Topic Background[1]

Transboundary waters – the aquifers, and lake and river basins shared by two or more countries – support the lives and livelihoods of vast numbers of people across the world. In an era of increasing water stress, how we manage these critical resources is vital to promoting peaceful cooperation and sustainable development. Depleted and degraded transboundary water supplies have the potential to cause social unrest and spark conflict within and between countries. Dealing with the impacts of climate change combined with the demands of increasing populations and economic growth requires a supranational, integrated approach to transboundary water resource management based on legal and institutional frameworks and shared benefits and costs.

The 263 transboundary lake and river basins cover almost half the Earth's surface. A total of 145 States have territory in these basins, and 30 countries lie entirely within them. There are approximately 300 transboundary aquifers, helping to serve the 2 billion people who depend on groundwater. Cooperation is essential, especially in areas vulnerable to the impacts of climate change and where water is already scarce. Wetlands around lakes and floodplains that straddle national boundaries provide essential ecosystem services to the surrounding populations, such as food provision, barriers against flooding and the natural processing of pollution.

Overexploitation of lakes, rivers and aquifers can jeopardize these ecosystem services and have dire consequences for the reliability and sustainability of water supplies, which can cause international tension if those impacts are felt more keenly on the other side of a border. Depleted aquifers can also allow saltwater intrusion in coastal areas and increase the concentration of arsenic and fluoride and other toxic substances. Even an ostensibly positive action can have a negative reaction. For instance, a unilateral move by one country to adapt to climate change by building a dam could drastically reduce a river's flow downstream in another country. The way in which transboundary waters are managed affects sustainable development within and beyond a country's borders. Therefore, the various heavily water-dependent sectors – agriculture, industry, energy, navigation and water supply and sanitation – need to cooperate on a supranational level. For example, efficient, cooperative management and development of shared waters and adjacent floodplains can boost food and energy production, helping to reduce poverty and control rural-urban migration.

There are many reasons to be optimistic. Transboundary water management creates benefits for everyone to share: international trade, climate change adaptation, economic growth, food security, improved governance and regional integration. Since 1948, there have been 37 incidents of acute conflict over water, while approximately 295 international water agreements were negotiated and signed in the same period. This includes the UNECE Water Convention, a legal framework for transboundary water cooperation worldwide, initially only open to countries in the pan-European region but globally available since 2003. However, around two-thirds of the world's transboundary rivers do not have a cooperative management framework.

[1] UN-Water. (n.d.). Transboundary Waters. Retrieved October 28, 2018

Past and Current Actions[2]

Most transboundary water agreements are the product of negotiations between individual countries. The more than 3,600 agreements and treaties signed are an achievement in themselves, but a closer look at them still reveals significant weaknesses. What is needed are workable monitoring provisions, enforcement mechanisms, and specific water allocation provisions that address variations in water flow and changing needs. The 1997 United Nations Convention on Non-Navigational Uses of International Watercourses is one international instrument that specifically focuses on shared water resources. It established two key principles to guide the conduct of nations regarding shared watercourses: "equitable and reasonable use" and "the obligation not to cause significant harm" to neighbours. However, it is up to countries themselves to spell out precisely what these terms mean in their watersheds.

Another example of an international program related to transboundary water issues is the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention), which was adopted in Helsinki in 1992 and entered into force in 1996. Almost all countries sharing transboundary waters in the region of the United Nations Economic Commission for Europe (UNECE) are Parties to the Convention. The Water Convention strengthens transboundary water cooperation and measures for the ecologically-sound management and protection of transboundary surface waters and groundwaters. The Convention fosters the implementation of integrated water resources management, in particular the basin approach. It is designed to work in concert with the 1997 United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses.

The Water Convention requires Parties to prevent, control and reduce transboundary impact, use transboundary waters in a reasonable and equitable way and ensure their sustainable management. Parties bordering the same transboundary waters have to cooperate by entering into specific agreements and establishing joint bodies. As a framework agreement, the Convention does not replace bilateral and multilateral agreements for specific basins or aquifers; instead, it fosters their establishment and implementation, as well as further development. In 2003, the Water Convention was amended to allow accession by countries outside the UNECE region. The amendment entered into force on 6 February 2013, turning the Water Convention into a legal framework for transboundary water cooperation worldwide. As of 1st March 2016, all United Nations Member States can accede to the Convention. Currently, over 110 countries are active in meetings and activities related to the Convention.

The Water Convention has been used to negotiate water agreements all around the world. It has been used frequently in former Soviet states, including former members of Yugoslavia and Central Asian nations like Kazakhstan, Kyrgyzstan, and Turkmenistan. It has also inspired agreements in the Lake Chad and Niger basins and between China and Kazakhstan. Programs under the auspices of the water convention include the Dam Safety Project and National Policy Dialogues, which brings varied stakeholders together to reform water policy. In 2013, it

[2] United Nations Department of Economic and Social Affairs (UNDESA). (n.d.). Transboundary waters. Retrieved October 31, 2018; United Nations Economic Commission for Europe (UNECE). (2018). *The Water Convention: responding to global water challenges*. Geneva: UNECE.; United Nations Economic Commission for Europe (UNECE). (n.d.). About the UNECE Water Convention. Retrieved October 28, 2018

facilitated the Global Network of Basins Working on Climate Change, which includes basins from around the world.

