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# Preventing Conflicts, Fostering Cooperation – The many Roles of Water Diplomacy



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## Preventing Conflicts, Fostering Cooperation – The many Roles of Water Diplomacy

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## **Abbreviations**

EU	European Union
MFA	Ministry of Foreign Affairs
MRC	Mekong River Commission
NDC	Nationally Determined Contribution
TFDD	Transboundary Freshwater Dispute Database
TRB	Transboundary River Basin
TWM	Transboundary Water Management
UNCCD	United Nations Convention to Combat Desertification
UNFCCC	United Nations Framework Convention on Climate Change
WRM	Water Resource Management

## Executive Summary

Water diplomacy aims to catalyze technical water cooperation and, at the same time, use it as a means to develop good neighborly relations in politically sensitive areas.

There is strong interdependence between water and conflict. Disagreements over water resources can lead to conflict that affects economic development and political stability. Tensions in political or economic relations can also shape relations among states over water. Water diplomacy – linking these spheres – is therefore crucial for building trust between countries or provinces bordering the same river (riparian states). Trust can be built if water is relevant in the political context and if transparent rules and procedures apply to a shared water resource.

Cooperation over water can extend to other areas beyond water such as international relations aiming at promoting good relations, peace, security and prosperity, by having impact on food security, or economic stability, improved regional security and integration, better trade relations and power sharing pools. Water diplomacy can enable countries to negotiate agreements on the allocation and management of transboundary waters and highlight

the importance of water conventions that identify principles and doctrines present in legal and management approaches. This process fosters trust building, sound decision-making, and in general having a shared vision, goals, and unified effort.

Besides the classic state actors in the water diplomacy processes, an emerging number of stakeholders started to engage and provide their own definition. As a dynamic, constantly evolving process, water diplomacy takes place in complex political, economic, social, and environmental contexts and most probably its purpose will also be shaped by these trends and new actors in the future within and beyond transboundary river basins.

### **Therefore, this report is divided into 5 core sections:**

- Section 1 sets the scene for water diplomacy by describing the linkages between conflict and cooperation in a transboundary river basin.
- Section 2 clarifies the distinction between the terms of water diplomacy and water cooperation.
- Section 3 briefly sets the scene for the water challenges including three key drivers which influence the water diplomacy process: economic, development, and environmental. The threat of a less cooperative, more inward-looking world also creates the opportunity to address global risks and the trends that drive them. The key drivers that shape the global outlook of water help provide explanations for the emerging interest in and development of the concept of water diplomacy.
- Section 4 dives into the more detailed definitions of water diplomacy by mapping the context, actors, and purposes.
- Section 5 draws conclusions.



# 1

## Setting the Scene

**Water is a multifaceted resource, therefore many factors originating outside of the water cycle affect its quality, quantity, and accessibility. At the same time, water itself influences the health of populations, ecosystems, agricultural production, cultural practices, energy provision, and so on. The world's many transboundary waters link countries in a common future as 151 countries and 2.8 billion people share 286 transboundary river basins, and 300 transboundary aquifers are serving the 2 billion people who depend on groundwater for their survival. They support the socioeconomic development and wellbeing of humanity and are home to a high proportion of the world's biodiversity (UNEP-DHI and UNEP, 2016).**

The mechanism for riparian states to engage in the management of international rivers, lakes and aquifers can take the form of international water treaties and conventions, river basin agreements, and bilateral and multilateral agreements on specific water-related issues. The governance architecture of cooperation is primarily guided by principles first established in the 1966 Helsinki Rules on the Uses of the Waters of International Rivers and then codified in the 1997 United Nations Convention on the Law of the Non-navigational Uses of International Watercourses (Sadoff and Grey, 2005). However, still about two-thirds of the world's transboundary rivers are not governed by any cooperative management framework.

Transboundary water management (TWM) and water cooperation both support opening new opportunities for riparian states to sustainably develop their common water resources and assist decision-makers and practitioners to reduce conflict, and increase economic development. At the same time, the key element for water diplomacy to work is the level of political engagement by both the riparian countries and the international community (especially that of the foreign policy). Water diplomacy is more in the domain of TWM, while water cooperation is more focused on the technical cooperation of various stakeholders.

Cooperation and conflict over waters that transcends political boundaries can co-exist. While issues of water and international conflict have appeared as interconnected with increasing frequency (Gleick, 1993; Wolf, Yoffe, Giordano, 2003), little global scale or quantitative evidence has been compiled on water related conflicts in international river basins. History reveals that in many situations, strategic cooperation is more common than open conflict, and leads to peaceful solutions rather than water disputes. The work of the Transboundary Freshwater Dispute Database (TFDD) and the Basins at Risk (Wolf, 1999; Wolf, Yoffe, Giordano, 2003) project led by Aaron Wolf at the Oregon State University, helped to partially resolve the debate over conflict and cooperation. It dispels the myths of water wars, showing that among all cases of over 1800 water events, more than 2/3 fall on the cooperative side and even the ones qualifying as conflictive are significantly below the threshold to war or even any form of violence. Over the last 67 years, we have witnessed only 37 severe water disputes globally, in comparison to 295 water cooperation treaties (Wolf, Yoffe, Giordano, 2003; Salman, 2015).



Under ever-growing economies and populations, water demand increases as the demand for food and energy production grows, both of which are very thirsty sectors that are fundamental to basic human security. Provision of good quality water at a given place at a given time become more and more challenging as climate change further exacerbates global uncertainty about water supply. As such pressures escalate, competition over water between sectors, countries, and regions grow together with the potential for conflicts to burst out, risking stability and peace at all scales. Globally, based on current trends, water demand is projected to exceed sustainable supply by 40 percent in 2030, moreover, one-third of the world's population, concentrated in developing countries, will live in basins where this deficit is larger than 50 percent (2030 WRG, 2009).

Therefore, water is becoming securitized, which means that it has become part of the political and national security agenda, putting it in the domain of foreign policy to strengthen efforts in supporting sustainable management of water resources. The most quoted examples are from the Middle East: Iraq, Syria, and Turkey form a water security perspective because of their disputes over sharing the Euphrates and Tigris Rivers. Their security interdependence involves the issue of dams, reduced water flow, salinization, and hydroelectricity. The Jordan, Yarmouk, Litani, and West Bank Aquifer link Israel, Jordan, Syria, Lebanon, and West Bank Palestinians, with conflicts occurring over the allotment of water. Other well-known examples of the water security lens include Egypt, Ethiopia, and Sudan (over the Nile); India and Pakistan (over the Indus, Jhelum, Chenab, Ravi, Beas, and Sutlej Rivers); Burma and China (over the Salween); Cambodia, Laos, Thailand, and Vietnam (over the Mekong).

As TWM and water cooperation most often focus on technical solutions, new avenues have recently been created to address the complex water challenges politically, from the local to the global level. Therefore, water diplomacy has evolved around the governance of water, putting water into the forefront of the political (and in particular the foreign policy) agenda.

Diplomacy means different things to different actors. As a result, there are various niche diplomacies, for example, cultural diplomacy, science diplomacy, or technical diplomacy. Diplomacy is theoretically defined as the art of communication between different parties, both representatives of states, and regular individuals. In international relations, diplomacy is the art of conducting negotiations, forming alliances, discussing treaties and reaching agreements. On a societal level, diplomacy simply refers to the art of managing and dealing with people successfully, employing tactfulness to ensure there is no ill will. The term multi-track diplomacy was coined based on the recognition that Track I, II and III did not capture the complexity or breadth of diplomacy lumped under Track II and III diplomacy (SIWI, 2016; Huntjens and de Man, 2017).

Water diplomacy can be both preventive in nature and also used as an approach for conflict management. As a preventive tool it can support trust-building, provide a platform for joint studies and collaborative risk assessments by riparian countries. On the other hand, mediation, negotiation, diplomatic statements are also part of its repertoire. The type of conflict/cooperation and the level at which the conflict/activity emerges (i.e. at the local, national, regional, or international level) is important in the design of solution spaces. This has a direct impact on who the appropriate and legitimate diplomats are to mobilize and engage in any given context.



Water diplomacy tries to awaken the water dimension within the diplomatic toolkit, and the political and diplomatic dimension within the water management toolkit, to preserve peace and security by preventing conflicts to emerge, to improve dialogue and cooperation with multi-level diplomacy. In its traditional interpretation, water diplomacy refers to a process led by state actors who have the formal obligation to fulfill their citizens' right to water, and therefore they have a national interest over the management of shared water resources (Marshall, Salamé, Wolf, 2017). It includes the official agreements, the endorsement of legal obligations, mostly at the highest level which very often is faced by roadblocks. Unlocking the potential of cooperation, and mitigating the high risk of non-cooperation often happens by the engagement of other third-parties: official actors providing support, or other non-official stakeholders including academia, grassroots groups, local leaders, non-governmental organizations, ranging from international to the local levels.

