence. UN Water, in its current mandate and capacity, is not able to reconcile these mandates around water across agencies.

FIGURE 10.2: UN agendas and the stages of the hydrological cycle



Note: The hydrological cycle and its fragmented representation across UN agendas are an opportunity to (1) strengthen water as an organising principle, (2) set a UN agenda across agencies and agendas, and (3) build a global water pact.

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Water at the Bretton Woods Institutions

The World Bank Group and the International Monetary Fund (IMF) are upgrading their approach to water. The World Bank has a long track record

in the water sector. Its renewed ambition for water translates into an active Global Water Practice designed to deliver finance in the most dynamic countries through strengthened collaboration between the International Finance Corporation, International Bank for Reconstruction and Development, and the Multilateral Investment Guarantee Agency. The recently redesigned and repurposed 2030 Water Resources Group illustrates the ambition of the World Bank to accelerate action in selected countries through public-private partnerships. Writ large, the importance of a stable hydrological cycle plays out across the full portfolio of the World Bank. This is an opportunity, as emphasised throughout this report, that plays into the new mission of the World Bank: to “eliminate poverty on a liveable planet”.

Box 10.1. Efforts at an UN-level to promote water action

There has been an array of UN Initiatives aimed at consolidating and driving action on water issues in the past. These include:

- The **Water Action Decade** (2018-28), launched on 22 March 2018, to accelerate efforts towards meeting water-related challenges and the SDGs (United Nations General Assembly, 2018).
- The **2023 UN Water Conference**, 22-24 March 2023, which marked a significant milestone in global water governance. Co-hosted by the Government of Tajikistan and the Kingdom of the Netherlands, it was only the second UN conference dedicated to water since 1977 [13]. It brought together over 10,500 participants and positioned water high on the global agenda. The Secretary-General's concluding remarks highlighted that "water as a common good [...] needs to be at the centre of the global political agenda." The Secretary-General also emphasised links across the 2030 Agenda for Sustainable Development, the justice and human rights aspects, the links with climate, and the need for UN leadership (Guterres, 2023). President of the General Assembly Csaba Korösi emphasised the need for water action in listing nine game changers (Körösi, 2023).
- The Conference adopted the **Water Action Agenda**, a collection of voluntary commitments from nations and stakeholders aimed at achieving water-related SDGs. The Water Action Agenda compiled over 800 commitments in the form of financial pledges, collaborative projects, and actions to protect water resources (UN Water, 2023).
- On 16 July 2024, the UN launched the **System-wide Strategy for Water and Sanitation**, which aims to enhance UN system-wide coordination and delivery of water and sanitation priorities across the UN system in support of countries to accelerate progress on national plans and priorities, internationally agreed water-related goals and targets, and transformative solutions to current and future water and sanitation challenges (UN Water, 2023).
- Looking ahead, **UN General Assembly resolution A/RES/77/334** (United Nations General Assembly, 2023b) agrees to organise two additional water conferences: one in 2026 to expedite the implementation of SDG 6, and another in 2028 to promote water-related actions and assess progress made during the International Decade for Action.
- Towards the COP29, and under the COP29 Presidency, the **Baku Dialogue on Water for Climate Action** was developed with support from the UNEP, UNECE, and WMO, with contributions from other UN Water members. The Baku Dialogue will be launched at the 29th Climate Change Conference (COP29) in November 2024 in Baku, Azerbaijan. The Baku Dialogue on Water for Climate Action will serve as a consistent and regular dialogue platform on water and its interplay with climate change, biodiversity loss, desertification, and pollution.
- The **UN Transition Agenda** (<https://unsdg.un.org/resources/six-transitions-investment-pathways-deliver-sdgs>) outlines an integrated approach and investment pathways needed to fulfil the 2030 Agenda, navigating the synergies and trade-offs across the 17 SDGs. The UN Transition Agenda identified six key transitions for catalytic and multiplier effects across the SDGs: (1) food systems; (2) energy access and affordability; (3) digital connectivity; (4) education; (5) jobs and social protection; and (6) climate change, biodiversity loss and pollution (United Nations Sustainable Group, 2023). With the establishment of this UN Transition Agenda, the UN sets the stage for investing to deliver on the SDGs. Water runs as an organising principle through these six transitions.
- On September 22, 2024, the UN General Assembly adopted the **Pact for the Future** (United Nations, 2024b). The breadth of the Pact is welcome. Avenues towards transformation of global governance, including the global financial architecture, provide opportunities to factor in the hydrological cycle as a global common good. Water still features in the Pact, in a fragmented way. As argued in this report, considering the hydrological cycle would provide a clear reference to the water agenda and its contribution to areas covered by the Pact, most notably peace and security, sustainable development, climate change, human rights, gender, youth and future generations.

