



# THE RISE OF HYDRO-DIPLOMACY

Strengthening foreign policy for transboundary waters



Federal Foreign Office



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## EXECUTIVE SUMMARY

Water is a fundamental precondition for human life. No substitute for freshwater exists, and it is scarce in many regions. Simultaneously, much of it transcends state borders via shared river and lake basins or groundwater aquifers. The resulting political, economic, social and environmental interdependencies give water resources the crucial potential to either foster cooperation or exacerbate conflict. The significance of access to water is growing as demographic and economic drivers as well as deteriorating water quality interact with climate change that will regionally increase water scarcity and variability.

Competition over shared waters should warrant strong interest from foreign policy makers. Foreign policy can help improve transboundary water governance, and transboundary water governance can give foreign policy makers a toehold for making progress on crucial foreign policy interests. Thus, encouraging greater cooperation over transboundary waters offers significant prospects for the resolution of political conflicts and greater regional integration. Transboundary waters constitute a promising entry point for diplomats aiming for high peace dividends.

This paper argues that foreign policy makers can and should do more to realise these dividends. It calls on diplomats to accompany and facilitate the efforts of technical and development experts in transboundary basins. In particular, foreign policy makers must:

- **exert political leadership in fostering intra-basin cooperation and integration;**
- **connect and reinforce appropriate institutional structures for coordinated and cross-sectoral, comprehensive engagement; and**
- **strengthen the diplomatic track of transboundary cooperation on water by investing more in training and capacity-building, expanding efforts to build confidence in shared basins, and improving water-related crisis response and conflict resolution mechanisms.**

Transboundary basin management is frequently eclipsed by intra-basin politics, which in turn is often compounded by power asymmetries. In this context, a focus on technical solutions for shared basins is often not enough; it needs to be complemented by political engagement. Foreign policy makers can provide crucial support in this respect, even if their engagement also entails risks by inserting (perceived) outside agendas.

There are several foreign policy objectives connected to transboundary water governance: facilitating the containment and resolution of conflicts in the short term; managing resources so that conflicts are avoided in the longer term; and harnessing water cooperation mechanisms to promote regional integration. Yet for all three purposes, there is a lack of agency at the international level. As a result, the international community faces huge challenges when it comes to systematically taking early action to both respond to emerging crises and reinforce cooperation.

Foreign policy makers should therefore help to strengthen and connect existing international and transnational institutions for coordination so as to allow for concerted foreign policy approaches. The end game of solving conflicts over water is to build the appropriate institutions to safeguard and extend cooperation. This quest for closer cooperation should simultaneously seek to enhance the cross-sectoral synergies between 'high' and 'low' politics such that water-related technical and economic opportunities are used (or better used) to strengthen political efforts to prevent and resolve conflicts and vice versa. Technical efforts that improve local and national water management can significantly contribute to safeguarding international security, just as foreign policy efforts can significantly contribute to the development and well-being of riparian people by helping them avoid conflict and harness the opportunities that closer cooperation brings about.

To underpin such greater political and diplomatic engagement and translate it into action, this paper suggests a three-pronged strategy of support regarding institutions, capacity and funding. Preventing conflict over water requires better understanding among the water, climate and foreign policy communities, as does using water as an instrument for greater overall cooperation. Training the respective communities to this effect is a necessary first step. More capable national institutions can directly contribute to more sustainable water management; they can also encourage national governments to 'risk cooperation', as policy makers will feel reassured about their ability to estimate its effects. Climate change is predicted to bring about an increase in the variability of water, adding urgency to the task of building trust and a shared understanding of the challenges in transboundary basins. Building capacity and supporting institutions that are conducive to intra-basin cooperation will require funding. The amounts necessary, however, pale in comparison to the costs of the physical water infrastructure – as well as to the hypothetical cost of the conflicts that they can help to prevent.