The following chapters rely solely on a desk-based research and no interviews or discussion with actors took place. It means that only published sources on water diplomacy were taken into account, most of them from academic circles, NGOs, international organizations and few governments (See Appendix).



**Mekong River**



**Euphrates River with Qadisiyah Reservoir in Iraq**

### **Purpose of the paper**

This report is dedicated primarily to actors both in the water and non-water professional circles, who are considered relevant in addressing the emerging challenges of transboundary waters in the future. The report looks into the case of third parties and in particular it aims to provide an overview about how these groups define and engage in the process of water diplomacy and what their roles may look like. While this paper does not try to define water diplomacy, it proposes that we need to better understand its various definitions to enhance cooperation and mitigate potential conflict over transboundary waters.



**Indus River, Himalaya**

There is further potential for this concept to evolve and be broadened by multiple actors who could engage in this process but have not yet done so. Of course, there are no quick fixes, and no simple remedy. What this paper proposes is to build on the growing body of literature highlighting the political nature of water resources which requires new types of responses from a growing number of stakeholders.



## 2 Water Diplomacy – Water Cooperation: The same but re-badged?

The term water diplomacy is often used interchangeably with 'water cooperation' or 'transboundary water management', although there is a fine, yet rarely specified line between them. Just the connotation of diplomacy insinuates a higher level political engagement – 'high' versus 'low' politics – with government involvement. Water diplomacy may have the same means as cooperation over water, but the ends have a broader scope beyond water, including influencing regional peace and stability. In this sense, even though the term itself is new, water diplomacy has been practiced by actors within the basin, as well as third parties to induce cooperation between riparians with the hopes of supporting a broader peace process. It is difficult to stringently define water diplomacy in contrast to water cooperation though because it means different things and suggest diverse courses of action for organizations and individuals acting in different sectors.

There is no clear distinction between water cooperation and water diplomacy. As Keskinen et al. (2015) elaborate, water diplomacy can lead to water cooperation. In cases where riparians are in a cycle leading to conflict, water diplomacy can disrupt escalation and reduce tensions. In the same sense, water cooperation could easily lead to water diplomacy, as a natural continuation of friendly relations between two states, or with a third party acting as a catalyst to capitalize on water-related coordination in expanding the range of issues on which states work together. In other situations, water diplomacy might not have any significant, or causal relationship with water cooperation.



Distinguishing water cooperation from water diplomacy invites us to clarify if the definition relates to water per se, or other issues. In some cases, the definition of water diplomacy has actually broadened the scope from water towards other areas, for example, improved regional security and stability, regional integration, improved trade relations and power sharing pools.





# 3

## Drivers of Water Diplomacy within and beyond the water sector

Before tapping into the actual water diplomacy processes, it is helpful to consider the drivers behind them. These trends relate to economic, social, and development processes.

### 3.1 The drive to grow and develop: Economic risks and global frameworks

Water insecurity can negatively impact growth and development of communities, societies, nations and entire regions. The World Economic Forum Global Risk Assessment Reports (WEF, 2006–2017) has tracked tendencies in global risks since 2006, and demonstrated the increasing perception that water will pose a top global risk. Leading up to 2010, top global risks were dominated by economic challenges, while from 2011, a dramatic shift began to take place (see Image 1). First, flooding was identified in 2011 as the second most likely global risk. In 2012, water supply crises became the fifth most likely global risk and the second most impactful, and since then water supply crises is steadily ranked as one of the top five most likely and/or most impactful global risk.

The Global Risks Interconnections Map (Image 2), published by the WEF's Global Risk Report in 2016 (WEF, 2016), reveals the visible link between water and social stability, climate change and food security concerns. Therefore, it is not surprising that business leaders increasingly recognize the urgency to mitigate risks threatening their businesses, and respond by developing corporate water management practices. The costs of providing future water security depend on how water risks are allocated to different sections of society (WWC and OECD, 2015). This begs the question of how companies and financial institutions will be considered as third party actors within the process of water diplomacy as they have growing interest in ensuring that access to water does

not pose any significant risk to their operations. They likely will be driving both dialogue with other water users and innovation to protect water resources (Smedley, 2017), or at the very least maintain political stability necessary for businesses to protect their assets. For example, UNEP-FI and UNEP GPA (2006) commissioned a report to map major water-related risks incurred by banks and other financial institutions. It analyzes commercial, political, legal and regulatory water resource risks, or reputational risks, in order to assess and manage them more systematically when they occur in water infrastructure development for example. The Carbon Disclosure Project has a water program with a database of good practices from more than 20 countries and over 200 case studies with evidence of companies recognizing benefits to use data for better risk management in the long-term (CDP, 2016).





2015	2016	2017
Water crises	Failure of climate-change mitigation and adaptation	Weapons of mass destruction
Rapid and massive spread of infectious diseases	Weapons of mass destruction	Extreme weather events
Weapons of mass destruction	Water crises	Water crises
Interstate conflict with regional consequences	Large-scale involuntary migration	Major natural disasters
Failure of climate-change mitigation and adaptation	Severe energy price shock	Failure of climate-change mitigation and adaptation

The recently published UN Global Compact report (2017) aims to inspire all business to take leading action in support of the achievement of the UN's key development framework, the Sustainable Development Goals (SDGs), running from 2015–2030 (SDKP, 2017). Companies' consumption of water and discharge most often takes place in shared water resources. Over 80 percent of all jobs globally depend on sustainable WRM, while water scarcity is estimated to cost about 6 percent of total GDP by 2050 (UN Global Compact, 2017:56).

The dedicated goal to water (SDG6) proves the success of the strong voice of the water community to bring focus within the development circles to water problems. One of the targets that were set includes the importance of bringing IWRM at all levels, including through TWC, measured by two key indicators: a) 6.5.1. Degree of integrated water resources management implementation (0–100); b) 6.5.2. Proportion of transboundary river basin (TRB) area with an operational arrangement for water cooperation (SDKP, 2017). Besides Goal 6, it is important to note that water is inherent in almost all other goals.

Mitigating the impacts of water scarcity on climate vulnerable populations is essential to make economy-wide transformation necessary to meet the SDGs in a changing climate. To this end, connecting political processes between water and climate is key. At the national level, of the 162 (then Intended) Nationally Determined Contributions (INDCs) published as of June 2016, 83 percent mention or include a component on adaptation, among them all the African countries and all South American countries. Water is mainly mentioned in relation to four priority areas: Risk Management, Water for Agriculture, Integrated Water Resources Management, and Drinking Water (FWP, 2016). In the implementation of the Paris Agreement though, almost every country's Nationally Determined Contributions (NDCs) make heavy use of water resources for both climate mitigation and clean adaptation activities. Few of these recognize that ongoing climate impacts on the water cycle itself will challenge the process of meeting many national and project goals (Matthews et al., 2017). Furthermore, the text of the Paris Agreement does not mention water at all, and up until 2016 water was almost invisible within the UNFCCC processes. The French and the Moroccan Presidencies of COP21 and COP22 continued to work towards the engagement of non-state actors and established a mechanism for their participation in the official agenda of the climate

summit. This has paved the way for the first ever Global Climate Action Day dedicated to water, which brought unprecedented visibility for water in the history of COPs. One key question is how climate policy, and the climate finance architecture will consider water and adaptation into planning and development policy. For example, through the Green Climate Fund that was created to support the efforts of developing countries by pledges worth \$100 billion per year by 2020 (Westphal, Canfin, Ballesteros, Morgan, 2015) to address their key adaptation and mitigation needs. As climate change is water change, the processes of climate diplomacy may also be interlinked with those of water diplomacy in the future.