Over the last decade, the IMF occasionally released seminal analyses on water (Kochhar et al., 2015). While recent developments on climate change and nature endeavour to consider how environmental risks affect inflation and financial stability, there is increasing evidence to support the macroeconomic case for improved water stewardship in the global economy. Water pertains to these discussions, as the hydrological cycle is both a driver and a victim of climate change, and because water and land-use are essential factors to mitigating environmental risks. The reform of the global financial architecture and the Paris Pact for People and the Planet provide opportunities to acknowledge water (and its multiple dimensions) as a driving force and part of the solution throughout global agendas, to promote system changes and the provision of multiple common goods.

Water at other international financial institutions and public development banks

International financial institutions and public development banks play an important role in financing achievement of the SDGs and other global agendas. Given water's centrality to all the SDGs, and the potential implications for human welfare of recent changes in the global hydrological cycle, these institutions are uniquely positioned to catalyse and scale up investments in water-related projects and initiatives that can have far-reaching impacts across multiple development goals. By leveraging and reframing their financial resources, technical expertise, and convening power, international financial institutions can mobilise additional funding from public and private sources, promote innovative financing mechanisms such as Just Water Partnerships, and support the implementation of integrated blue and green water management strategies that address interconnected and systemic challenges such as climate resilience, food security, and public health.

Most international financial institutions have a water strategy, usually in connection with commitments to address climate change. These cover water supply and sanitation. Acknowledging the evidence of a tilted hydrological cycle, they can also include blue water and related risks

(floods, droughts, pollution). They rarely refer to green water. Items relevant to the management of the hydrological cycle, such as agriculture, land use, or urbanisation, are covered separately. Here there is an opportunity for multilateral and regional financial institutions to establish facilities dedicated to scaling quality investment in blue and green water to support countries' Nationally Determined Contributions and National Biodiversity Strategies and Action Plans.

At national level, public development banks are catching up. With their mandate to finance sustainable development and their knowledge of national specificities and opportunities, they are equipped to contribute to water governance and finance along the lines in this report. The most proactive ones gather in the Water Finance Coalition, providing opportunities to advance the blue and green water agenda in national development strategies and finance.

Water and trade

The linkages between trade and water are central to global water action. Trade agreements can set the stage for equitable and sustainable water productivity, and even minimise pressure on water resources when trade flows and their regulatory frameworks reflect the competitive advantage of countries – typically a larger endowment of water resources. Trade distortions emerge when the opportunity costs of using water in one country are not reflected in the price of traded goods, such as when water is undervalued and not properly priced, and subsidies weaken the price signal.

The World Trade Organization (WTO) plays an important role in advancing the SDGs, including those related to water and sanitation. By promoting stable and equitable trade relationships, the WTO supports sustainable development and addresses challenges such as water scarcity, pollution, and drivers that affect the hydrological cycle. Furthermore, the WTO cooperates with multilateral environmental bodies such as UNEP and others in a bid to ensure that trade policies are, to the extent possible, aligned with environmental sustainable development objectives.

Water-related issues have been discussed in various contexts within the WTO.⁷³ There would be some benefits in reviving them, considering the projected consequences of a tilted hydrological cycle on trade flows (Chapter 3):