This report thus proposes a number of specific instruments of engagement. Yet, as useful as all these instruments could individually be, they depend on an internationally coordinated, cross-sectoral engagement on transboundary water issues – engagement that must be driven by foreign policy makers. In the end, strengthening the governance of transboundary waters hinges on strengthening and connecting the international institutions that can channel political will into coherent action.

# I. THE IMPORTANCE OF TRANSBOUNDARY WATERS

Transboundary waters are a pivotal but underappreciated issue in global politics. There are 148 states with territory in international river basins (UN-Water 2014a). In other words, almost every country with land borders (i.e., that is not an island) shares some waters with its neighbours. These international basins cover 46% of the earth’s land surface (UN-Water 2014b), host about 40% of the world’s population, and account for approximately 60% of global river flow (UN-Water 2008). Shared waters are therefore of critical importance for riparian states, i.e. the states that lie within a transboundary basin. Many important shared basins – the Nile, the Indus, the Ganges, the Euphrates-Tigris, the Amu Darya and Syr Darja, and the Mekong – overlap with regions characterised by substantial interstate and intrastate tensions and often a history of armed conflict. Competition over water access in these and other basins is likely to increase as over-extraction, harm to freshwater ecosystems, and climate change continue to constrain water supplies.

There is little historical precedent for major ‘water wars’. To the contrary, shared waters have in some instances been ‘islands of cooperation’ in otherwise conflictive relationships. The 1960 Indus Waters Treaty has thus survived three wars between India and Pakistan, cooperation on the Mekong persisted throughout the Indochinese wars, and water has served as a crucial means for strengthening cooperation in Southern Africa. As a consequence, the use and allocation of water in transboundary basins is both a source of tension and an opportunity to promote cooperative practices and build collaborative institutions. The extent to which these conflict risks can be managed and the significant cooperative opportunities realised will depend on the level of political engagement demonstrated by both basin countries and the international community.

BOX 01
TRANSBOUNDARY WATERS

**148**  
**21**

The territories of 148 nations fall within international basins that include the political boundaries of two or more countries; 21 countries lie entirely within them (UN-Water 2014a)

**276**  
**300**

There are 276 transboundary river and lake basins (UN-Water 2014a) and around 300 transboundary aquifers worldwide (UN-Water 2008)

**46 %**

Transboundary basins cover 46% of the earth’s land surface (UN-Water 2014b)

**40 %**  
**90 %**

About 40% of the world’s population live in shared basins, and over 90% live in countries that share basins (UN-Water 2008)

**60 %**

Transboundary waters account for approximately 60% of global river flow (UN-Water 2008)

Water management in many transboundary basins is highly politicised and has a considerable impact on conflict prevention, regional stability, environmental peace-making and international governance. Therefore, transboundary water governance is a domain that should elicit great interest in the foreign policy community. Yet so far the challenges and opportunities of transboundary waters for these critical foreign policy objectives remain insufficiently appreciated and utilised among foreign and security policy makers. Water governance remains largely a topic for technical and development cooperation. To be sure, this is often also the most appropriate setting. Many of the issues and challenges in water governance are technical – from gathering and analysing data to planning the use of water resources and setting standards for environmental impacts. Moreover, the development policy makers that often support such technical work have created comprehensive tools for addressing and resolving conflicts over water (*Trondalen 2008; Houdret et al. 2010; Kramer et al. 2013; USAID 2014*). Yet there are limits to what technical cooperation alone can achieve in conflictive political contexts.

The management of transboundary waters is often eclipsed by politics, which in turn is frequently complicated by power asymmetries in the basin (*Zeitoun and Warner 2006*). This poses tough challenges for the water and development communities whose instruments are hardly honed for enticing powerful states to play a constructive role. Domestic interests in conflict and power struggles often drive water policy in transboundary basins – sometimes more so than contending interests between countries. In such a situation, explicit political engagement is needed to nudge riparian governments towards more cooperative behaviour. The same is true for what is often the ultimate objective of engagement on transboundary waters: having cooperation on water spill over into broader and deeper political cooperation. These crucial challenges demand whole-of-government approaches in which foreign policy makers can play a crucial role.