The Sendai Framework for Disaster Risk Reduction (2015), the main guiding document relating to disasters, makes an explicit mention on TRB and the need to prevent conflicts by focusing on prevention, and long-term planning. Although this framework primarily deals with natural disasters, both water and human security highly depend on it. The UN Secretary-General's Water and Sanitation Advisory Board, UNSGAB, has also emphasized in its final report (UNSGAB, 2015) the need to address the interconnection between water and disaster risks. UNSGAB and its disaster working group that has evolved into the High-Level Expert Panel on Water and Disaster (HELP), cooperated closely in a joint effort to

### IWRM is based on Four Principles – the Dublin Principles, which are the following:

- Principle 1: Fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment
- Principle 2: Water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels
- Principle 3: Women play a central part in the provision, management and safeguarding of water
- Principle 4: Water has an economic value in all its competing uses and should be recognized as an economic good

Source: ICWE, 1992.



advocate a shift in political attention, similar to that of the Sendai Framework: from disaster response to disaster risk reduction. Furthermore, to promote the global and cooperative development and management of water resources, and to mobilize concerted action, the High Level Panel on Water and Peace was launched on 16 November 2015 in Geneva and developed a set of proposals to prevent and resolve water-related conflicts, and facilitate the use of water as an important factor of building peace (Global High-Level Panel on Water and Peace, 2017). Soon after, the President of the World Bank Group and the UN Secretary General convened the Global High-Level Panel on Water launched in April 2016 in New York.

The interlinkages between climate, water, and other related sectors such as energy or agriculture needs to be recognized by actors in the water diplomacy process, and those actors who participate in negotiations on climate change. Aside from their cross-sectoral understanding, it might be also interesting to map out who these particular actors are within the government and if they are connected.

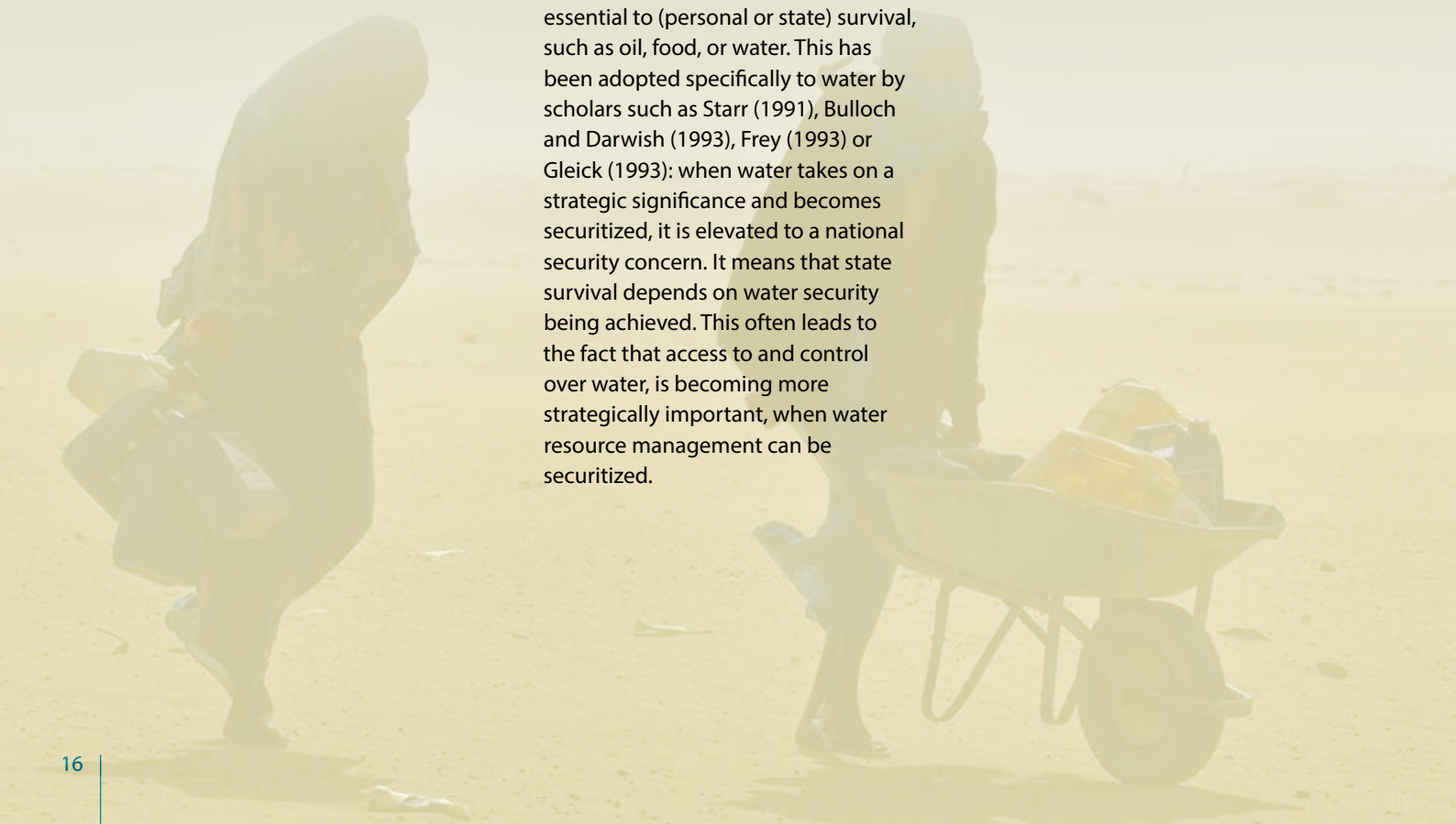
As we can see, global development frameworks such as the SDGs, the Paris Agreement, or the Sendai Framework integrate, or are strongly related to water. This shows that sustainable development requires strong management and cooperation over water resources, which often isn't possible without water diplomacy.

### 3.2 The drive to secure: Environmental security concern

National leaders like Anwar Sadat of Egypt and King Hussein of Jordan, the UN Secretary General Boutros Boutros-Ghali and the World Bank Vice President Ismael Serageldin, all referred to the subject of water insecurity during the 1970's and 1980s, prompting the anticipation of water wars around the world and particularly in the MENA region. However, it took more than 40 years until 2016, for the UN Security Council to debate the issues of water, peace and security (UNSC, 2016). It is a clear sign of connecting water with the security domain, requiring responses from new actors.

Buzan et al. (1997) coined the term securitization to describe the process of something being found to be a strategic or security good when it is essential to (personal or state) survival, such as oil, food, or water. This has been adopted specifically to water by scholars such as Starr (1991), Bulloch and Darwish (1993), Frey (1993) or Gleick (1993): when water takes on a strategic significance and becomes securitized, it is elevated to a national security concern. It means that state survival depends on water security being achieved. This often leads to the fact that access to and control over water, is becoming more strategically important, when water resource management can be securitized.

Today, we need to consider environmental factors behind potentially violent conflicts, which stem from the impact of climate change and global environmental degradation on the wellbeing of people and economies too. This becomes linked to the notion of common security, and a shared interest in survival. This is why when we talk about the water scarcity crisis with competition over the resource, it is framed within the war/peace and conflict/cooperation domain, making water a potential source or cause of conflict itself. Further, because the traditional security paradigm has broadened its meaning from including protection from solely military threats to non-military threats such as those related to environment concerns, non-state actors from all levels of society have started to claim their right to voice their perspectives (Dabelko, 2006). This conceptualization contributed to the securitization of water as a traditional non-military concern.



Full securitization happens when an issue is presented as being urgent and existential, and so important that it should not be exposed to the normal haggling of politics, but as a top priority requiring top leaders to deal with as a matter of priority (Buzan et al., 1997:29; Allan, 2001:244). It can be argued that while the existing water management discourse tends to raise the issue as an emergency or crisis, water has not yet become one of the top priorities confronting the governments of developing countries. Although there are discernable attempts to securitize the management of ecosystems as evidenced in the rhetoric of certain events such as the various World Water Forums, the World Summit on Sustainable Development, or the two High Level Panels on Water, and Water and Peace. This is healthy, because full securitization would be the result of failure to deal with the issues in the normal political framework (Buzan et al., 1997:29).

Most recently, the linkage between environmental and climate concerns in the water and security sector has broadened by the migration dimension. UNHCR, for instance, has recently warned of increasing numbers of people forced to leave their homes and their countries due to severe

environmental stress – many of them related to water (floods, droughts, etc.) (UNHCR, 2015). Likewise, the UN Convention to Combat Desertification (UNCCD) forecasts that “By 2025, 1.8 billion people will experience absolute water scarcity, and two thirds of the world will be living under water-stressed conditions” (Kamal, 2017), forcing many of them to migrate. At the same time, already existing migration movements put pressure on cooperative water management and have the potential to increase conflicts, e.g. between host communities and refugees. They also shift the balance between

countries in already water scarce regions. The nearly 1 million Syrian refugees currently present in Jordan, for instance, have shifted water needs from Syria to Jordan in an already very water stressed basin. The UN Security Council just recently published a report prepared by the Secretary General (UNSC, 2017) about the current state of the Lake Chad region, one of the key hotspots of ongoing environmental, social, and humanitarian crisis stemming from the fight against the Boko Haram terrorist group, and the shrinking of Lake Chad (Kingsley, 2016; Brookings Institution, 2017).