- **Trade and water supply and sanitation services.** Reducing trade barriers could facilitate the transfer of water treatment and conservation technologies across borders. However, such liberalisation must be accompanied by strong regulatory frameworks to ensure equitable access and environmental protection. Under the WTO's General Agreement on Trade in Services (GATS), for instance, governments are expected to regulate water services and set standards for quality, safety, pricing, and other policy objectives. This ensures that when commitments are made, foreign suppliers would be subject to the same regulations as national providers. Fifty-two members have made commitments regarding wastewater treatment, but none have done so for water distribution services. This is because water services require costly infrastructure and are traditionally operated by local public authorities with limited room for competition. During the Doha Round of negotiations, some proposals aimed to expand commitments on water services – focusing on wastewater treatment – but these negotiations were inconclusive.
- **Trade and environmental good and services.** More recently, discussions under the Structured Discussions on Trade and Environmental Sustainability (TESSD) by 77 members have explored the scope of environmental goods and services. While these talks do not directly address water trade, trade in environmental products could facilitate the dissemination of water management and conservation technologies. This includes technologies related to water supply, pollution management, and wastewater treatment.
- **Virtual water trade and trade policies.** While the concept of "virtual water" has not been discussed in WTO bodies, it plays

a significant role in understanding the water-trade nexus. Virtual water refers to the hidden flow of water used in the production of goods and services that are traded internationally. By importing water-intensive products, countries with scarce water resources can conserve their own water while meeting their needs for those products. Conversely, countries rich in water resources can export water-intensive goods, effectively exporting virtual water.

Trade in virtual water can be a powerful tool for global water management, promoting more efficient use of water resources worldwide. Efficient resource use relies on well-designed incentives. Just as economic gains arise when countries specialise according to their comparative advantage, environmental benefits can be achieved when water-intensive products are traded from water-rich to water-stressed countries. To ensure virtual water trade promotes efficient, equitable, and sustainable water use, domestic and trade policies must reflect the true value of water, preventing virtual water flows from exacerbating water scarcity or further tilting the hydrological cycle (through land-use change, for instance) in exporting countries. Properly designed trade agreements can balance virtual water trade, helping to achieve water sustainability on a global scale.

However, for trade agreements to play these roles effectively, domestic water pricing must accurately reflect the true economic, social, and environmental costs. Distortions occur when the opportunity costs of water usage are not considered in the price of traded goods, particularly when water is undervalued or subsidies undermine appropriate pricing signals.

Reforming and repurposing harmful agricultural subsidies also presents a critical opportunity to enhance water conservation. While irrigation subsidies directly affect water use, other subsidies, though not specifically aimed at irrigation, can indirectly steer producers toward water-intensive crops, often at the expense of more sustainable alternatives. Additionally, subsidies like input supports can promote the overuse of fertilisers, leading to soil degradation and the contamination of waterways. Reforming these subsidies through agricultural negotiations can therefore drive

⁷³ Contributions from the *Brief on the economics and relevant policies of virtual water trade*, prepared by the WTO Secretariat for the GCEW. The views here reflect views of the WTO Secretariat and not of WTO members.

significant improvements in both economic and environmental outcomes by fostering more-efficient use of water and other resources.

To make water and trade mutually supportive, trade must promote economic efficiency, equity, and environmental sustainability. Achieving this requires new analytical and regulatory frameworks, and political platforms to address the political and economic challenges that hinder reform.

Water at the OECD

As an intergovernmental organisation, the OECD helps governments manage their water resources and deliver water-related services across economic sectors and policy agendas.

As an economic organisation, the OECD supports countries through economic analysis of water management. The current programme of work builds on several pillars:

- **Policies to prevent and manage water pollution.** The degradation of water resources affects ecosystems, increases water treatment costs, and worsens water scarcity. The OECD helps identify the economic and financial costs of water-quality degradation and identify effective pollution-management strategies.
- **Water finance.** The OECD documents financing needs and capacities across regions (most recently Europe and Asia). It supports active dialogues between the water and finance communities on new developments and options to finance water at scale (OECD, 2021). It also explores how to redirect financing flows that work against the Water Agenda, using analytics that document the materiality of water for corporates and financiers.
- **Water governance.** The OECD has identified twelve principles that characterise

good water governance and can contribute to the design and implementation of such policies, where shared responsibility across levels of government and the broader range of stakeholders is explicit and compliance is encouraged.

OECD policy guidance on water is captured in the Recommendation of the OECD Council on Water (OECD, 2016), unanimously adopted by member states in 2015. The Recommendation provides guidance on managing water quantity, improving water quality, managing water risks and disasters, ensuring good water governance, and ensuring sustainable finance, investment and pricing for water and water services. Non-member countries are welcome to adhere to the Recommendation, signalling their willingness to align with good international practices.