***The management of transboundary waters is often eclipsed by politics.***

In short, foreign policy can help improve transboundary water governance, and transboundary water governance can give foreign policy makers a toehold for making progress on regional integration and conflict prevention. This paper therefore stresses that foreign policy makers need to increase their engagement – and engage much more systematically – on shared waters. Our foreign policy lens implies a focus on politically contested waters. Water issues in these basins often involve volatile political dynamics. In the context of limited institutionalisation of political and regional processes, water disputes can contribute to or even trigger conflict, whether at the local or transboundary level. In these cases where basin relationships are unstable, hydro-diplomacy may be able to build on technical collaboration to facilitate stability and peace. Such collaboration can and should simultaneously be used to foster regional integration by supporting the spill-over of cooperative practices into other sectors, such that water may become the nucleus of more formal integration via legal rules and shared institutions.

This report begins by detailing the importance of transboundary waters for key foreign policy objectives. We then discuss the potential for greater diplomatic efforts in these basins while outlining key political challenges of such engagement. The second part of the paper subsequently elaborates on the steps that foreign policy makers in particular should undertake. The report calls on the international community to establish an institutional framework that connects the crucial actors in hydro-diplomacy and reinforces existing initiatives and expertise. This informal structure should help coordinate and implement systematic early warning and coordinated action to prevent conflicts, facilitate timely responses to emerging crises, and build the appropriate institutions for sustainable cooperation in transboundary basins. We then show how coordination between countries and across sectors needs to be strengthened to achieve these purposes. Finally, the report outlines a number of specific steps to enhance capacity to contain the risks and harness the opportunities of transboundary watercourses.

## 1. THE THREATS OF CONFLICT

Conflicts over transboundary water can threaten international peace and security. After the menace of 'water wars' started to be prominently discussed in the early 1990s (*Starr 1991; Bulloch and Darwish 1993*), policy makers were relieved to learn from academic research that there were few historical precedents for such conflicts, and that shared water had instead more often induced cooperation. Analysing 1,831 state-to-state interactions on water between 1948 and 1999, researchers found that around two-thirds of these were cooperative and that none resulted in formal war (*Wolf et al. 2003*).

Yet the limited historic evidence for 'water wars' should not lead to complacency. Formal war was generally rare during the second half of the twentieth century, and state-to-state interactions do not necessarily reflect conflict at lower levels. Many violent conflicts past and present have been connected to competition over water, particularly in the Middle East and the Sahel. Even if the salience of other (political) issues makes it misleading to identify them primarily as 'water disputes', water issues often feed into other conflicts. Moreover, the incentives and opportunities for exploiting water resources in a unilateral manner, and to the (perceived) disadvantage of co-riparians, may be shifting.