**Bottom left: Lake Boukou;**  
**bottom right: Ajous Lake;**  
**right: Ounianga Lakes**  
Source photopin, D-Stanley







# 4 Defining Water Diplomacy

The above sections highlighted the relations between water and various domains outside of the water sector in order to make a case for third party actors to inquire more about water even if their day-to-day work does not directly relate to it. The term water diplomacy is often used interchangeably with water cooperation, although there is a fine line between the two (see Appendix for various definitions).

Water diplomacy has no singular definition. The descriptions vary by stakeholder group and their particular role and motive, and most describe what water diplomacy does, what it is based on, and what its purpose is, but not what it is per se. It is also important to highlight that each basin and their political realities differ, therefore any solution in a particular basin may not apply in another basin with a similar context. In order to better understand water diplomacy, we need to also understand the process of conflict and cooperation within a TRB, and apply a multi-level governance approach in order to identify entry points for third parties.

## 4.1 Context of defining water diplomacy

Water diplomacy does not have a list of techniques that would make it easy to pinpoint when it is happening. Strategies used in the context of water diplomacy can and do overlap with those used for water cooperation, making it hard to distinguish between the two. However, one clear difference is that while water cooperation can be a goal in itself, water diplomacy is more used as “means for goals beyond water (stability, peace and cooperation)” (Schmeier, 2016).

Many researchers have shown that countries tend to cooperate more frequently over managing shared water resources (Wolf, Kramer, Carius, Dabelko, 2005; Jägerskog, Swain, Öjendal, 2014). However, Zeitoun and Warner (2006) found that the power asymmetries between riparian states have a tendency to be ignored both by the researchers and development practitioners who supported increased cooperation, which can limit understanding of the nature of cooperation. It was also found by looking at the dynamics of TRB, that cooperation and conflict often co-exist (Zeitoun and Mirumachi, 2008), and that relations within a basin can also be described as interaction, rather than conflict or cooperation because not all conflicts are bad, while some forms of cooperation can be coercive (Cascão and Zeitoun, 2010).

Opportunities and benefits of cooperation over international rivers are driven not only by the basin countries. There are drivers outside of the basin, connecting TWM with the wider region, including non-water actors “beyond the basin” (Sadoff and Grey, 2002). The interest of actors within and outside of the basin does not necessarily point in the same direction, given that these often have their own sovereign interest. Thus, the different degrees of cooperation can mean different positions in each basin on various issues (Earle, Jägerskog, Öjendal, 2010).

## The Water Diplomacy Process

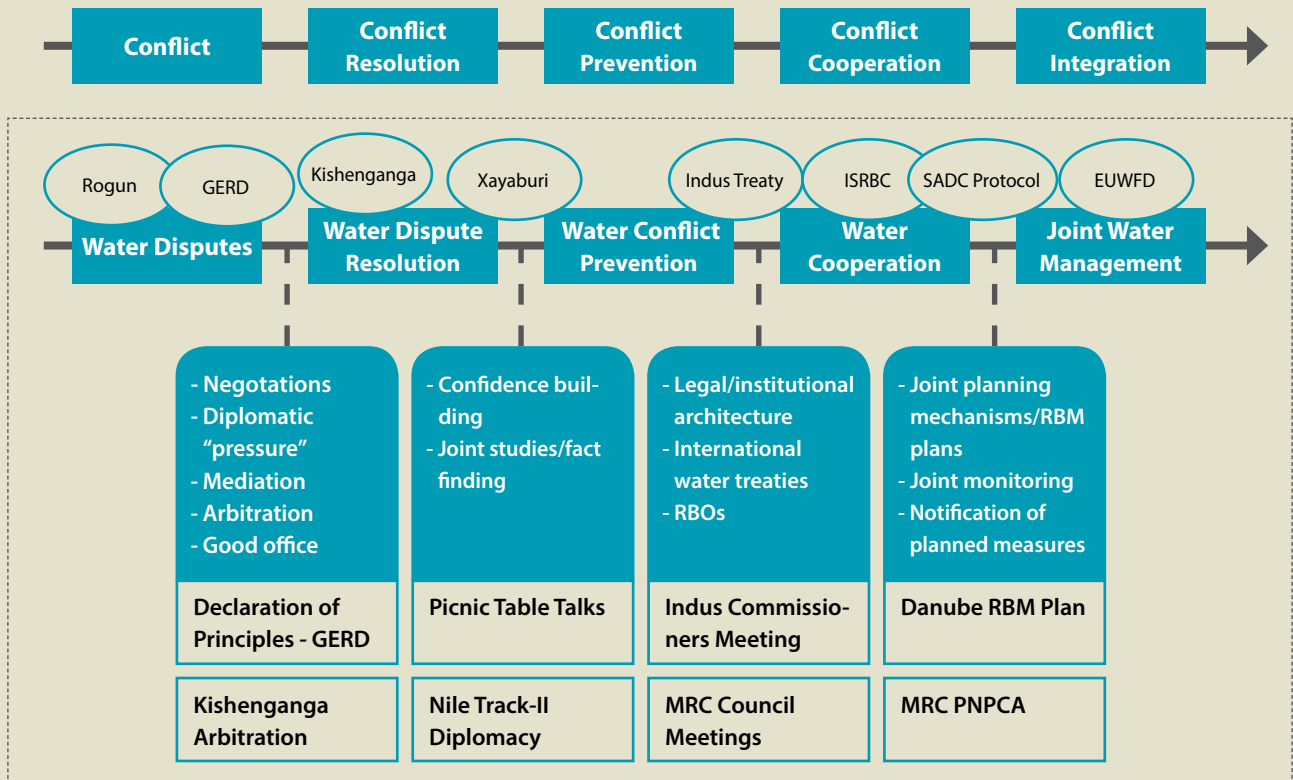


Image 3 (Source: Schmeier, 2016)

The state of conflict determines what kind of response is needed from actors. The response may depend on the potential risk of conflict, if it already exists, or if it has already escalated to a certain degree that would require urgent response in order to mitigate its impact and

further expansion relating to both water, or other areas beyond water (such as human lives, the environment, economy, foreign relations, etc.). Using water diplomacy can be a potential way to resolve a conflict over water or over any other issue in a given region where water can be a

bridge, as it was the case with the Lake Chad Basin Commission in the midst of insecurity post by Boko Haram (UNSC, 2017) launching a military task force (Kindzeka, 2014).

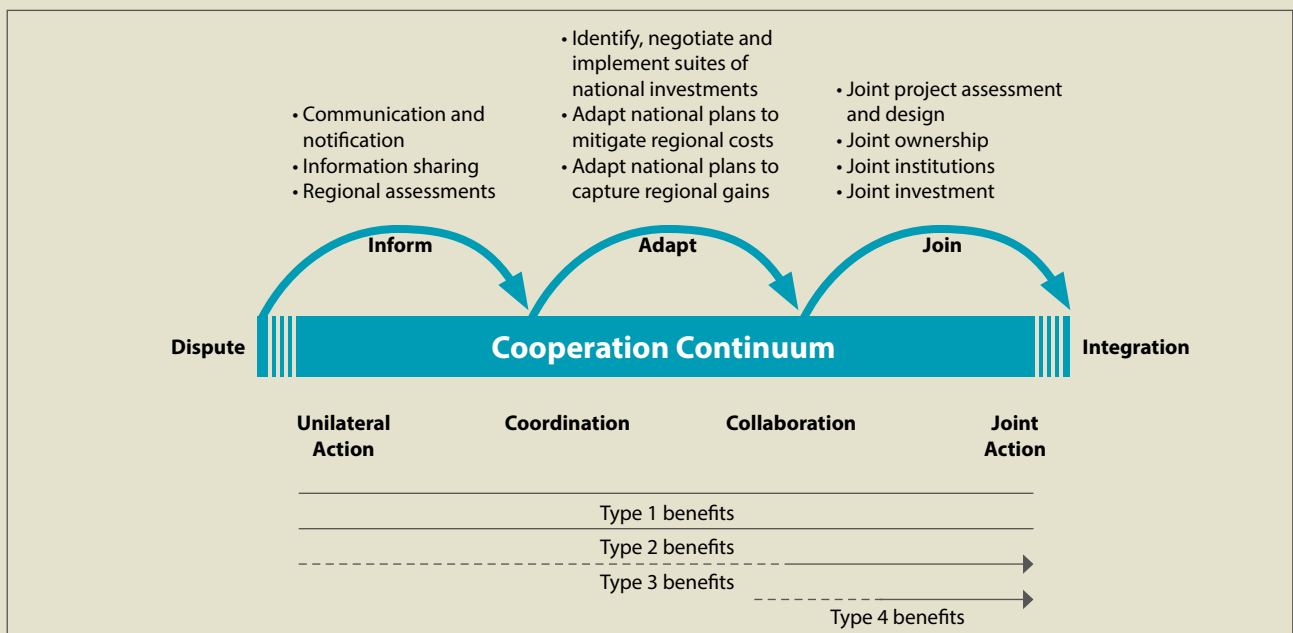


Image 4: Types of Cooperation- the Cooperative Continuum. Source: Sadoff and Grey (2005)

Water diplomacy is often defined as a process. Image 3 illustrates a continuum, ranging from water disputes to water dispute resolution, water conflict prevention, water cooperation, and joint water management.