New work inspired by the Global Commission on the Economics of Water (GCEW) can help countries and other agencies consider the value of the hydrological cycle and align policies and incentives with the ambition to stabilise it. This would require considering water in conjunction with biodiversity and ecosystems, climate change, land use and forests, and agriculture and trade (in collaboration with the WTO). A pilot on a major evaporationshed would test some of the key concepts and proposals of the GCEW. In co-operation with national and international partners, the development of Just Water Partnerships could ignite interest across jurisdictions. Support for UN efforts to revive interest in water accounts in line with the ambition of the GCEW would seem timely

The role of social movements in water governance

Social movements have significant power to push action on water issues, spread awareness, and contribute perspectives. Youth movements, Indigenous groups, and mass actions represent the exercise of rights and the voice of civil society, demanding a safe and just water future. These



movements help drive policy change, hold corporations accountable, promote the human right to water and sanitation, and bridge local and global issues.

Youth

With the future at stake now more than ever, we must put young people at the heart of championing water for the common good. Young people are the largest demographic group and, at times, the most affected by the consequences of an altered hydrological cycle. Therefore, they must be empowered to act on their own behalf to mitigate the water crisis.

Young people are not just tomorrow's leaders; they spearhead efforts to address water challenges today, demonstrating capacity for leadership. Youth's ability to communicate and mobilise public opinion, engage with policymakers, develop solutions to address water-related challenges, and maintain pressure on international forums, positions them as important stakeholders in dialogues, consultations, and decision-making. The establishment of the loss and damage fund during COP27 was influenced by youth advocacy and activism, demonstrating that advocacy from youth movements has successfully materialised before.

While there is a growing volume of youth water actors at all levels, engagement groups, and network associations face fragmentation, limiting their voice and influence. Further, youth movements face challenges such as a lack of funding, limited access to data and information, and insufficient continuity and formality – even as their agency is recognised and they secure seats at the table. At times, young people lack the avenues, platforms, and support to play their part in the development of strategies and policies aimed at protecting the hydrological cycle and defining how we govern water for the common good.

Therefore, fostering intergenerational action on water issues is essential: leveraging the experience and resources of older stakeholders while harnessing the energy, stake, and ideas of young people.

Numerous youth networks engage in water governance at local, regional, and international levels, and have support from “traditional” stakeholders:

- Youth-led commitments in the Water Action Agenda were pledged to address water-related challenges at the 2023 UN Water Conference. Of the 700 commitments included in the Agenda, more than 400 involved youth. Tajikistan pledged to use the Dushanbe Water Process as a follow-up mechanism to ensure youth involvement in global water discussions, and Grundfos, along with 16 other companies, committed over USD 11 billion to support investments in innovation and youth engagement over the next five years (Espindola, 2023).
- The Youth Declaration and Plan of Action was developed by the United Nations International Federation of Youth for Water and Climate, mandated by the co-hosts of the 2023 UN Water Conference. This plan consolidates the inputs of young people, highlights youth perceptions, evaluates their awareness of water and climate issues, identifies challenges, and formulates recommendations in the form of policies, projects, programmes, and activities (UN1FY, 2023).
- The Global Youth Movement for Water connects over 300 youth-led organisations and allies from 70 countries, working to influence decision-makers, increase youth negotiating power, and encourage action on water-related issues globally. Launched during the 9th World Water Forum, this movement aims to amplify the voice of the younger generation and mobilise youth from local to global levels. By fostering collaboration and synergies among various youth organisations, the movement enhances their collective outreach and impact (YMW, 2023).

Against this backdrop and the findings in this report, the GCEW, is keen to continue empowering youth leaders, activists, innovators, entrepreneurs, and champions to be at the forefront of valuing and governing water for the common good.

An example of the latter is the Youth Water Agenda, launched at the 10th World Water Forum in Bali, Indonesia, under the auspices of the GCEW. The vision of the Youth Water Agenda is to be a catalyst, facilitating the structuring and mainstreaming of youth to advocate and participate in shaping water security and governance.

The report offers the Youth Water Agenda focus areas allowing youth across multiple sectors to engage in water issues in their contexts, supported by strategic and collaborative platforms and partnerships, ensuring that youth contributions and impacts transcend boundaries. It is paramount to ensure that young people, regardless of their age, sexuality, race, gender, background, or disability, can contribute to the conversation as we are fighting for water for the common good.