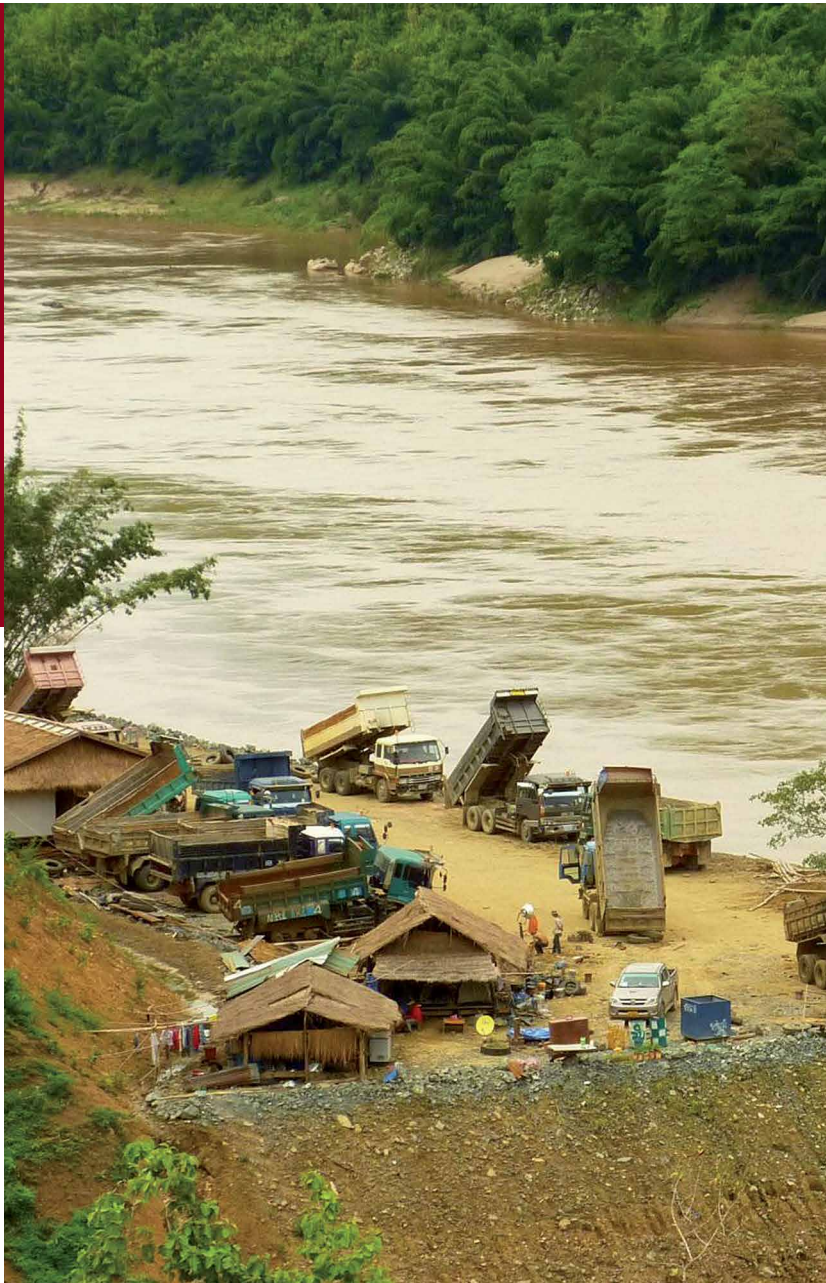
***The limited historic evidence for 'water wars' should not lead to complacency.***

Many international basins will face a strong increase in demand for water as a result of demographic pressures, industrialisation and urbanisation. Simultaneously, in many cases supply will recede, due to both earlier mismanagement and the impacts of climate change (*Falkenmark and Jägerskog 2010*). Climate change might decrease water supply in many basins through changes in precipitation and greater evaporation. Other basins may witness increases in floods and droughts, or shifts in the seasonality of rain or snowfall. And even as climate pressures may alter the amount and timing of water availability, climate stresses may also increase the demand for water, e.g. for irrigation and cooling. These changes have security implications at both the national and the international level.

First, insufficient or irregular access to water can imperil agricultural production and rural livelihoods, threaten municipal drinking water and sanitation, compromise electric power generation, and jeopardise public health, posing manifold security risks at the subnational level. Some affected states may find it difficult to share the costs of climate change in a way that is agreed by societal groups. Water scarcity may therefore reduce the perceived legitimacy of the government. Pastoralists in the Horn of Africa – who usually carry arms – may need to find new feeding grounds for their livestock, and impoverished farmers in Afghanistan may migrate to Kabul because their fields have been desiccated. Such scenarios are likely to (further) undermine social and political stability and enhance the risk of violent conflict. These risks are mirrored in the potential consequences of sea-level rises for farmers and people living in coastal communities in littoral zones and river deltas such as in Southern Bangladesh. These examples of water insecurity and conflicting interests at the subnational level can also have transboundary impacts if impoverished migrants or refugees fleeing natural catastrophes seek to cross borders, or if the resulting grievances draw in foreigners, e.g. via shared ethnic ties. In this way, water insecurity and climate change may put additional pressure on individuals, institutions and states that are already vulnerable.