Key Challenges and Possible Solutions[3]

The good news is that transboundary water conflicts have in general been decreasing with the increasing implementation of transboundary water treaties. The notion of 'water wars' has proven itself to be largely exaggeration. At the same time, there has been a shift in the nature of water conflicts, away from water disputes between nations and toward subnational and local violence over water access. In this sense, it is not water wars that the international community must address but the far broader lethal causes of water conflicts overall, especially conflicts over equitable access to water, strategies for sharing during shortages, and water contamination. This issues will only deepen as the effects of climate change become more apparent. While international competition over water resources can make existing difficulties worse, transboundary cooperation may also be part of the solution to this growing problem. Nations may be able to go beyond fighting over common water resources to actually helping each other develop water infrastructure or even providing water during severe droughts.

A key consideration when it comes to water conflicts and agreements is the role of political power. While any international issue involves the relative power roles of the countries involved, water is an especially pertinent and sensitive example. Studies have shown that, when some nations in the water basin have more political or economic power than others, they tend to dominate the negotiation process. Weaker parties, left with few options for negotiation, often acquiesce and agree to unfair water treaties. This process has been seen, for example, in the dominance of Israel in the management of the Jordan River and the dominance of Egypt in the management of the Nile. It is important, therefore, that water agreements are based on common goals and interests and the leveling of existing power structures. The existence of a supervising body, like the UNECE and the Water Convention, or a common set of rules, like membership in a regional union like the European or African Unions, may help level the playing field during negotiation.

Purpose of the Committee

UN-Water plays a key supportive role in the establishment and maintenance of transboundary water agreements. It monitors the status of water systems around the world, providing key data to support local and regional efforts. It raises awareness of water-related issues around the world. It makes sure that water issues are contained within key UN programs, like the Global Goals for Sustainable Development, the UN Framework Convention on Climate Change, and the Sendai Framework for Disaster Risk Reduction. The continuation of this work is essential for providing information and international support for transboundary water issues in the future.

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[3] Gleick, P. H., & Heberger, M. (2014). Water Brief 3 - Water and Conflict: Events, Trends, and Analysis (2011-2012). In *The World's Water* (Vol. 8). The Pacific Institute.; Zeitoun, M., & Mirumachi, N. (2008). Transboundary water interaction I: reconsidering conflict and cooperation. *International Environmental Agreements: Politics, Law & Economics*, *8*(4), 297–316.; Zeitoun, M., Mirumachi, N., & Warner, J. (2011). Transboundary water interaction II: the influence of 'soft' power. *International Environmental Agreements: Politics, Law and Economics*, *11*(2), 159–178.

Although not historically part of its mandate, UN-Water may be able to play a supervisory or guiding role in the negotiation of transboundary water agreements, ensuring that all parties are empowered and fairly considered. UN-Water supports the work of UNECE and the Water Convention in facilitating transboundary agreements among nations.

Key Terms

Accession: the process by which a nation joins an international agreement already in effect between other nations

Basin: aka watershed, the area that a body of water drains. All countries within a basin are important stakeholders in transboundary water cooperation.

Integrated Water Resources Management (IWRM): an approach that recognizes the social, economic, and environmental aspects of water resources and seeks to manage them in a sustainable and equitable way

Riparian nation: any nation that borders a particular river

Further Research

Guiding Questions

- What is the state of water resources in your country, both internally and internationally? What about neighboring countries?
- Is your country a party to any transboundary water treaties? How successful have these parties been? What power dynamics exist in the formation and implementation of these treaties? Where does your country stand in these power dynamics?
- What can UN-Water do to support transboundary cooperation for sustainable water use?

Research Sources

For more information on the topic, please refer to the following sources:

- 2016 UNEP report on Transboundary Water Systems - Status and Trends: https://drive.google.com/file/d/1af83L5uA8AFZGyIPjmNEoaY_KN5l4KUz/view?usp=sharing
- More information about the Water Convention: http://www.unece.org/env/water.html
- UN Resolution on Transboundary Aquifers: http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/63/124
- 1997 Convention on the Law of the Non-navigational Uses of International Watercourses: http://legal.un.org/ilc/texts/instruments/english/conventions/8_3_1997.pdf
- More information about UN-Water: http://www.unwater.org/about-unwater/
- More information about Integrated Water Resources Management: http://www.un.org/waterforlifedecade/iwrm.shtml
- Address by UN Deputy Secretary General at High-Level Panel on Water Diplomacy in August 2018: https://www.un.org/press/en/2018/dsgsm1210.doc.htm

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