



BLUE DIPLOMACY:

Transboundary Water Governance from a Foreign Policy Lens

Aneel Salman



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Transboundary Water Governance from a Foreign Policy Lens
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Abstract

Water quantity and quality are deteriorating and the struggle among all common water users is likely to intensify. This may become even more visible in river basins that cross political boundaries of different countries. History reveals that in many situations, this mutual need may bring strategic cooperation rather than open conflict, and lead to peaceful solutions to water disputes. Over the last 67 years, we have witnessed only 37 severe water disputes globally, in comparison to 295 water cooperation treaties (UN Water 2008: 3).

This paper highlights that with rising population, natural resources endowed on human kind are degrading and depreciating and would soon become extinct or unusable if not sustainably utilised. Impact of climate change serves as a catalyst to further amplify the process of ecological deterioration with anthropogenic activities. It argues the rationale and significance of shifting from techno-centric water governance models towards hydro-diplomacy with a greater role of foreign policy makers/diplomats and advocates for the adoption of the Water Diplomacy Framework (Islam and Repella 2015; Islam and Susskind 2012) in transboundary river basins to enhance national security, economic growth and environmental services, as well as strengthen social development and urban planning for a more sustainable and equitable future. Many treaties regarding transboundary waters in the last 200 years have been established globally. This paper briefly looks at various transboundary cases of successful, unsuccessful and potential hydro-diplomacy cases to understand the various dimensions of shared water governance for South Asia, Africa and Europe.

Introduction

“Water is like the Cinderella of our times; cleaning, storing, providing for our needs, whilst we take everything for granted.”

-- Gopalkrishna Gandhi¹

Water has often been the core of every global challenge the Earth has faced and continues to face even today. Affecting the environment, through climate change, the impacts of water quality and quantity are linked to human and animal health, hence, impacting food security and nutrition. At a macro level, domestic water crisis can transform into serious political conflicts within and outside national borders.

Most developing and underdeveloped countries, which constitute a sizable area of the planet, are agrarian economies. A global sectoral consumption of water reveals that agricultural water withdrawals account for nearly 70 percent of the total (UN-WWAP 2014: 4). This primary sector is the central provider of sustenance for a huge population on Earth. According to FAO (2009), by the year 2050, to sustain a world population of 9.1 billion people would require an aggregate food production of 70 percent. This cannot become a reality unless global water resources are harnessed more efficiently. These vital statistics reveal the crucial significance of water and the need to address water-related issues as a serious priority.

Statistics show that 40 percent of this planet's population is sustained by rivers and lake-basins which are a part of two or more countries, crossing political borders. There are 276 transboundary² lake and river basins covering nearly half of the Earth's land surface and account for an estimated 60 percent of global fresh water flow (UN-WWAP 2014). The United Nations lists 148 states with territory in international river basins and approximately 2 billion people rely on groundwater from 300 transboundary aquifer systems (UN Water 2008:1).

Water, being non-static, poses more complicated concerns of control, authority and dominance than management issues of land resources. Water Resource Management (WRM) becomes more challenging in situations where water bodies are being shared by more than one politically independent state. Numerous studies have explored the area of transboundary waters and have highlighted its different dimensions of complexity. Biswas (2008) analysed the importance of transboundary waters, their magnitude and distribution issues, complexities of management in conflict and role of international organisations in handling them. He also examined 'two very contrasting results of managing transboundary rivers in South Asia, a most successful one in Bhutan and India, and a missed opportunity in Nepal, India and Bangladesh' (Biswas 2011: 662). Janakarajan et al. (2006:93) perceive shared water resources as potential mediums for negotiation and coordination that can cause positive and negative change, while Wolf et al. (2007 and

1 Gopalkrishna Gandhi is an Indian civil servant and diplomat and the grandson of Mahatma Gandhi. He was speaking at the IUCN Hydro-Diplomacy Conference 2012 in Chiangrai, Thailand.

2 'The term "transboundary water" refers to transboundary rivers, lakes, inland water as a whole and aquifers; here, explicitly excluding open oceans, territorial seas and coastal waters' (UN Water 2008: 1).

2006) see water as a pathway for building assurance and engaging in cooperation. The reality is that water has been politicised as a commodity rather than being taken as a means of sustenance. Malhotra (2010) points out that:

“The problem with water issues is not that water issues complicate political issues (that rarely occurs), but that complicated political issues make the smallest water issues between countries, intractable.”

Evaluating the institutional framework for transboundary water diplomacy, Kliot et al. (2001) examined the evolution of management structures of 12 transboundary river basins. Legal principles, which have been central to the regimes and related conventions and treaties, were also studied. They found scarcity of water, dense population, poor distribution and exploitation of water resources to be responsible for causing water conflict.

Underlining social and economic interdependency, the environmental condition of shared river basins contributes to the well-being of the neighbouring countries' populace. The magnitude of socio-economic impact that mismanagement of transboundary waters can have on human lives, calls for the development of a serious and prioritised high-level governance framework for suitable and sustainable management of transboundary waters.

Anthropogenic activities are also continuously causing a hike in greenhouse gas (GHG) concentrations and are responsible for substantial changes to the Earth's climate system, which eventually implies variations and jolts to the hydrologic cycle of the planet as well. Evaluating the impact of climate change on transboundary river basins, Cooley et al. (2011), quoting numerous case studies, find climate change to be responsible for bringing many challenges to fresh river waters, affecting quantity, as well as quality, subsequently bringing changes in water networks and, thus, posing new obstacles to governance. According to the Intergovernmental Panel on Climate Change (IPCC), freshwater systems are particularly vulnerable to climate change, e.g. water temperature variations can alter 'oxygen regimes, redox potentials, lake stratification, mixing rates, and biota development', while 'increases in intense rainfall result in more nutrients, pathogens, and toxins being washed into water bodies' which can eventually lead to health epidemics since 'numerous diseases linked to climate variations can be transmitted via water, either by drinking it or by consuming crops irrigated with polluted water' (Kundzewicz et al. 2007: 178).