Indigenous Peoples

Indigenous Peoples are stewards of ecosystems, and blue and green water flows in their territories. They are stakeholders and rightsholders who bring unique knowledge and perspectives on water. Incorporating their epistemic knowledge and agency into global water governance is critical to address water-related issues and to be faithful to the principle of recognition justice. In global fora, Indigenous Peoples have been prominent on issues related to climate change, nature, and biodiversity:

- The UN Permanent Forum on Indigenous Issues constitutes the largest global annual gathering of Indigenous Peoples and is an advisory body to the UN Economic and Social Council, mandated to address issues related to the environment, among others (Resolution E/2000/22⁷⁴).
- The Indigenous Peoples Global Coalition Commitment for the UN Water Action Agenda was adopted in anticipation of the 2023 UN Water Conference (United Nations Department of Economic and Social Affairs n.d). The Agenda aims to include Indigenous People's rights and knowledge

in the development and implementation of international plans, bodies, and programmes to protect and manage water in response to the climate crisis.

Representatives of different Indigenous Peoples face barriers to participating in governance processes that affect Indigenous livelihoods and rights, such as limited financial and non-monetary resources, language and lack of inclusion. It is important to note that these hurdles take place against a backdrop of a wider set of systemic challenges related to land property rights, access to credit, acknowledgement of traditional lifestyles and knowledge, conflicting uses of water sources, deforestation and extractive activities in indigenous territories, among others.

Mass-action campaigns

Privatisation of water services and sanitation, water tariffs, corporate exploitation of water resources, violation of indigenous rights, and lack of citizen consultation have led to mass-action campaigns around the world that demand government and stakeholder accountability. Justice is often invoked as a prominent driver for such social movements:

- The Right2Water campaign was born in Ireland in 2014 with the abolition of water charges and "Irish Water" as the primary objective. The Right2Water trade unions facilitated nine of the largest protests Ireland had ever seen, with over one million people. The campaign forced several policy changes on domestic water charges (EWM, n.d.).
- In 2000, thousands of Bolivians protested water privatisation and rate hikes, leading to the Cochabamba Water War (Baggerman & Davalillo-Hidalgo, 2021) .
- A mountain village in Tunisia protested a quarry operation that contaminated the Khumayr tribe's only water source, leading to allegations of government neglect [32].
- Citizens in Chiapas, Mexico, collectively demanded government action to stop "Big Soda" corporations from draining public wells (Baggerman & Davalillo-Hidalgo, 2021).

74 The Resolution E/2000/22 was introduced in the ECOSOC 45th plenary meeting, 28 July 2000 (Economic and Social Council, 2000)

- For decades, South Africa has seen ongoing water-related protests and riots in certain townships (Baggerman & Davalillo-Hidalgo, 2021).

As climate change accelerates, water-related challenges will intensify, increasing strain on water governance systems and fuelling social movements. To address water-related tensions and improve water governance, it is critical to acknowledge social movements and create platforms that can combine independent but related issues around the hydrological cycle. The Water System Justice approach offers a framework to structure discussions around water-related justice issues.

Environmental NGOs

Non-governmental organisations (NGOs) play a critical role in advancing global water governance. Their involvement ensures that the voices of marginalised communities, environmental concerns, and public accountability are represented in decision-making processes relative to the protection of the hydrological cycle. Non-governmental organisations bring expertise, advocacy, and operational capacity to water governance efforts, often working at the intersection of local, national, and global levels. They engage in a wide array of activities, from community-based water management programme to influencing international water policy frameworks.

Non-governmental organisations have been pivotal in raising global awareness about water scarcity, pollution, and the need for sustainable water management practices. Through campaigns and advocacy, they have brought attention to the urgency of stabilising the global hydrological cycle and its implications for climate change, biodiversity, and human health. Moreover, their work transcends mere awareness, as many non-governmental organisations actively engage with international bodies such as the UN, World Bank, and regional organisations, and with corporates, thereby contributing to water governance at multiple scales. Their involvement ensures that environmental justice, human rights, and sustainability are integrated into global water strategies. They are also watchdogs, monitoring the actions of governments and corporations to ensure compliance with international water governance standards. By holding stakeholders accountable,

non-governmental organisations safeguard the interests of the public and the environment.