Water diplomacy builds on a continuum between conflict and cooperation and as a process, it can enter at different stages. Here, Sadoff and Grey's (2005:5) framework (see Image 4) is applied to explain how such water diplomacy process can move from disputes to integration through unilateral action, coordination, collaboration, and joint action.

**Unilateral action** is characterized by no cooperation or information exchange between riparian states, which prevents opportunities to secure any benefits from cooperation. It can easily lead to opposing development plans which may undermine one another, and eventually degrade water quality, or compromise activities and flow. In such cases, coordination and a strategic approach to TWM should also see basin-wide thinking among third parties, in embassies and foreign ministries, if any intervention is to be planned to avoid having a narrow, host country-focused view of TRB (Pohl et al., 2014).

The first step in moving away from a state of unilateralism or dispute towards better cooperation is through communication and information sharing. This is particularly relevant given that dialogue is the one of the core pillars of the water diplomacy definitions. Disagreements between parties might start at the very basic level of collecting data with different methods or interpreting that data differently, or even withholding data. As key drivers in a basin include political relations between basin states and the existing power asymmetries between them (Cascão et al., 2015), data can become a focal point of conflict if it is used to the benefit of the more powerful riparian state to maintain hegemonic control as it was the case in the Jordan River



Nile river

basin. In 1992, during the Middle East Peace Conference the first tangible attempt to generate uncontested and shared hydrological data took place between Israel, Jordan, and the Palestinians, which was previously unforeseeable for the Palestinians. This type of cooperation is entitled **coordination**, where the exchange of hydrological information or even basin plans can help avoid conflicting projects for example between upstream and downstream riparian states and overcome divergent interests. By exchange of information and plans, forecasting can be improved, preparedness to flood risks can be enhanced, and therefore tensions can also be reduced as trust and information symmetry is established. Preventing conflict over water and using water as a stepping stone for greater overall cooperation requires better understanding among various stakeholders, including foreign policy communities (Pohl et al., 2014). Jointly collecting data can potentially lead to establishing a mechanism for consistent and transparent data exchange, which starts to institutionalize cooperation.

As coordination becomes **collaboration**, planning shifts from a national

to regional scale and point towards more mutual benefits to mitigate causing harm to others. The SADC (revised) Protocol (2000) has significantly improved cooperation within and beyond the water sector in Southern Africa, providing legal basis for cooperation. It is a particularly convincing example of how a regional framework – combined with the support from external parties – can promote basin-wide cooperation including all riparian states, thus reducing the likelihood of upstream-downstream conflicts (Pohl et al., 2014). With this strategy, states switch from approaching negotiations as a zero-sum game to approaching them as a positive-sum game. Benefits from developing an infrastructure in a basin become shared by all parties, which can then lessen tensions or shift policy away from a dispute and generating further positive impacts on food or energy security.



Joint action occurs when riparians design, invest, and implement joint plans and this type of collaboration can lead to various kinds of benefits, through for example formalized treaties. One such example is the joint investment planning on the Nile through NELSAP, or the ORASECOM basin management plan.

In summary, there are various entry points for third parties to engage in the water diplomacy process, which depends on factors such as the degree of cooperation in a given context, or the drivers of cooperation including political relations, power, or the initial involvement of third parties in the basin.

## 4.2 Actor groups

The following review breaks down the definitions of water diplomacy by state and non-state actors, in order to know if we can have a better understanding on what it is by knowing who defines it and who is included in its process. Sources can be found in Table 1 in the Appendix.

### 4.2.1 State Actors

#### Government agencies

The MFAs for a variety of countries have a lot of information dedicated to foreign policy and water, or collaboration with other countries on the basis of water issues, without explicitly mentioning water diplomacy. Some describe their efforts under the banner of 'science diplomacy' – the use of scientific knowledge or exchanges to advance common interests and address common problems – but without specifying water diplomacy. The only ministries of Foreign Affairs that define water diplomacy explicitly are the Finnish and the Swiss ministries. The Finnish MFA emphasizes conflict prevention and reconciliation to prevent and solve water problems, while the Swiss Federal Department rather supports peacebuilding and promotion of consensual solutions regarding water and security.

The Dutch and German foreign offices commissioned reports by think tanks that produced definitions, Clingendael and Adelphi respectively. The Clingendael definition (2011) refers to state and non-state actors' collaboration over different types of TRB, while Adelphi mentions 'third party engagement' (Pohl et al., 2014). Despite countries' commitment to international development challenges such as climate change through the ratification of the Paris Agreement, or the 2030 Agenda, or even participation on High Level Panels as mentioned earlier, only very few official definitions can be found in the public domain on water diplomacy. Even Hungary, Jordan, or Senegal, all of which are part of high level panels related to water do not have an official definition on water diplomacy.

The Council of the European Union (EU) also recognized that "tensions and conflicts over access to water are likely to become more frequent and could endanger stability and security in many parts of the world. This could also have a direct bearing on European interests, as on international peace and security" (EU, 2013). Therefore, the Council put water diplomacy within an explicitly political context through a regional and international scale by encouraging "the elaboration of action plans in promoting water cooperation across the world and the incorporation of water diplomacy considerations in relevant EU and Member States' regional strategies and actions" (ibid). The meeting brief also mentions cooperation with other stakeholder groups such as business and the scientific community.

### International Organizations

A handful of Multilateral Development partners published definitions on water diplomacy, which mostly refer to international frameworks (UN Water) or promoting capacity building in the form of training for international civil servants such as UNITAR, UNESCO-IHE, and the University of East Anglia (2013a; 2013b) did in the past. OSCE also have a definition on water diplomacy (2014) that advocates for balancing conflicting needs between different countries and sectors.

### 4.2.2 Non-State Actors

Most people involved in foreign policy and security claim that the difference between water diplomacy and water cooperation is that in water diplomacy it is foreign policy makers who need to be involved. Some non-state actors, however, claim that it is important to engage different stakeholder groups (such as NGOs, local communities, etc.).

#### NGOs

This group often defines water diplomacy as a dynamic process (IAHS, IUCN, GWP) with diverse stakeholder engagement (GWP, IAHS, IUCN,) of countries, water users, local and national governments, including municipalities, provinces, civil society and minority groups (IAHS), for the sake of preventing, resolving, or managing conflicts through opening dialogue. Some recognize the traditional notion of water diplomacy as "relations between sovereign States on transboundary waters" (GWP) requiring their ultimate involvement (IUCN). Since the end of the Cold War the role of nongovernmental organizations (NGOs) has become more pronounced in world politics. NGOs are working to become architects of policies related to democracy building, environmental protection, poverty amelioration, or preventing ethnic conflict. NGOs unlike state actors and international organizations have largely emphasized track two diplomacy – that is, working at the grassroots level to build linkages and dialogue across social groups.

On the other hand, they can act as local level policy implementers to target populations at risk. NGOs have such a role and unique position that their work can have implications on foreign policy in a given region, or they could serve as an arm of foreign policy. Probably due to their role and historical background explained above, the messaging of this group of actors is particular in such a way that they visibly advocate for multiple levels and stakeholders and the cooperation across them.