As urban water demands expand, infrastructure solutions - including the transfer of water between rivers - are rising³, in spite of the fact that such projects are expensive and often:

- ◆ lead to increased tensions between implementing organisations and those harmed by them;
- ◆ displace local populations who lose their livelihoods leading to greater poverty and food insecurity;
- ◆ degrade natural processes, such as, water cleaning and flood and drought mitigation;
- ◆ leave efforts to foster efficient water management open to the risk of creating unintended consequences through ignorance of the freshwater systems; they are altering due to lack of shared water data systems, especially in emerging economies (NIC 2010).

This paper, based on the author's post-doctoral fieldwork in Switzerland, experience of teaching grey and blue diplomacy to foreign and national diplomats, as well as a comprehensive secondary review of literature, advocates for a greater role of foreign policy makers/diplomats in negotiating water sharing scenarios. As transboundary water governance context requires the engagement of many stakeholders (formal and informal) working through both direct and indirect channels, an enhanced role of foreign policy makers/diplomats can make political engagement over shared basins more meaningful and sustainable.

Section 1 of this paper gives an overview of transboundary basins and related issues linked to their management, including cases of win-win transboundary strategies used in various riparian contexts. In section 2, the paper proposes making political engagement over shared basins more meaningful and sustainable by including foreign policy diplomats and policy makers in water sharing scenarios. Sections 3 and 4 outline the challenges to blue diplomacy and how these have been overcome regionally. Section 5 looks at the Water Diplomacy Framework (WDF) that combines science and technology solutions within a political economy context and explores how it can be used by foreign policy personnel for value creation in contested yet shared waters by focusing on finding similar values and interests. It also discusses the various tools for building capacity of both diplomats and development professionals and increasing funding for Blue Cooperation. In conclusion, this study stresses the importance of leadership from foreign policy makers to work in sync with technical and development experts to foster intra-basin cooperation and integration; strengthen the diplomatic track of transboundary cooperation and build confidence in shared basins.

³ At least 3,700 major dams, each with a capacity of more than 1 MW, are either planned or under construction, primarily in countries with emerging economies (Zarfl et al. 2015).

1. Managing Transboundary Basins

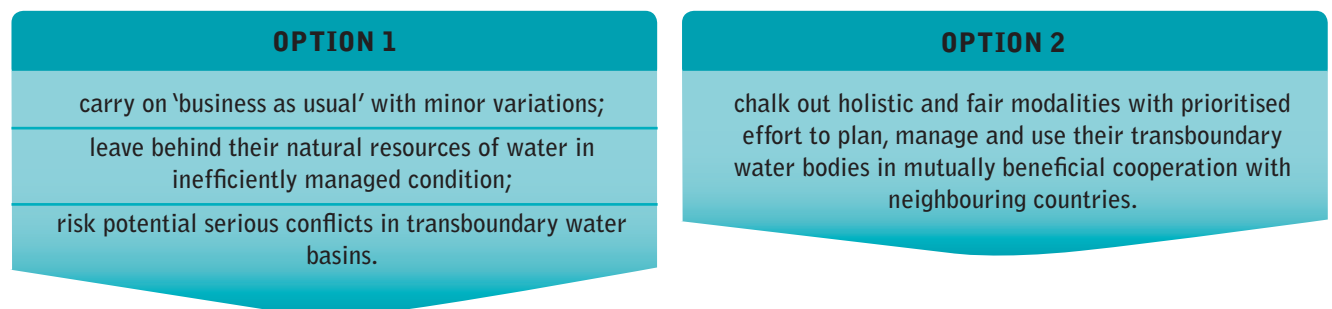
Transboundary watersheds span political and territorial lines, diverse and at times contradictory national laws, priorities and judicial set-ups which pose major challenges for managing these shared supplies of freshwater.

Population increase, misdirected socio-economic expansion and weak governance can lead to degraded and low fresh water supplies, disrupting sustainable development of economies, highlighting the sheer requirement for mutual understanding and pragmatic cooperation among the top water consuming sectors – agriculture, industry, energy and sanitation. In

order to fulfil sectorial demands domestically, it is in favour of riparian countries to carry out Integrated Water Resource Management (IWRM) as a part of their political obligation, eventually, favouring the protection and sustainable use of water and interrelated ecosystems. Potential impacts of transboundary conflicts require planned and synchronised effort by neighbouring countries with suitable legal and institutional frameworks.

With the new millennium, the time when water was assumed as an abundant, free resource has ended. Hiking demands for water and shortage in supplies with rising levels of water pollution indicate a severity and perplexity in water management that has not been identified before. Given this, riparian nations are left with two options regarding transboundary water resource management (Figure 1):

Figure 1: Options for Riparian Countries



The former can lead to a vicious cycle with no winners in the long run (Biswas 2011). Experiences worldwide reveal that the increasing adoption of Option 2 leads

to win-win cycles for all riparian countries (see Box 1 for examples).

Box 1: Win-Win Transboundary Water Strategies

The case of the **Danube River Basin** highlights that water should not only be perceived as a potential source of conflict in the case of diverging interests in its use or protection, but can also serve as a means for initiating cooperation in spite of an overarching conflict. At the height of the Cold War, Germany and Austria joined the 1948 Belgrade Convention concerning the Regime of Navigation on the Danube. Various other agreements were also signed subsequently, not only across national borders but also across ideological divides.

The **Southern African Development Community's (SADC) Protocol** has significantly improved cooperation within and beyond the water sector in Southern Africa. 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. Downstream states such as Botswana and Namibia have benefited from SADC since earlier they were always left out from upstream water management plans.