Second, conflicting interests over the use of often-scarce water resources can also directly contribute to interstate tensions. Such conflicts may arise around the construction of dams on transboundary rivers. Recent examples that have captured headlines include the Grand Ethiopian Renaissance Dam in Ethiopia, the Xayaburi Dam in Laos, and the Rogun Dam in Tajikistan, all of which have raised tensions between riparian states. The countries pursuing such projects argue that the new dams will enable them to generate renewable hydropower, enhance flood security, and increase water storage to buffer against varying availability. However, downstream countries frequently fear these same structures could be used to control or reduce the water flowing to them, placing their own water needs at risk.

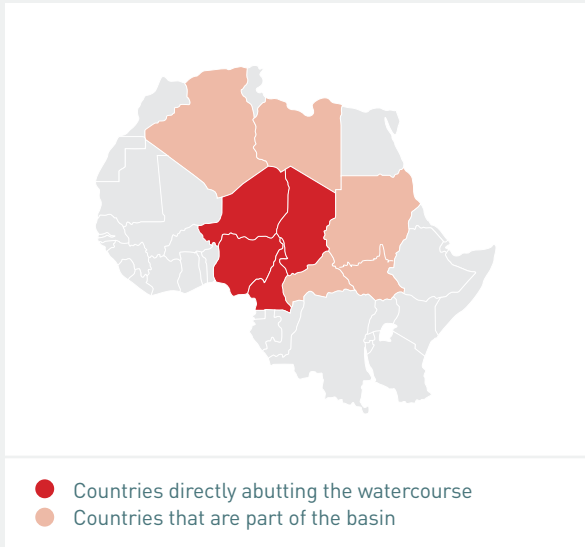


#### **Construction site of Xayaburi dam on the Mekong**

Dams have many potential benefits – producing clean energy, facilitating irrigation and controlling floods. Yet they are also regularly flashpoints for conflict in transboundary basins because downstream countries fear loss of control and water availability and/or disadvantages for fishing, sediment transport, etc.

## BOX 02

## THE LAKE CHAD BASIN

**Shrinking water ...**

Lake Chad – shared by Cameroon, Chad, Niger and Nigeria, but fed by rivers originating in Algeria, the Central African Republic, Libya and Sudan – is the most important source of water and hence well-being for more than 20 million people. Over the past decades, the lake has faced increasing environmental challenges due to unsustainable water use. Water scarcity (most obvious in a significant shrinking of the lake), erosion, desertification, salinisation, overfishing and the introduction of invasive species are – together with the consequences of global climate change – putting increasing pressure on people's livelihoods and riparian states' economic and political stability.

The Lake Chad Basin Commission (LCBC) was established in 1964 by Cameroon, Chad, the Central African Republic, Niger, Nigeria and Libya to institutionalise their general commitment to cooperation on water in order to enhance economic development. The LCBC is one of the oldest basin organisations, but its track record has so far been rather weak and water management in the region faces many challenges.

**... rising insecurity**

The lake basin has been a particularly tense region for a long time. Some of its bilateral and regional conflicts are directly related to water resources and the lake. The border between Chad and Nigeria, for instance, experienced various conflicts in the 1980s, resulting in a high number of deaths and increasing instability in the border region, which partly runs through the lake. Likewise, border conflicts between Cameroon and Nigeria have emerged regularly – not least related to the falling lake level, which has altered border lines previously defined on the basis of the lake surface. In addition, there have been numerous intra-state conflicts over the use of scarce resources, especially between different federal states in Nigeria competing for water resources and fighting over the construction of dams.