### Academia and Think Tanks

The definitions on water diplomacy that this report took into consideration are put forward by academics and Think Tanks. This group's understanding of who the actors of water diplomacy are is also diverse, including riparian states in a TRB; developing and developed countries (Hefny, 2011); different political entities (Pohl et al., 2014); those part of a peace process in a regional conflict (Kraska, 2009) or those promoting regional cooperation (ICWC-SIWI); official (state) and non-official (non-state) actors (Islam and Madani, 2017) undertaking bilateral or multilateral diplomatic contact (Farrow, 2014; Hefny, 2011; Yıldız et al., 2016); or international actors having collective responsibility (Salman, 2015; Yıldız et al., 2016) to improve relations with foreign publics. Tufts University program on water diplomacy asserts that water diplomacy's purpose is to provide solutions that are 'sensitive to diverse viewpoints and values'. To put it boldly, it is a political extension of water cooperation (Keskinen et al., 2015).

### RBOs

Few RBOs have recently taken on an acclaimed role or mention water diplomacy. The reason for this is partially the securitization of water in many of the TRB. For example, the Mekong River Commission (MRC), describes itself in its updated Mekong Basin Development Strategy as "a technical and knowledge body", noting that it "can play more often the role of an honest facilitator on which



Ganges river, India

people in the basin countries can rely on to provide scientific and even-handed information and advice on technical aspects, and to pro-actively facilitate solutions and agreements" (MRC, 2016). Another reason might be that many RBOs continue to rely on international donors, such as the World Bank. The most well-known examples are the Indus Waters Treaty, the Mekong River Commission and the Nile Basin Initiative that were set up to promote cooperation between riparian states.

### Religious groups

Religious groups have also played a role in water diplomacy. For example, the Egyptian Coptic Church was tapped to play mediator in Nile River dispute (Aman, 2015) as tensions over the constructions of the Grand Ethiopian Renaissance Dam continued. The church supported cooperation building through an agreement between the pope of the Coptic Orthodox Church of Alexandria, and the minister of water resources and irrigation back in 2015 (ibid). A whole chapter was dedicated to 'The issue of Water' within Pope Francis's latest encyclical, *Laudato Si* (Vatican Press, 2015). In it, the pope called for diplomacy to act for the cause of the environment. It also contextualizes water in urbanization, the role of ecosystems in providing water.



Religious ritual in the Ganges river

To summarize, some definitions of water diplomacy don't specify which actors are involved and remain ambiguous. Some organizations, such as SIWI, UNITAR, IUCN organized dedicated trainings, conferences on water diplomacy to discuss who, what, where, and for what purpose. Trends show that the emphases of most definitions were put on peace and security; the combination of political dialogue and the use of conflict management and resolution techniques; the issue of stakeholder engagement; and prevention to avoid the escalation of conflicts.



### 4.3 Purposes of water diplomacy

Based on the trends that emerged from the previous chapter on actors defining water diplomacy, the purposes get clearer. These can be categorized into: conflict prevention and peace promotion, dialogue and cooperation, and multiple stakeholders' engagement. It is obvious that water cooperation traditionally deals with technological answers and the water issue per se, while water diplomacy is more political and reaches beyond water.

#### Conflict Prevention and Peace Promotion

When looking at the aim of water diplomacy pertaining to conflict prevention and peace promotion, in the literature (see Appendix) we find four interconnected purposes: reconciliation, integrated prevention with the aim of promoting peace, prevention and resolution of conflicts, and promotion of peace, security and stability.

Riparian states often have conflicting interests, water needs for food security and economic stability, which have implications on their neighboring countries. Water diplomacy, according to Hefny, and OSCE can help in *reconciling and balancing* these interests and negotiate solutions for people residing in different countries and advocating for more efficient water allocation in various sectors. Yildiz et al. (2016), and Kraska (2009) integrate prevention and peace promotion, and water resources management (WRM) with the security question as the aim of water diplomacy. Yildiz et al. (2016) argues that water diplomacy is "preventive in nature, with the ultimate goal of peace and security", while Kraska (2009) suggests that agreements over TRB are one element of a peace process in a regional conflict.

Salman (2015) and Yildiz et al. (2016) combine various elements of water diplomacy highlighting first of all its preventive nature or peaceful resolution of conflicts related to water availability, for the purposes of deterring conflict and promoting cooperation (Farrow, 2014).

Among those who identify the aim of water diplomacy in this domain, twice as many emphasize prevention and resolution of conflicts instead of connecting it with promoting peace. WRM is often contextualized within the security context. Water diplomacy can occur as integrating TWC within an overall peace process in regional conflict (Kraska, 2009). *Preserving peace* emerges from the literature as one of the key purposes of water diplomacy, emphasizing that stability in TRB is key (Adelphi), that peace and security are interconnected in the context of WRM (The Hague Institute for Global Justice) that the promotion of consensual solutions, good relations, in and outside of water cooperation can have positive implications for sustainable water resources management as well as other areas, as mentioned in the case of cooperation in the previous section, such as peace (Swiss), regional economic, energy, or trade integration (Keskinen et al., 2015).

Among the aims of water diplomacy, as seen in Table I (see Appendix), is *prevention* across and within national borders by supporting WRM (The Water Diplomacy Consortium), promoting sustainable supply, allocation, or use of water for development, security and stability (Adelphi), putting standards skills and competencies of the diplomatic body (UNITAR), by identifying political links and power relations concerning water and its use (MFA Finland), for preserving peace (Salman, 2015). Related to these processes are *resolution of conflicts*, that may already exist, emerge, or could be resolved by peaceful means or negotiation (Spring, 2007; Farrow, 2014; Salman, 2015; Yildiz et al., 2016).

#### Effectively Manage Water Resources: Increasing Dialogue and Cooperation

The need for dialogue and cooperation emerges, as discussed in the previous chapters, because of the challenges posed by the decreased quantity of available freshwater per capita, environmental stress, factors linked to lack of water availability due to climate change, poor basin management, river diversion, arid ecosystems, diverging water use requirements by different economic sectors, and so on. Water can be a catalyst, and can offer the potential as platform for cooperation (Salman, 2015) to mitigate the increased risk. The question arises, dialogue and cooperation between who, which stakeholders? Water diplomacy tries to increase awareness and mobilize political support for WRM (International Water Ambition, 2016), engages in transboundary water security challenges, fosters broader and deeper political collaboration in which foreign policy makers and diplomats can play a crucial role (Pohl et al., 2014; Salman, 2015) and thus bring water into the wider diplomatic process (Hefny, 2011) through political dialogue (Swiss FDFA, 2015). If water diplomacy is inherently political and connects countries sharing the same water resources, must it be between foreign policy makers, and/or other stakeholder groups (NGOs, local communities)? This is a dilemma worth considering and clarifying in any given situation. Israel and Jordan held secret "picnic table" talks to arrange sharing the Jordan and Yarmuk rivers starting in 1953, even though they were officially at war from 1948 until the 1994 treaty. Community dialogues across Israel, Jordan, and Palestine have also contributed to cooperation, especially with the participation of the NGO Friends of the Earth Middle East (today 'Ecopeace Middle East').

One key positive outcome is the Regional NGO Master Plan for Sustainable Development in the Jordan Valley, 'to promote peace, prosperity and security in the Jordan Valley and the region as a whole designed to help create political will towards its full or partial implementation by the Jordanian, Israeli and Palestinian governments and also by donor states and the broader international community and public and private sectors' (EcoPeace Middle East, 2015).

### **Engaging Multiple Stakeholders**

Who are the water diplomacy actors? Is it set into stone, or considering water diplomacy as a process, would there be room to allow new stakeholders to be engaged?

So, who is really part of water diplomacy? This question is understood differently across the various third-party groups, which also includes different approaches as per who should be engaged within the dialogue to help reconcile conflicting (self-) interests, ambiguity and uncertainty as well as changing competing needs. According to Salman (2015), water diplomacy is primarily a political collaboration, while the Swiss MFA sees it a cross-sectorial process, Adelphi claims it shall entail all actors in the basin, and GWP or IUCN focuses more on the multi-stakeholder aspect emphasizing the importance of NGOs, and local communities (See Table 1 in Appendix). To-date, there is no criteria or internationally agreed set of standards for water diplomacy that would clarify and bring all stakeholders on the same page. Until then, multiple levels, entailing actors from the basin, or actors from outside the basin from both the state and non-state actors shall be taken into consideration with the common understanding, that water diplomacy as a political process has to happen with the integration of at least one diplomatic, political channel.

Therefore, actors can be both from riparian countries, as well as from outside the basin. However, this paper is mainly building on the third-party perspective.

Multi-track water diplomacy distinguishes various stakeholders within the water governance framework to ensure water security at multiple levels. It recognizes that information flows up and down, and links different diplomatic tracks to prevent environmental injustice and conflict through the empowerment of local actors and their active participation in the process. The inclusion of more actors can help broaden the scope and depth of understanding of the problems, which in turn can create more space for innovative solutions (Huntjens et al., 2016).