India-Bhutan Cooperation - Landlocked Hermit Kingdom Bhutan had from 1961- 1980, one of the lowest per capita incomes in South Asia. Following its water-based development projects in collaboration with its neighbour India, its per capita GDP increased to being the highest by far in the region at 1932.8 USD in 2008. Realising early on that it would not be able to develop its water resources rapidly and efficiently by itself, given weak capital, technical and management capacities, Bhutan decided to develop its water resources in close cooperation with India, with whom it shares its transboundary rivers. Both countries, over the past three decades, have benefitted enormously from this cooperation which is an excellent, yet often an ignored case from South Asia, where visionary leadership, political will and shared trust has paid huge dividends.

Sources: Salman and Niazi forthcoming (2016); Wikipedia (n.d.); Pohl (2014); Biswas (2011).

2. Towards Blue Peace:⁴ Role of Foreign Policy Makers and Diplomats

“Not all diplomats are peace negotiators, but all peace negotiators are diplomats.”

-- Philip C. Habib⁵

Water governance has been on the radar of technical and development cooperation for decades since establishing peace around transboundary waters and minimising water crisis can inter alia pave the way for sub-national, national and regional security, strengthen economic growth, enable regional integration and enrich environmental services. Many water governance issues are technical, such as data collection and analysis; water resource planning; setting standards for environmental impacts etc. often complemented by tools and frameworks developed by development policy makers for addressing and resolving conflicts over water (Kramer et al. 2013; Houdret et al. 2010).

Institutions like the World Bank and Asian Development Bank (amongst others) have facilitated several international treaties, including river basin organisations (RBOs) such as the Indus Water Treaty, the Mekong River Commission and the Nile Basin Initiative and large-scale water infrastructures over shared freshwaters. Apart from water related socio-economic development milestones, these investments are justified on the basis that transboundary water policies can deepen regional peace and integration. Yet there are limits to what technical cooperation alone can achieve in conflictive political contexts.

For these reasons, focusing on technical solutions for shared basins needs to go hand in hand with strong political engagement to deal with the inherent power asymmetries that can influence human security, regional stability, ecological balance and international governance. However, even though transboundary water governance should elicit great interest in and from the foreign policy community, the opportunities of transboundary waters remain insufficiently appreciated and utilised among foreign diplomats and policy makers (Pohl 2014).

“The ‘low politics’ of technical and development cooperation do not automatically add up to the ‘high politics’ of pursuing conflict prevention and regional integration. For technical cooperation to realise its full potential, it also needs political support to overcome inertia and vested interests, to ensure broad ownership and legitimacy, and to convince political decision-makers of the necessity and benefits of cooperation (and of the consequences of non-cooperation)” (Ibid: 11).

Water policies in transboundary basins are often driven by domestic interests and power struggles rather than conflicting interests between countries (Zawahri 2014; Trondalen 2010; Wolf 2007). In such cases, strong and systematic political engagement can push riparian states towards more cooperative behaviour. An earnest shift from merely reflecting on techno-centric water governance towards hydro-diplomacy can foster broader and deeper political collaboration in which foreign policy makers and diplomats can play a crucial role.

For the purposes of this paper, the terms ‘foreign policy makers’ ‘foreign diplomats’ are used interchangeably and include ‘those who do not have a direct stake in a given basin, i.e. the diplomats from the (non-riparian) international community and in particular those from major donor countries’ (Pohl 2014: 12), as well as foreign policy actors from the riparian countries who are equally crucial as necessary dialogists. Hence, the recommended framework and recommendations apply to the foreign policy makers of the riparian countries within a particular basin and may overlap and complement those from the international community w.r.t. the basins that they do not share. 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 (INBO and GWP 2012: 13).

Foreign policy makers and diplomats can add value to transboundary water governance by playing a critical role with their skills in mediating disputes; framing and defending compromise and cooperation. Foreign policy engagement in such issues can:

“Give foreign policy makers a toehold for making progress on crucial foreign policy interests. In fact, transboundary waters constitute a promising entry point for diplomats aiming for high peace dividends” (Pohl 2014: i).

As mentioned before, since water issues in contested basins can have unstable power dynamics with weak institutionalisation of political and regional processes (Wolf 2006, 2007), it is here that hydro-diplomacy⁶ can support

⁴ Title inspired from ‘The Blue Peace: Rethinking Middle East Water’ (2011) by the Strategic Foresight Group. It discusses an ‘innovative approach to engage political leaders, the public and the media in harnessing and managing collaborative solutions for sustainable regional water management. It makes a path for the evolution of a regional political and diplomatic community in water and creates new opportunities for resolving protracted water related conflicts’ (INBO and GWP 2012: 22).