Unlike global-scale organisations, non-governmental organisations often work closely with local communities, which allows for effective trust-building with local communities. This becomes a symbiotic relationship as they also promote capacity-building at a local scale to ameliorate water management. By training community members and supporting local governance structures, non-governmental organisations empower people to take charge of their water systems, fostering ownership and sustainability.

Non-governmental organisations are called to collaborate with local, national, and international organisations if a coherent global water governance framework is to be developed; especially by promoting Just Water Partnerships. By fostering these types of partnerships between diverse actors, non-governmental organisations will deliver governance mechanisms that are inclusive, participatory, and aligned with the principles of sustainability and justice.

Water and the private sector

The private sector plays a critical role in addressing global water challenges through corporate governance initiatives, responsible supply-chain management, technological innovation, operational efficiency improvements, and sustainable investing. Companies increasingly recognise water-related business risks and engage in corporate water stewardship to mitigate them and promote sustainable water management [34]. Moreover, they are working with other corporates, governments, and civil society to elevate water issues on companies' agendas, advance collective water stewardship, and provide platforms for innovation, partnerships, and exchange of best practices.

Examples of initiatives where the private sector is addressing global water challenges:

- The Global Water Initiative by the World Economic Forum aims to scale a new generation of public-private partnerships to protect the world's freshwater ecosystems.
- The UN Global Compact's CEO Water Mandate mobilises business leaders to

advance water stewardship, sanitation, and the SDGs. Participating companies commit to continuous progress against six elements of stewardship and report on their efforts annually.

- The Water Resilience Coalition, an industry-driven, CEO-led coalition of the CEO Water Mandate, aims to elevate global water stress to the top of corporate agendas and preserve the world's freshwater resources.
- The 2030 Water Resources Group, a public-private-civil-society partnership hosted by the World Bank Group supports country-level collaboration to unite diverse groups with a common interest in the sustainable management of water resources.
- The Alliance for Water Stewardship is a global membership collaboration that promotes responsible use of freshwater through its International Water Stewardship Standard. The Alliance works with companies, NGOs, and the public sector to drive collective responses to shared water challenges.
- The World Business Council for Sustainable Development's Water Solutions initiative is a business-led programme that develops tools and partnerships to support companies in implementing water stewardship strategies and achieving water security.
- The Water Footprint Network is a platform for collaboration between companies, organisations, and individuals to solve the world's water crises by advancing fair and smart water use.

The water-related missions set out above provide actionable ambitions to drive and gauge the capacity of these initiatives to transform corporate practices and value chains.

Public-private partnerships integrating the conservation, restoration and sustainable use of blue and green water in contractual arrangements can further catalyse such action. Synergies can be exploited with action in the field of climate change mitigation and nature conservation. The field of materiality of climate, nature, and water risks for

corporates and financial institutions is a cogent illustration.

Water and academia

Academia plays an essential role in ensuring informed water governance and programming across geographical scales by providing the scientific and historical (Dellapenna & Gupta, eds., 2021) knowledge and data necessary to develop effective policies, manage water resources sustainably, understand complex water systems, and identify innovative solutions to address emerging water challenges. Research institutions are also key strategic partners in co-designing and achieving missions thanks to the generation of data, and providing expertise as well as driving policy and technical innovation. Incentives should be put in place that support the integration of science-policy interface mechanisms in water-related governance processes.

The effects of a tilted hydrological cycle – driven by the Anthropocene – have not yet been fully understood. There is an urgent need to explore the unpredictable nature of this new cycle and how global societies must adapt to living within it while preventing its further destabilisation. Furthermore, academia must address the question of how innovation – particularly in sectors like agriculture – impacts the destabilisation of the hydrological cycle. Applied research, coordinated across institutions globally, is essential to understanding whether current innovations genuinely contribute to sustainable water management. Governments have a role in moving the frontiers of R&D, steering the focus and direction of collective efforts, and bringing together multiple knowledge systems to purposely tackle the challenges ahead.