Continued resource scarcity and poverty have – among other things – led to fragility in the lake basin and provided incentives for some parts of the population to join armed ethnic groups, warlords or terrorists, further destabilising the region. These insecurities have been on the rise in the past years – most prominently with the emergence of Boko Haram, which is now threatening not only Nigeria but the entire Lake Chad Basin (The Economist 2014).

To address these increasing security challenges, in early 2014 the LCBC was asked to host a joint military task force of member states that will aim to address security problems such as terrorism, the arms trade and cross-border insurgencies (Kindzeka 2014). The task force will be mandated to patrol the Lake Chad region and conduct military operations against arms dealers and suspected terrorists.

It remains to be seen whether the LCBC, as a water management institution, will provide the right setting for living up to these expectations. In any case, the case of Lake Chad clearly demonstrates the strong linkages and interdependencies between more technical water resources management tasks and broader challenges of regional or even international security.

Wherever nations share common water supplies, their ability to meet their water needs will be interdependent. Yet fewer than half of the world's transboundary basins are subject to any formal agreement outlining how the resources are to be divided and managed (*Giordano et al. 2013*). There are even fewer water bodies with institutionalised cooperation: only 116 out of 276 transboundary basins have ever had a river basin organisation (RBO) (*Schmeier 2013*). Yet most experts agree that an RBO is a key institutional formation for cooperation, policy coordination, risk management, and conflict resolution. Such institutions have been identified as more important than any physical 'water stress' indicators for peacefully coping with rapid changes in a given basin (*Wolf et al. 2003*). This being said, the mere existence of a treaty is not enough to prevent conflict because such agreements often lack robust conflict management mechanisms; this is the case, for example, with the existing agreements in the Tigris- Euphrates basin (*Lorenz and Erickson 2013*). Even hitherto successful institutions may be at risk. The Indus Waters Treaty, for example, suffers from insufficient governance insofar as it contains no rules on how to adapt to the changes that climate change may bring about, and insofar as there is no integrated water management that could provide the necessary long-term solutions to rapidly growing scarcity (*Swain 2013*).

Beyond the weakness of institutional mechanisms and the question of what issues treaty terms do or do not cover – water quality, variability, conflict resolution, etc. – lies the issue of what parties are involved in the agreements. In both the Indus and the Tigris-Euphrates, the existing agreements do not include all riparians. This is particularly problematic in the case of the Tigris-Euphrates, where no tri-lateral accord brings together Iraq, Syria, and Turkey. Geographical incompleteness might undermine agreements' potential resilience and riparian states' ability to advance collective management in the face of climate change. Rising water demands and climate change-induced variability and uncertainty thus threaten the survival of existing water-sharing agreements while simultaneously making better, collective management more urgent.

The extent to which each country securitises water – i.e., transforms water into a key aspect of its national security whose protection justifies the use of extraordinary means – will depend on national perceptions of how the country will be impacted by climate change, both in absolute terms and relative to its (potential) rivals. Deteriorations in position – whether actual or perceived – may in many cases increase political stress and help fuel conflict.