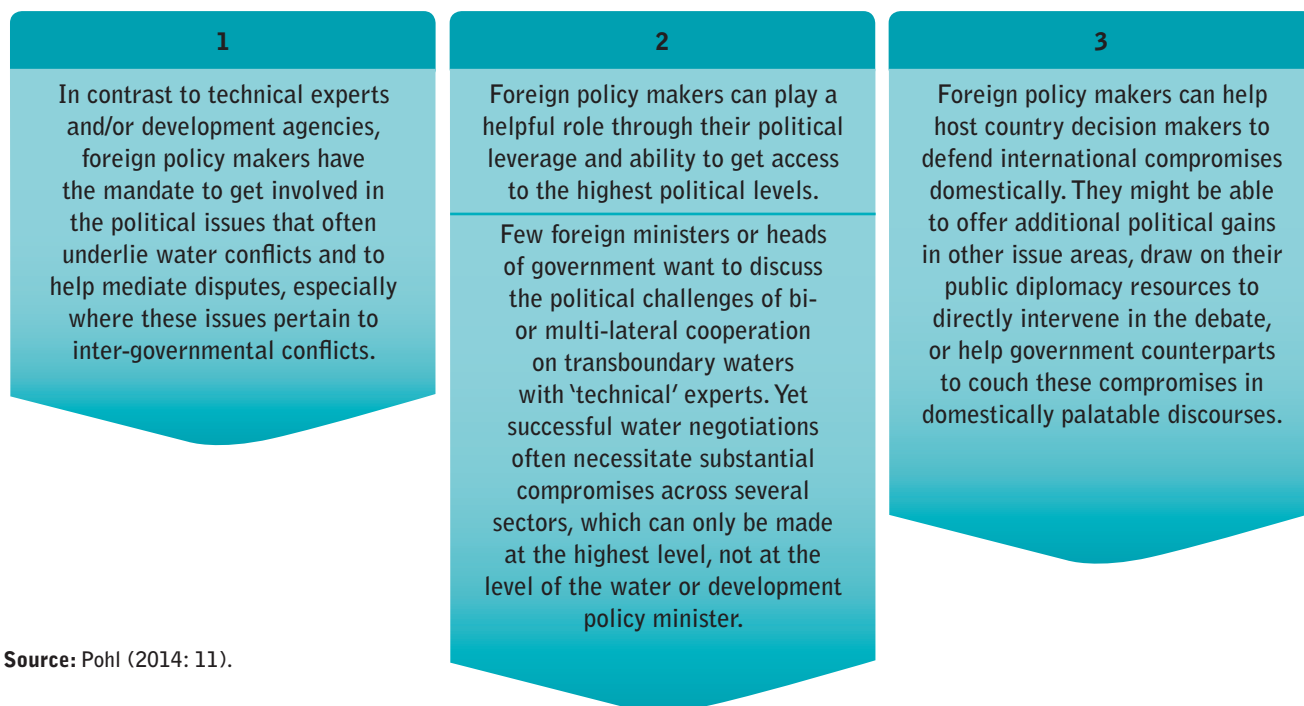
⁵ Philip Charles Habib is known as one of the pre-eminent career diplomats in American post-war history.

⁶ The words hydro-diplomacy and blue diplomacy and cooperation have been used interchangeably.

technical and development collaboration to facilitate stability and regional collaboration that may eventually lead to formal

cross-sectoral integration via legal mechanisms and shared institutions (Figure 2):

Figure 2: Blue Foreign Policy Interventions



Source: Pohl (2014: 11).

3. Challenges to Blue Diplomacy

Kliot (2001: 230) indicates four core aspects of management of water resources which contribute to its complexity and make it challenging:

1. Shortage.
2. Misdistribution.
3. Presence of multiple stakeholders.
4. Exploitation and wastage.

The examples in Box 2 shed some light on these complex linkages from an economic, ecological and political perspective:

Box 2: Intricate Water Policies

Part of Turkey's largest hydropower Anatolia project, the Ilisu Dam (one of the last ones being built), is likely to damage the downstream Mesopotamia marshes in Iraq, squeeze crucial supplies downstream in Syria and Iraq, aggravate already strained tensions from decades of cross-border water disputes, as well as inundate Hasankeyf, an ancient and protected heritage site, along with its found and still hidden archaeological treasures.

The under-construction Rogun hydropower project upriver in Tajikistan – one of the tallest in the world at 335 meters (1,099 feet) - features significantly in the tense Uzbek-Tajik relationship. Situated on the Vakhsh River, the dam will most certainly impact the volume of water flowing downstream leading to irrigation shortfalls due to which the Uzbek government has imposed travel and tariff restrictions on its neighbour. The CASA-1000 project (2019) - hailed as landmark success for diplomacy - for transporting electricity from Kyrgyzstan and Tajikistan to Afghanistan and Pakistan is heavily dependent on the Rogun Dam.

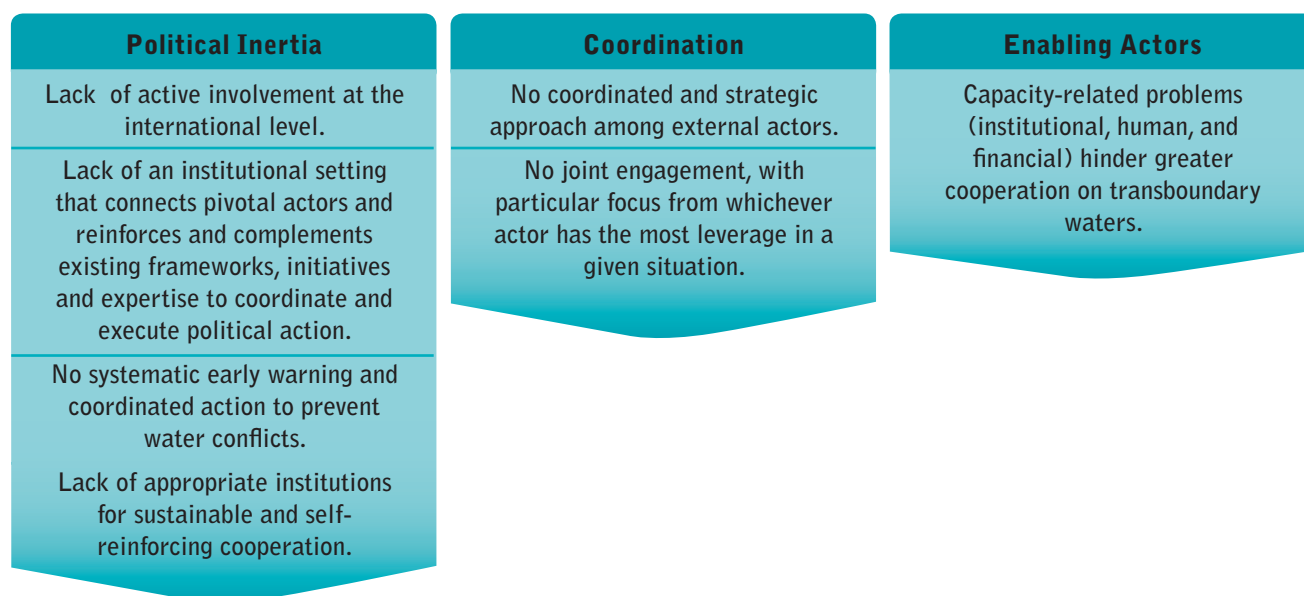
Sources: Putz (2015); Harte (2014).