### **Improving Foreign Relations**

Improving foreign relations as a purpose of water diplomacy could become more important in the future if more governments recognized this issue to be higher on their political agenda. The potential of what water diplomacy could encompass will be broadened as the definition evolves. However, there is ample evidence on how water cooperation contributes to better relations between states beyond water. Water diplomacy can be successful when parties realize that non-collaboration is likely to result in worse outcomes for all involved. Sharing benefits may include benefits to the river, from the river, because of the river, or beyond the river (Sadoff and Grey, 2002). For example, downstream and midstream countries such as Bangladesh and India could offer trade routes for energy supply that is generated upstream by China and Bhutan (Huntjens and de Man, 2017). The Okavango River Basin is another "basin at risk" (Wolf, Yoffe, Giordano, 2003), where Angola, Namibia, and Botswana want to use the river's water in not necessarily compatible ways, which could reopen old wounds in this former war zone. These competing demands however can be addressed to prevent future conflict

by fostering cooperation, for which the Okavango River Commission is a good platform (Nicol, 2003; Earle and Mendez, 2004), which was for long time supported by various third parties (OKACOM, 2017) including the Swedish International Development Agency, the Global Environmental Facility, UNDP, or USAID, FAO, GIZ.





# 5 Conclusion

Water has a strategic role in shaping long-term thinking and prevention across various global domains. Diplomacy means different things to different actors. As a result there are many different niche diplomacies. The paper did not try to define water diplomacy as such, as it is currently understood very differently by the multiple stakeholders. Water diplomacy and water cooperation differ in such a way that the former considers water as a means for goals that reaches beyond the issue of water per se due to the fluid nature of water that extends beyond political boundaries.

The perception of water as a top global risk rose over the past decade, and thus became more of a concern to the private sector. Water has a dedicated water goal on the 2030 Agenda, and is very much present in the Nationally Determined Commitments, which put water in the heart of national adaptation plans as the implementation of the Paris Agreement starts to speed up.

Water diplomacy is a process, shaped by multiple stages on the continuum between conflict and cooperation. Looking through the context and the actors within this process, we can see that the potential is there for this concept to evolve and broaden in the future around the world. Among its purposes, conflict prevention and peace promotion is found to be key. Furthermore, water diplomacy has the potential to increase dialogue and cooperation, bring multiple stakeholders together, and improve foreign relations for more sustainable water resource management, and beyond.

As a preventive tool it can support trust-building, joint data collection, providing a platform for joint studies and collaborative risk assessments, mediation, negotiation, and diplomatic statements – all of which third parties shall take into consideration as they find themselves in the position of having to navigate one of the key challenges in the 21st century and drive them towards opportunities.



Nile river





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## Appendix A: Water Diplomacy Definitions and Aims

### International

**EU, 2013**

***Aim:***

“proactively engage in trans-boundary water security challenges with the aim of promoting collaborative and sustainable water management arrangements and to encourage and support regional and international cooperation in the context of agreed policies and programmes”

**OSCE, 2014**

***Definition:***

“negotiating solutions which balance the sometimes conflicting needs of people in different countries and sectors”

***Aim:***

“reconcile their national water needs and interests, such as food security and economic stability, with those of neighboring countries and environmental concerns”

**UNITAR, 2013a & UNITAR 2013b**

***Aim:***

“The purpose of water diplomacy is no other than to put the standard skills and competencies of the diplomatic body to the benefits of challenges posed by the decrease in per capita freshwater quantities as a means to prevent or deter conflict and promote cooperation”

**Conference report of the International Annual UN-Water Zaragoza Conference 2012/2013, 2017 (UN-Water)**

***Aim:***

“Water diplomacy efforts have been often directed to the establishment of a global framework for water governance which can facilitate the further development of multilateral and bilateral water treaties and agreements... One of the objectives of water diplomacy will be to highlight the importance of these conventions [Convention on the Law of Non-Navigational Uses of International Water Courses and the Water Convention] in enhancing cooperation and to encourage states to ratify the conventions.”

### National

**Ministry for Foreign Affairs of Finland et al., 2007**

***Definition:***

“Water diplomacy means applying the experiences gained in conflict prevention and reconciliation, in particular, to prevent and solve water problems.”

***Aim:***

“The aim of water diplomacy is therefore the prevention of insecurity relating to water, by focusing particularly on the identification of political links and power relationships concerning water and its use, and on resolving the conflicts that arise from these relationships.”

**Swiss Agency for Development & Cooperation, 2014**

***Aim:***

The main purpose of water diplomacy is to “foster evidence-based dialogue, build trust and promote sound decision-making.

**Swiss Federal Department of Foreign Affairs, 2015**

***Definition (approximate):***

“Switzerland uses political dialogue with technical support in these regions to develop new methods and rules and promote consensual solutions regarding water and security. Peacebuilding and the sustainable management of water reserves are closely linked.”

***Aim:***

“The aim is to promote, in a complementary manner, dialogue between actors in the political, economic and water sectors to seek solutions conflicts related to water management.”

## NGOs

### **The Global Water Partnership and Executive Committee International Fund for saving the Aral Sea, 2014**

**Definition:**

"Water diplomacy was traditionally related only to relations between sovereign States on transboundary waters, but nowadays is transforming and expanding to a broader process that deals with diverse water challenges and involves diverse stakeholder groups by means of information, interaction and negotiation."

**Aim:**

"It has the potential to safeguard water security at multiple levels through identification and strengthening of shared benefits"

### **International Association of Hydrological Sciences, 2017**

**Definition:**

"a dynamic process that enables countries, users, local and national governments to prevent, resolve or manage conflicts, and negotiate arrangements or agreements on the allocation and management of water resources... Water diplomacy can open up the cooperation dialogue to multiple stakeholders, including municipalities, provinces, civil society and minority groups."

**Aim:**

"It seeks to develop reasonable, sustainable, fair and peaceful solutions to water allocation and management while promoting cooperation and collaboration around water and beyond."

### **IUCN-BRIDGE, 2017**

**Definition:**

"process which operates under the authority of sovereign States, requiring their ultimate involvement, but which also unlocks cooperation among multiple stakeholders, including municipalities and provinces and civil society"

**Aim:**

"Enables countries to negotiate agreements on water management. For transboundary agreements over water to work more effectively on the ground, they need the involvement of water users at multiple levels of governance"

### **The International Water Ambition, 2016**

**Definition:**

Water diplomacy requires collaboration with local NGOs and actors

**Aim:**

outcomes include increased awareness and political support for water resource management/development

### **Water Diplomacy Consortium, n.d.**

**Definition:**

"Water diplomacy is defined broadly to include all measures that can be undertaken to prevent or peacefully resolve conflicts related to water availability, allocation or use between and within states."

### **The Hague Institute for Global Justice, n.d.**

**Aim:**

"contribute to conflict prevention and conflict resolution in relation to water management across and within national borders"

## Academia & Think Tanks

### **Vetter, 2016**

**Definition:**

"Third-party engagement on transboundary water issues... Water-diplomacy is based on the premise that it is the finite and transboundary nature of water resources that offers the potential for basin-wide cooperation."

**Aim:**

"Water diplomacy aims at initiating and supporting processes at different political scales and levels in order to enhance basin-wide water governance and cooperation, regional integration, development, security and stability... It aims to preventively initiate and support sustainable supply security, development, regional integration and stability in transboundary river basins."

**Darnault, 2008** *Definition:*

Hydrodiplomacy is mostly related to water sharing principles and doctrines which are present in legal and management approaches governing the exploitation of water resources in a complex milieu and transboundary environment.

**Detraz, 2009** Referenced as “interactions and international negotiations” around water issues

**Farrow, 2014** *Definition:*

“Hydro diplomacy...is understood as: bilateral or multilateral contact between state and/or non-state actors over transboundary water resources...”

*Aim:*

“...for the purposes of deterring conflict and promoting cooperation”

**Hefny, 2011** *Definition:*

“Water Diplomacy is a branch of diplomacy, applied to bilateral and multilateral negotiations on water issues between and among states. Water diplomacy is about dialogue, negotiation and reconciling conflicting interests among riparian states. It involves the institutional capacity and power politics of states.”

*Aim:*

“Bringing water into the wider diplomatic process can provide incentives for developing and developed countries to work together to build partnerships and agreements that are mutually beneficial and to find workable, resilient solutions to development problems.”