Researchers must take a multi-causal approach to understanding global to local hydrological changes, identifying who causes and benefits from the alteration of the hydrological cycle, and unpacking how, when, and why certain values and interests might or might not translate into sustainable policy and practice. This requires investing in new explanatory capacities and data collection practices at localised and global levels, particularly regarding moisture flows and the quantification of exposure to hydrological imbalances in terms of people, the economy, and biodiversity.

Moreover evidence-based decision making, identifying emerging issues early, and developing innovative solutions are key. Together with capacity building, policy analysis and advocacy, and community engagement, academia plays a pro-active role in the future orientation and integration of sustainable water governance across societal dynamics, cultural boundaries, and geo-political constraints. A key component of this role entails equipping students across disciplines with knowledge and skills that enable young professionals to advance a systemic understanding of water-related challenges within their respective fields, and to foster innovative solutions.

Creating a safe space, programming for ongoing research, capacity development, and testing organisational innovations will be key to strengthening local to global water valuation and governance.

Towards a global water pact

The GCEW has offered five missions to solve blue- and green-water-related challenges.

Through a process of inclusive and multi-stakeholder debate, negotiation and decision, an implementation agenda, reporting, and action, the international community can catalyse the adoption of these missions by country, organisation, and coalition, ensuring their timely achievement.

While many institutionalised agendas exist to carry out these missions, there is a lack of overarching and enabling institutional capacity. Without it, an ever-more fragmented approach will dominate. Taking into consideration the interdependence and interconnectedness among countries evidenced in this report, we need to value, stabilise, and govern the hydrological cycle as a global common good through co-operation, coordination, and shared responsibility. As such, institutional capacity on water by a global governance mechanism is required to support preparation of the 2026 and 2028 UN conferences, sustain post-2028 UN dialogues, ensure policy follow-up, implementation, and accountability, and provide leadership for a global water agenda while respecting national sovereignty and water jurisdictions.

Box 10.2: Towards a convention to manage vapour flows and the hydrological cycle

The 1979 UNECE Convention on Long-Range Transboundary Air Pollution (LRTAP) offers a precedent of global water governance for the common good. The Convention emerged after scientific evidence demonstrated that acid rain in one country was triggered by air pollutants emitted thousands of kilometres away. Noting that collective action was more effective and cost-efficient than domestic responses, countries in the pan-European region signed the UNECE convention in 1979 – the first international treaty to deal with air pollution on a broad regional basis. The Convention laid down general principles and set up an institutional framework for international co-operation for air pollution abatement. Further refinements unfolded to cover a rising number of polluting substances, enhancing the policy framework with evidence-based studies. This endeavour is considered a success and illustration of the benefits of international co-operation.

Just like LRTAP, vapour travels long distances and connects evaporationsheds with precipitationsheds across continents and beyond. These flows must be maintained to stabilise the hydrological cycle and rain patterns downwind. Hence, the UNECE convention offers several lessons that could inspire a legal instrument to manage green water and the hydrological cycle:

- 1. The Convention is based on robust scientific research proving how emitters and recipient countries are connected through clouds and air flows, sometimes across thousands of kilometres. The Convention later provided a platform for scientists and policymakers to exchange information, supporting innovation, mutual trust, and learning.*
- 2. The Convention was initiated at a regional basis as it became clear that localised approaches would be inefficient in addressing this issue. With time, other parties joined.*
- 3. The Convention was subsequently supplemented by various protocols, focused on selected substances. The initial framework was wide enough to allow for adjustments and additions as new evidence developed, which in turn enhanced and improved the policy and its goals.*

*Other approaches are currently underway. A multidisciplinary research project is being led by the Collège de France, the University of Geneva, the Geneva Water Hub and the University of Mekele (2024-2027), called *Legal Perspectives on Atmospheric Water (Regards croisés sur l'eau atmosphérique)*. The project recognises that legal status, management, and protection of atmospheric water remain undetermined because international law deals very little with atmospheric water, and are only indirectly covered by international environmental legal instruments. It will map out this little-known territory from a wide range of disciplinary angles, with an emphasis on international law.*

In this vein, the GCEW recommends capacitating unified action on water at the UN level. Leveraging its legitimacy and structure, and the momentum on global water action, the UN must lead in the consolidation of the Global Water Agenda. This agenda should be symbiotic and synergistic with the SDGs and the Paris Agreement, build on a shared set of principles inspired by the outcome of the 2023 UN Water Conference, and act as an organising principle to unite the uncoordinated processes, agendas, and solutions that feature water. To raise the visibility and urgency of succeeding on these vital missions, the GCEW supports the recent appointment of a United Nations Special Envoy on Water. Additionally, the GCEW encourages the UN to appoint a youth water envoy to ensure a formalised, intergenerational approach.