Foreign policy makers can be instrumental in persuading governments into cooperative behaviour, and/or in helping to extend it. However, it is important to remember that many countries are not open to foreign or outside engagement on transboundary issues, which they see as external pressure or the insertion of outside agendas (Conca 2012). The latter can often occur if local sub-national communities are getting short changed in water negotiations at the macro level (Swain 2013.) For example:

- ◆ India is not keen to include external observers regarding bilateral discussions with Nepal and Bangladesh about the Ganges.
- ◆ Turkey has serious reservations to any foreign intervention regarding the Euphrates-Tigris Basin.
- ◆ China has stayed away from the Mekong River Commission due to US involvement (Pohl 2014).

Some of the other challenges to policy engagement are shared in Figure 3:

Figure 3: Blue Diplomacy Challenges



Source: Adapted from Pohl (2014).

4. Blue Diplomacy in Action

Despite these challenges, there are cases where governments and foreign policy experts have invested on the diplomatic front and been rewarded by reaching agreements that highlight the positive spill over of such cooperation.

Case in point, a long-standing river border dispute between **Paraguay and Brazil** was resolved in 1973 when the two countries decided to build a jointly owned hydropower facility. This decision was initiated and spearheaded by the countries' two foreign ministries.

The **European Union's Water Framework Directive (WFD)**, an ambitious and one of the most comprehensive pieces of EU legislation was adopted by all member states in October 2000. The Directive sees the 'river basin as a planning and management unit' and the river basin approach as the most pre-eminent and cost-efficient methods to manage water:

"Isolated measures to improve water quality cannot be successful without taking account of what happens upstream and downstream. Integrated river basin management adopts a holistic approach to protecting the whole body of water, its source, tributaries, delta and river mouth" (European Commission 2010: 14).

Since the Directive has come into force, Member States have worked towards defining their river basin districts geographically, as well as identifying the institutions responsible for water management (2003)

and undertaken joint economic and environmental analysis of these areas' characteristics (2004) in order to identify water bodies at risk. In 2006, Members launched water monitoring networks and by 2009 drew up river basin management plans (RBMPs). According to an extensive study conducted by Hedin et al. (2007: 12) about the impacts of the WFD along the dimensions of vertical implementation, horizontal integration and transnational cooperation on Baltic Sea countries:

"WFD implementation appears to have initiated, intensified, or improved cooperation on water resources shared by EU Member States."

Not only this, they noted that implementation of the WFD through diplomatic channels had even reignited and intensified dialogues between non-EU states such as Belarus and Russia with their EU neighbours (Ibid: 34). The European Commission's most recent 2012 assessment report recommends extending the deadline of the Directive up to 2027 or beyond (European Commission 2012: 6-7).

While not implemented due to political changes within the country, **Pakistan** spent several years (from 2002-07) in back channel diplomatic negotiations with Indian counterparts and Kashmiri leaders working on a draft 'Treaty of Peace, Security and Friendship' between Pakistan, India and Kashmiris, like the Élysée Treaty between Germany and France. One of the most critical (and contentious) features envisaged in this treaty was to encourage the promotion of common policies towards the development of infrastructure, hydroelectricity and exploitation of water resources. Although it is beyond the purview of this paper to assess the treaty, Kasuri (2015), Pakistan's ex-Foreign Minister argues that it can serve as a benchmark or a guideline when governments in both countries find the required political will.

5. Contemporary Framework for Blue Diplomacy

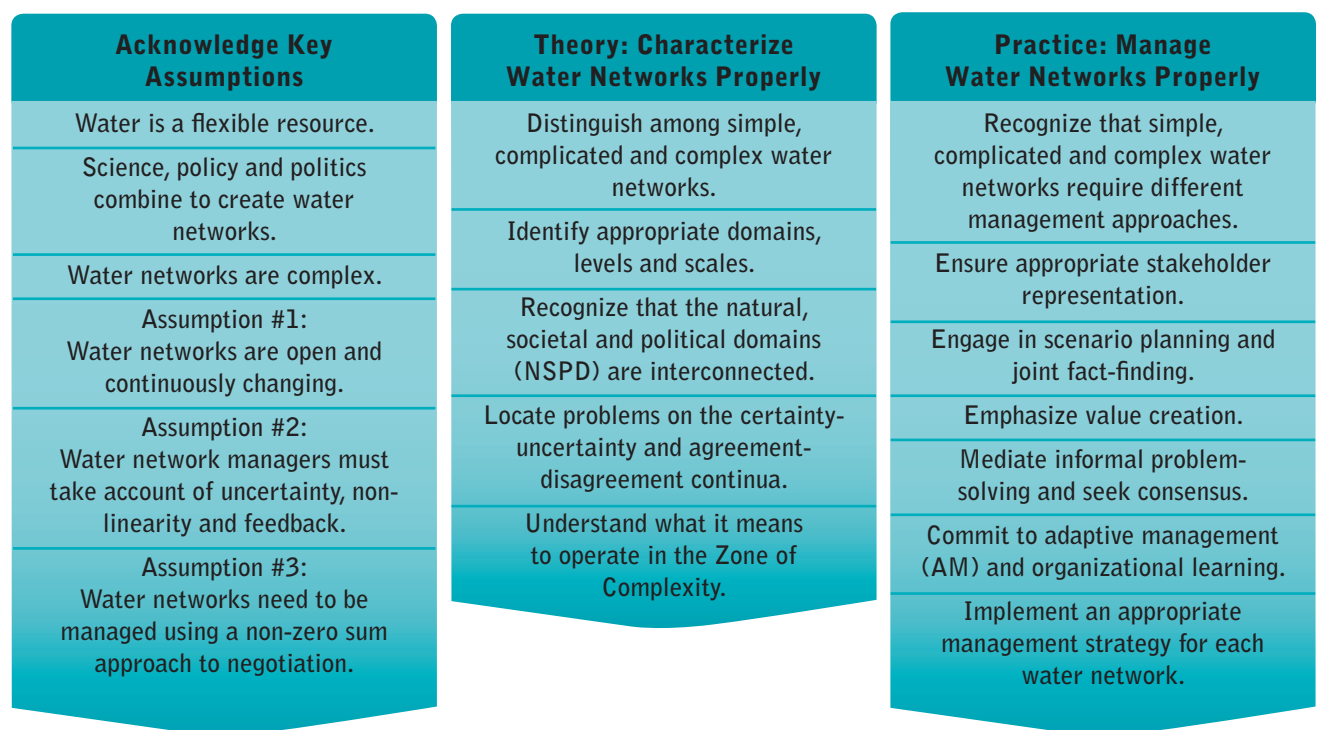
Given shortage of space, this paper has not delved deeper into each of the cases above. However, what comes across distinctly is the fact that while technical and engineering solutions in case of shared waters, are sometimes needed, they are not always the right or perfect fit for one partner or the other because they lack effective synergy with the deeper, more complex, certainly more 'messier' socio-political water scenarios (Islam and Repella 2015). The Water Diplomacy Framework combines science and technology solutions within a political economy context and can ideally serve as a blueprint for diplomats who want to facilitate the efforts of technical and development experts in transboundary basins.