**Heinrich-Böll-Stiftung (Salman, 2015)**

*Definition:*

“There are three important elements of this hydro-diplomacy: 1. Preventive diplomacy for preserving peace and security; 2. Traditional bilateral diplomacy complemented by multilateral and multilevel diplomacy and dialogue; 3. Collective responsibility of the international community”

*Aim:*

“hydro-diplomacy can foster broader and deeper political collaboration in which foreign policy makers and diplomats can play a crucial role ...Water can be one of the catalysts towards dialogue in otherwise confrontational relationships.”

**Huntjens et al., 2016**

*Definition:*

“Water diplomacy includes all measures by state and non-state actors that can be undertaken to prevent or peacefully resolve (emerging) conflicts and facilitate cooperation related to water availability, allocation or use between and within states and public and private stakeholders.”

**ICWC - SIWI** *Definition:*

“Water diplomacy is a dynamic process that seeks to develop reasonable, sustainable and peaceful solutions to water allocation and management while promoting regional cooperation and collaboration.”

*Aim:*

“It enables countries to negotiate agreements on the allocation and management of internationally shared water resources.”

**Islam & Madani, 2017**

*Definition:*

“For our purposes, the term water diplomacy refers to all positive interactions among official and unofficial actors concerned with the management of shared water resources...Actors...range from international, regional and national governmental and intergovernmental institutions to representatives of indigenous tribes living on opposite shores of a river, including non-official representatives of a give state...and any kind of non-governmental organization”

*Aim:*

Water diplomacy is “aiming to achieve peaceful and sound management of such [shared water] resources”

**Keskinen et al., 2015**

*Definition:*

“water diplomacy refers to the conduct of international relations in broad terms, aiming at promoting good relations, cooperation, peace and prosperity.”

*Aim:*

“The desired results of water diplomacy are thus not just related to water cooperation, but extend to, for example, improved regional security and stability, regional integration, improved trade relations and power sharing pools.”

**Kraska, 2009** *Definition:*

Water diplomacy is alluded to as being “the concept of integrating trans-boundary river agreements as one element of an overall peace process in regional conflict [which] combines the issue of fresh water management to the greater security question”

*Aim:*

“the practical impact of trans-boundary water agreements as one component of building a more stable regional security framework, rather than a centre-stage environmental treaty, augurs well for increasing cooperation along international tributaries.”

**Leight, 2012** *Definition:*

“Encompassing work conducted by a variety of international actors to aid water-stressed areas, which in turn can improve relations with foreign publics.”

*Aim:*

“these efforts can save lives and enhance influence”

**Mylopoulos et al., 2008**

*Aim:*

“Strengthening international co-operation for environmental protection under the framework of good neighboring and management of common goods...its main principles are: effectiveness, efficiency, equality, equivalence and equity.”

**Spring, 2007** *Aim:*

“Hydro-diplomacy plans to reduce water demand and to widen its supply simultaneously. It proposes cooperative relations for an integrated basin management within an arid ecosystem taking other natural resources between both neighbors into account.”

**Spring, 2011** *Definition:*

“Hydrodiplomacy means negotiating water conflicts peacefully”, addressing “causes of environmental stress, especially those factors that are linked to the lack of water supply due to climate change, poor basin management, river diversion, ... etc., as well as to different social factors”

**Water Diplomacy @ Tufts, n.d.**

*Definition:*

“A theory and practice of implementing adaptive water management for complex water issues. The Water Diplomacy approach diagnoses water problems, identifies intervention points, and proposes sustainable solutions that are sensitive to diverse viewpoints and values, ambiguity and uncertainty as well as changing and competing needs.”

*Aim:*

Finding more effective solutions to wicked water problems.

**van Genderen, & Rood, 2011**

*Definition:*

All contact between (non-)state actors and at least one state or international governmental organization over transboundary freshwater resources such as lake, river and aquifer basins

**Yildiz, 2015** *Definition:*

Cooperation with the addition of a “shared vision, shared goal and unity of effort”

**Yildiz et al., 2016**

*Definition:*

Water diplomacy is characterized by being preventative in nature, with the ultimate goal of peace and security; by complementing traditional bilateral dialogue with multilateral diplomacy; and by adhering to the notion of collective responsibility in the international community.

## Other

**Gyawali, 2008** *Definition:*

“Diplomacy is the chief instrument through which foreign policy goals, its primary strategies and broad tactics are implemented. Water diplomacy therefore has to first understand the subtleties of policy in general, foreign policy in particular and water policy more specifically before practicing its professional art.”

**van Schaik, 2013**

***Definition:***

"In practice, water related conflicts are dealt with through informed processes of demand, negotiation, mediation and conciliation. Managing these processes is the field of Water Diplomacy. Water diplomacy nowadays is more than official discussions involving high- level political and military leaders, known as Type 1 diplomacy. Other types of diplomacy are: unofficial dialogues and problem-solving activities aimed at building relationships (Type 2); or the buildup of people-to-people relationships at grassroots level undertaken by individuals and private groups. (Type 3). The combination of these three types is known as 'Multitrack diplomacy.'"

## Appendix B: Water Cooperation Definitions and Aims

### International

#### Conference report of the International Annual UN-Water Zaragoza Conference 2012/2013, 2017 (UN-Water)

**Definition:**

"Water cooperation' refers to the peaceful management and use of freshwater resources at local, national, regional and international levels among various players and sectors. The concept of water cooperation entails working together towards a common goal, in a way that is mutually beneficial."

**Aim:**

"Water cooperation contributes to: poverty reduction and equity...economic benefits...preserving water resources and protecting the environment...promoting peace"

### National

#### Federal Ministry for Economic Cooperation and Development (BMZ), n.d.

**Aim:**

"The main aim of transboundary water cooperation, apart from crisis and conflict prevention, is poverty reduction and resource protection."

#### EPA, n.d.

**Aim:**

"Collaborating with global and bilateral partners, EPA is working to promote sustainable development, protect vulnerable populations, facilitate commerce, and engage diplomatically around the world."

### Think Tanks & Academia

#### Adeel et al., 2015

**Definition (Unver):**

"Water cooperation, defined in its broader scope, covers various levels of interactions between and among parties, stakeholders, and sectors that are involved in the development, use and management of a water resource; in the delivery of water services; or are impacted from either the actions or the consequences of such involvement. The scope covers the full cascade from local communities to transnational domain" It has four domains: level/ scale, modality, area/sector, and actors.

**Aim (Adeel):** Water cooperation is "a catalyst for peace and security" and "is important for development"

#### Dinar, 2009

**Definition:**

Implied as coordination between riparians

#### Grey et al., 2009

**Definition:**

"Effective cooperation on an international watercourse is any action or set of actions by riparian states that leads to enhanced management or development of the water - course to their mutual satisfaction."

**Aim:**

"states work together when doing so offers special economic and political advantages Over unilateral development, and when these larger benefits are shared... It is our view that an increasingly important and compelling driver toward effective cooperation is the management of water-related risks"

#### Kim and Glaumann, 2012

**Definition:**

"... 1. Shallow cooperation: Characterized by 'loose institutional cooperation', there there is no official headquarters or formalized bureaucratic mechanisms of cooperation. Instead there may be shifting structures such as joint committees, coordination teams, technical teams, task forces, or partnerships. 2. Intermediate cooperation: characterized by a 'more sophisticated level of bureaucratic organization', where regular meetings are held between the parties, and there is a permanent headquarters or secretariat with independent staff. This organization is not financial independent, and may, for instance, be dependent on donor funding. 3. Deep cooperation: Characterized by 'a high degree of bureaucratic organization and financial independence'. Such institutional arrangements qualify as formal international organizations, as they 'institutionalized collective decision-making and oversight in governance.'"

**Philip et al., 2015**

**Definition:**

"Active water cooperation is the commitment of countries to jointly manage their shared water resources."

**Sadoff & Grey, 2002**

**Aim:**

Cooperation aims to provide benefits to the river, benefits from the river, reduction of costs because of the river, and/or benefits beyond the river.

**van Genderen & Rood, 2011**

**Definition:**

"cooperation varies from trust building, to scientific cooperation, to economic cooperation, to an international treaty and a joint institution, and finally to regional integration"

**Aim:**

It can be "a catalyst for trade expansion"

**Wolf et al., 2006**

**Aim:**

"Water cooperation forges people-to-people or expert-to-expert connections"

**Yildiz (2015)**

**Definition:**

"Cooperation is defined as 'Voluntarily arrangement in which two or more entities engage in a mutually beneficial exchange instead of competing. Cooperation can happen where resources adequate for both parties exist or are created by their interaction'"





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