Rather than creating a UN agency specialised in water that risks reinforcing a siloed approach, the GCEW recommends to establish a Governing Board consisting of: (1) the UN Deputy Secretary-General (also in their capacity as chair of the United Nations Sustainable Development Group); (2) the UN Special Envoy on Water (mandated by the UN Secretary-General); (3) the Under-Secretary-General of the UN Department of Economic and Social Affairs; and (4) the Chair of UN Water. This quartet can prepare and guide the roadmap towards the 2026 and 2028 UN Water Conferences, the Transversal Water Agenda for the Six Transitions of the Investment Pathways to Deliver the SDGs, and the preparation of the post-2030 Agenda. Additionally, this quartet can coordinate the designated UN agencies on their water work for their dedicated UN agendas and meetings, and the development of a unified UN Water Agenda.

By leveraging this untapped agenda and bringing water to the forefront of global discussions, we can begin to forge a more integrated and effective approach to global water governance. This strategy will acknowledge and bolster existing commitments and progress on multiple global agendas, and set the stage for a cohesive, fit-for-purpose and transformative global water governance mechanism. A global water governance mechanism would ensure a comprehensive strategy for collective action where rights-holders and stakeholders are given an institutionally mandated participatory role.

The ultimate ambition of an interinstitutional approach for a Global Water Agenda should be the establishment of a global water pact. This pact would work under clear and measurable goals to stabilise the hydrological cycle. If appropriate, the five missions previously posed could provide a framework for action. An enabling condition is the GCEW's recommendation for a global water data infrastructure, which would allow monitoring, verification, and reporting; ensure transparency; and support the development of further scientific efforts and evidence.

Convening capacity beyond institutional settings will be the cornerstone for successful institutionalisation, alongside institutional capacity, leadership, and the mandate needed at all levels from local to global, with a clear focus on the UN and its role in the global water agenda. A safe space – a global forum for water (economics) and beyond – will have to bring together all processes, partners, and political, cultural and policy dynamics necessary for research; building trust, capacity, and accountability; exploring partnerships; testing

innovations; and sparking dialogues across the many divides, interests, backgrounds, and needs. Beyond this report, beyond the missions and the prompting of institutional action, this forum can be fertile ground for next steps.

Recommending unified, global, formal and informal water governance is not merely an aspiration, it is an imperative for survival and for lasting prosperity on our planet. Only through concerted, collective effort will we address the complex water challenges and safeguard the hydrological cycle.

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Box 10.3: The untapped UN Water Agenda

The UN can build on the established and agreed System Wide Strategy to anchor water in the UN system, by:

- *Anchoring water in all related upcoming UN conferences and meetings. On the road to the 2026 UN Water Conference, the sequence of UN meetings includes the COP16 on biodiversity, COP29 and COP30 on climate, COP16 on desertification, the third Oceans Conference, the Finance for Development Summit, the Food Systems Summit, and the 2nd World Social Summit. All of them present stepping-stone opportunities in the preparation of the 2026 UN Water Conference.*
- *The UN Agencies that support these conferences and gatherings should work together under the guidance of the quartet and actively support the presidencies of these conferences to deliver:*
 - *an outcome document as input for the 2026 UN Water Conference*
 - *organising a dedicated moment or day for that preparation*
 - *anchoring the outcome (the input for the 2026 UN Water Conference) in the concluding declarations of the subsequent meetings*
- *The development of new Nationally Determined Contributions and National Biodiversity Strategies and Action Plans provides an opportunity to reflect the benefit of investing in blue and green water to mitigate climate change and biodiversity loss. To support increased drought and flood resilience, National Adaptation Plans can benefit from prioritising the role of nature in conserving and regulating blue and green water.*
- *The 2026 and 2028 UN Water Conferences should serve as focal points for reporting and consolidating water-related commitments and progress from these various global frameworks.*