5.1 Water Diplomacy Framework (WDF): Value Creation Not Zero-Sum Thinking

Given the tensions between various water users and stakeholders as outlined in some of the cases shared earlier, one is forced to ask how these tensions can be resolved. The Water Diplomacy Framework (WDF) by challenging traditional, techno-centric solutions highlights that:

1. Water is a flexible rather than fixed resource.
2. Water networks are a combination of science, policy and politics.
3. Water networks are open-ended, complex and unpredictable rather than closed and predictable systems (Islam and Repella 2015: 5).

Figure 4: The Water Diplomacy Framework



Copyright Shafiqul Islam and Lawrence Susskind
 Water Diplomacy: A Negotiated Approach to Managing Complex Water Networks,
 Resources for the Future, 2012

Source: Islam and Repella (2015: 2).

In this Framework, negotiation functions ‘as the fulcrum of diagnosis and intervention’ in multidimensional water problems using different forms of contextual inquiry and intervention as outlined in the Table 1:

Table 1: Different Problems - Different Responses

Problem Types	Definitions	Examples
Simple	Cause-effect relationships are well-understood; best management practices are effective.	In mid-19th Century Boston, when small reservoirs within the cities could no longer support the water needs of the growing population, a reservoir/canal system was built to transfer water from 30 km away to the city.
Complicated	Cause-effect relationships are not straightforward; range of possible solutions are possible for a given management intervention; analysis and intervention requires experts with contextual knowledge.	Water supply to an expanding Boston city became more complicated as additional reservoirs were connected via canals. In early 20th Century, the Quabbin Reservoir was built to meet the city’s regional water needs.
Complex	Cause-effect relationships are ambiguous; uncertainty, nonlinearity and feedback are inherent; emergent properties dominate system behavior and response.	Building the Quabbin Reservoir transformed the complicated engineering challenge to a complex water problem as four towns were selected to be eliminated and inundated to create the reservoir. How do we reconcile the rights of people from those four towns with the competing development agenda for Boston to grow? This is not a scientific question with a precise and predictable answer. Resolution of this class of complex water problems with conflicting needs requires a different framework.

Source: Islam and Repella (2015: 2).

The first step in water diplomacy, therefore, should be knowing why, rather than knowing how by distinguishing and understanding the underlying:

- ◆ **Values:** Deeply held beliefs that shape how people view the world including economic, political, cultural, religious, and ethical considerations.
- ◆ **Interests:** Reasons and objectives that underlie positions that develop to secure or advance the values held by stakeholders, that is, the ‘why’ behind the ‘what’ sought by a stakeholder.
- ◆ **Tools:** Techniques and processes that can be used to answer specific questions in support of understanding the range of outcomes that are possible from a policy, management, or infrastructure based intervention (Islam and Repella 2015: 3).

Within the Water Diplomacy Framework, foreign policy associated with transboundary water governance can enable conflict suppression and resolution; minimise conflicts by managing shared resources; and strengthen regional integration by implementing mechanisms for water cooperation. Given below are some case studies in which this has been achieved:

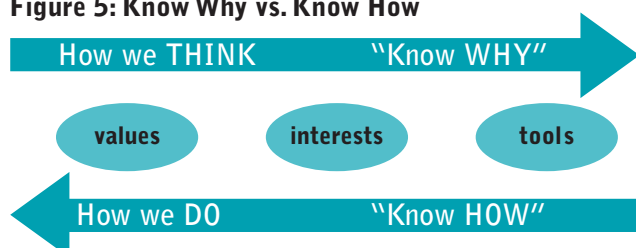
5.1a. Shared Values and Interests

Case of the Rhine River

The explosion at Sandoz Warehouse 956 near Basel, Switzerland in November 1986 and the resultant spill of toxic chemicals which washed into the Rhine River had a catastrophic impact on its ecology and marine life. Apart from fauna, water supplies badly suffered from the spill. All water plants which processed Rhine water for drinking in France, the Netherlands, Switzerland, and West Germany were closed down. Livestock at many places died by consuming contaminated water. In West Germany, farmers pulled back livestock from pastures along the Rhine (Schwabach 1989).

In 1987, in response to this catastrophe, the International Commission for the Protection of the Rhine (ICPR) initiated the Rhine Action Programme (Chase 2012; Raith 1999). This was a path-breaking programme and is an illustration of ‘landscape-level planning and site-scale implementations to rehabilitate and protect the Rhine River ecosystem’ (Raith 1999:

Figure 5: Know Why vs. Know How



Source: Islam and Repella (2015: 3).

2). Policy decisions affecting river ecology, flood control, hydroelectric power production and river navigation were some of the shared values and interests for riparian countries.

But more than anything, the external team, behind RAP did what is often one of the first lessons taught to foreign diplomats - look for something that is symbolic and culturally meaningful for lasting impact. They found such a 'symbol of restoration and improved quality of the river' and recommended that the overarching goal of the Plan should be to Bring Salmon Back to the Rhine by 2000. This became the rallying call of the RAP.

Secondly, it was imperative that RAP secure the use of the river as a drinking water resource; and thirdly, bring pollution levels down by 50-70% by 1995. The Plan also proposed that 'international regulation should be minimal and informal' and for ICPR to issue non-binding reports regarding clean-up goals of the river, 'rather than a formal treaty making process setting out the specifics of regulation' (Chase 2012: 619). Local management and rehabilitation projects were carried out regularly along the Rhine River. The development and management of these projects were supervised by ministers and natural resource managers themselves. Involvement in the rehabilitation efforts was witnessed at every level by private citizens, high schools, NGOs, businesses, zoological institutes and the Nature Conservancy amongst others (Raith 1999). Some of the other components of the Plan included:

- ◆ Reconstruction of salmon spawning grounds.
- ◆ Building fish passages around the dams in the Rhine.
- ◆ Construction of basins to collect fire extinction water.
- ◆ Tightened safety norms in industrial plants.
- ◆ Restoration of the riverside environment to allow the return of plants and animals typical to the Rhine (Chase 2012).

The success of RAP meeting its goals five years ahead of schedule lies in the following key points:

- ◆ Under the 'soft law approach' individual countries were able to develop and standardise their clean-up strategies than a specific binding treaty would have been (Koppel 2009).
- ◆ Given the linkage between the river's use as a drinking water resource, pressure from citizens and civil society was high which led to reduction in the emissions of the identified hazardous substances by 70% a year in advance with an early warning system put in place for future notification of chemical spills along the river.
- ◆ Salmon finally returned to the Rhine for the first time in years.
- ◆ It stimulated improvements in national water policies of all riparian partners (Verweij 2000).

Following the positive outcomes of RAP, ICPR actively worked towards streamlining its governance structure and drafted the Convention on the Protection of the Rhine (CPR)⁷ following the blueprints laid down in RAP with the overarching goal being sustainable development and enhancement of the Rhine's ecological state. Convention negotiations were even more participatory than those for RAP:

"Observer status was offered to groups, including environmental groups, industry and agricultural associations, and water supply companies, allowing these groups to play a larger role in the continued improvement of the river" (Chase 2012: 622).

Rhine 2020, adopted by ICPR in 2001, is a more comprehensive and deeper programme that includes instruments for voluntary agricultural agreements, encourages the participation of local interest groups, and frequently planned discussion groups between consuls in different regions to address emerging or continuing problems (Ibid.).

Case of Climate Change- Potential Opportunity Multiplier for Asia and Africa

For countries in Asia and Africa, climate change related loss and damage is all about water. The (shared) threat of climate change might help to convince local opposition groups to support international deal-making on water issues. In this context, the significant financial resources earmarked for climate adaptation can (and should) also be used to enhance resilience to conflict. Climate change adaptation pressures can thereby generate positive spill-overs, serving as an entry point for building trust and engaging in politically thorny regions. In short, vulnerability to water and climate change may constitute not only threat multipliers, but also opportunity multipliers. The extremely devastating 2008 cyclone Nargis brought change to Myanmar as the government came to realise that the foreign diplomats at the United Nations who pushed for access for relief efforts were in fact well-meaning. A similar dynamic unfolded a few years earlier in the aftermath of the 2004 tsunami in Aceh (Pohl 2014).

Foreign policy makers and diplomats are ideally placed to not only get involved with the state-level parties but also relevant sub-state stakeholders and foster institutions where their interests are adequately represented which otherwise they might prove counterproductive. Without a political perspective on the regional situation, attempts to address any socio-economic and environmental concern might add fuel to the fire elsewhere. Case in point, the Niger River Basin where construction of dams for irrigation, water storage and regulation, as well as hydropower generation offer potential economic benefits to upstream Guinea, Mali and Niger while decreasing the available flow for Nigeria, the most downstream country.

⁷ Adopted in April 1999

5.1b. Tools for Blue Cooperation: Capacity and Funding

There are various international institutions (UNEP, UNDP, UN-Water, UNESCO including UNESCO IHP, the UNECE Water Convention, Water Cooperation Facility, World Water Council, Shared Waters Partnership etc.) that deal with shared waters, but they lack individual political power and are largely fragmented. The paper is not calling for the formation of new institutions (in fact that might lead to the least common denominator approach and make water matters worse), rather advocating for an institutional setting that connects central actors and reinforces and complements existing frameworks.

In South Asia, for instance, this could be done through an informal coalition of foreign policy makers engaged in transboundary water issues (like the Group of Friends of Water - an informal voluntary association of likeminded countries in promotion of the UN water agenda or the Green Diplomacy Network which links foreign policy officials dealing with international environmental issues).

Technico-centric transboundary water planning often takes years, diplomats also come and go (on an average they change posts every 3-4 years). These concerns also make institutionalisation of blue cooperation within the political economy of shared resources difficult and risky, and hence, a systematic and consolidated approach through an international network for risk management and policy coordination is needed for the sake of sustainability and credibility. The network can help build trust and understanding among interested outside parties and give political support that foreign policy makers are well placed to provide.

“While development agencies can thus crucially support foreign policy objectives, diplomats’ tolerance for the seesaw of politics can in turn facilitate and complement the structural foreign policy embedded in development work. Less driven by the need to finish a project, foreign policy makers can wait, attend to long-winding processes and prepare the ground with the relevant governmental and societal actors until the opportunity for an agreement on transboundary waters arises” (Pohl 2014: 33).

It becomes important, therefore, to leverage these various dynamics in a way that is mutually beneficial and which goes beyond the focus on unconnected, independent single sectors and quick results.

Governments, especially in South Asia and Africa, should support forums like the one proposed above and trans-nationally connect their policy officials from different fields. This becomes even more critical when both these regions are seeing more individual states and private financiers with limited experience in hydropower and little interest in the long-term benefits for the host country investing in water infrastructure projects rather than the

traditional multilateral lending institutions. This can have serious implications for diplomatic leverage.

Contrary to popular perception, foreign policy officials are not the Jacks and Jills of all things within bureaucratic and political circles, in fact they usually lack the technical knowledge to fully understand water-sharing dynamics. Technical water professionals, on the other hand, prefer the technocratic approach to avoid securitising water-sharing issues. In order to have an integrated approach that is in sync with the technical and political tracks, diplomats should be trained about water development issues and water experts about negotiation and mediation skills. In fact, water conflict management trainings should be an integral part of the curricula for young diplomats and development practitioners.⁸ This will be helpful for weaker riparian countries, especially those that have had a history of prolonged conflict. A level playing field for all negotiating can create an enabling environment for sustainable water cooperation (Troell and Weinthal 2014; Zeitoun and Jägerskog 2011).

Interactive training formats (like policy games) can alter biased assumptions about each others’ hidden agendas and objectives and foster better interpersonal relationships between professionals from different countries. Despite being technically at war with each other, Israel and Jordan had basic coordination for actions pertaining to the Jordan Basin since the 1950s. In the so-called ‘Picnic Table Talks’ held every three to four weeks in the 1970s, the parties met and discussed issues of common concern facilitated by the UN Truce Supervision Organization (UNTSO). These talks acted as an umbrella for discussions on water coordination (Lipchin et al. 2009; Collins et al. 1994). Change agents from diplomatic circles of respective governments abroad can be invited to facilitate conflictual water sharing concerns in order to allow for substantial reflection on the larger issues at stake.

Funding for ‘soft’ aspects of blue diplomacy also require finances which, though small in comparison to water infrastructure costs, are not allocated. This is unfortunate given the potential peace dividend in terms of the avoided costs of conflict (Trondalen 2011). To tackle this lack of funding, financial institutions like the World Bank could, for example, consider extending its existing water expert list to include a subcategory on transboundary waters; and subsequently provide political capital to riparian states in the form of specialised mediation teams in transboundary water issues and renowned experts in specific basins.

The discussion above highlights that there are numerous potential synergies between development and foreign policy. Table 2 provides a bird’s eye view of the various tools for blue engagement and the roles of experts best placed to take the lead in engagement⁹:

⁸ Such programmes are being offered by the Clingendael Institute in the Netherlands; UNESCO’s Centre for Water Law, Policy and Science in Dundee; Compass Foundation in Geneva; and Oregon State and Tufts Universities in USA.

⁹ These roles and tasks are in no way sacrosanct nor meant to support construction of guarded sectoral domains.

Table 2: Tools and Roles for Blue Engagement

	National/Sub-National	Basin	Global
Institutional and Legal	Strengthen domestic and national water institutions**	Support new and strengthen existing basin agreements**	Support principles and codification of International Water Law*
Capacity Building	Improve national water use practices and institutions***	Develop capacity (through training) in water and diplomatic communities**	Diffuse knowledge on appropriate stakeholder processes**
Financial	Fund cross-sectoral capacity-building***	Fund intra-basin confidence-building processes (e.g. joint data collection, monitoring systems) **	Fund global early warning and crisis response mechanisms***
Political Coordination	Ensure cross-sectoral coherence (e.g., climate adaptation and conflict resilience) **	Offer fact-finding support and engage preventively*	Overcome international political inertia / create institutional platform**

Source: Adapted from Pohl (2014).

Note: * Tasks for foreign policy makers and diplomats.
 ** Shared Tasks.
 *** Tasks for development community.

6. Recommendations and Conclusion

Fresh river waters are under the stress due to climate change, increasing population and inappropriate management policies. Transboundary river basins cover almost half the Earth, with millions of people depending on them for their basic needs. Given the scarcity of fresh water, potential utilisation of these river basins needs to be done in the most efficient and sustainable way possible. This efficiency under transboundary conditions is not possible without mutual cooperation and conflict resolution between riparian countries.

Water can be one of the catalysts towards dialogue in otherwise confrontational relationships. Hydro-diplomacy applied to transboundary aquifer management requires greater political and diplomatic engagement across the globe. Riparian states need to realise the importance of harnessing the synergies between 'hard' and 'soft' politics, and between foreign, development, economic, and environmental policies. While donors and countries make huge financial investments on the technical side of water infrastructure projects, there is a strong case for investing more on the diplomatic side as well through capacity and skills enhancement of diplomats and foreign offices about water management and conflict resolution linkages; coordination of trust building measures through frequent working seminars/meetings e.g. on future scenarios or joint (scientific) risk assessments and joint water monitoring systems; preventive engagement through unbiased conflict/cooperation indicators and water data in emerging or

simmering conflicts; and vigilant and regular reforms/re-organisation of existing water governance institutions and legal instruments to enable a clear pathway for nurturing dialogue around joint aquifer management.

Using the Water Diplomacy Framework (WDF) can help actors:

- ◆ Analyse respective contexts and assessment of both favourable and unfavourable shared values and interests for the potential set-up of joint management institution/s and arrangements;
- ◆ Support hydro-diplomacy if they are favourable by adopting an anticipation and preventive approach;
- ◆ Include trust building measures and capacity enhancement in order to create suitable conditions, if they are not.

The paper has explored approaches where issues in transboundary river basins have been addressed under diplomatic framework umbrellas and the results have been promising. Transition from techno-centric water governance towards hydro-diplomacy can be an important step to attain harmony, socio-economic development goals and ecological balance.

While foreign policy engagement, as well as international cooperation are not like the magic wand of Cinderella's fairy godmother, there are many instances where deeper engagement of foreign policy makers, and enhanced cooperation between the development, foreign and technical communities, have helped calm stormy waters and, in future could also foster greater regional cooperation.

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