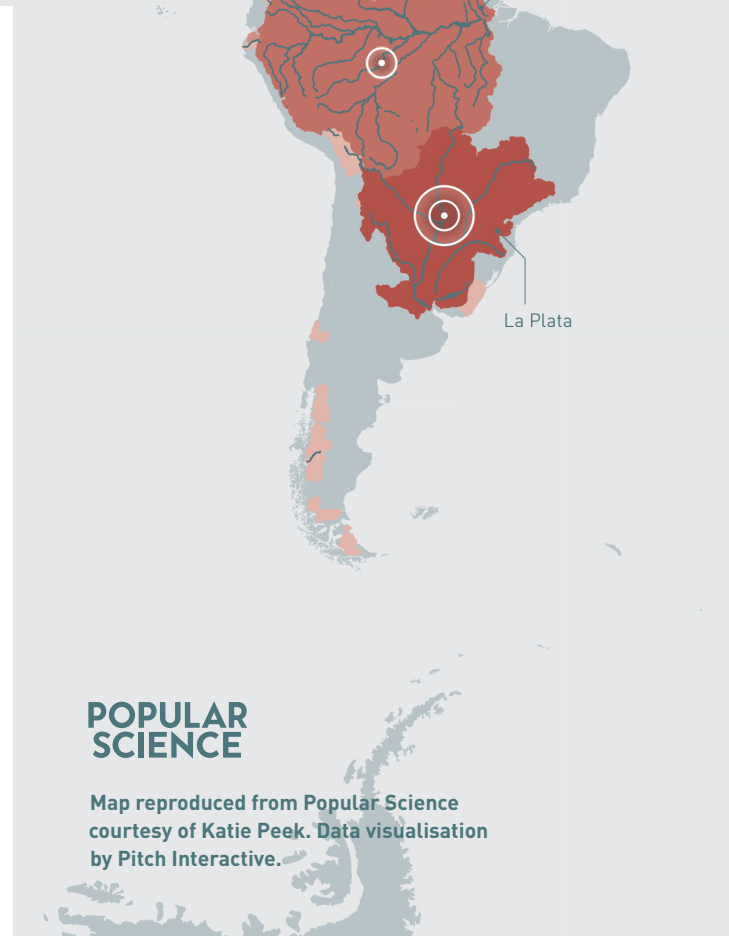
Even in the absence of clear-cut 'water wars' so far, there are strong links between water mismanagement, the impacts of climate change, and risks of social and political instability (see box 2; for an example of how this topic is entering foreign policy analysis, see *NIC 2012*). Such instability has the potential to contribute to both inter and intrastate conflicts, which in turn might become internationalised (see e.g. *Trondalen 2011*). With respect to the latter, the 1989 conflict between Senegal and Mauritania over the Senegal River is an example. What started as a local conflict between herders and farmers over decreasing water availability (at least partly caused by a hydropower project that altered the river's flow regime) turned into an international conflict between the two countries. As both countries deployed troops along the border, they broke off all diplomatic relations – except for those through the shared river basin organisation OMVS, which continued to act as a means of communication (*Schmeier 2013*). This brings us to the salutary role that shared waters can also play.

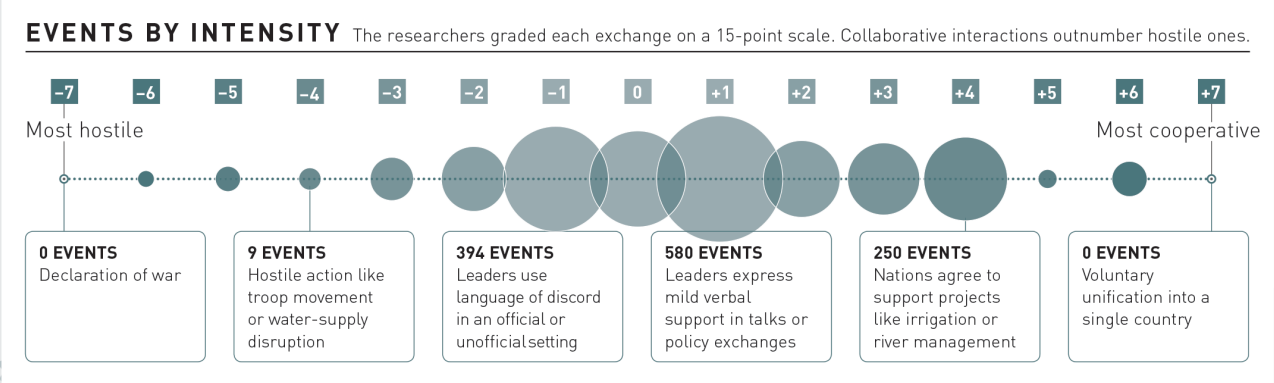
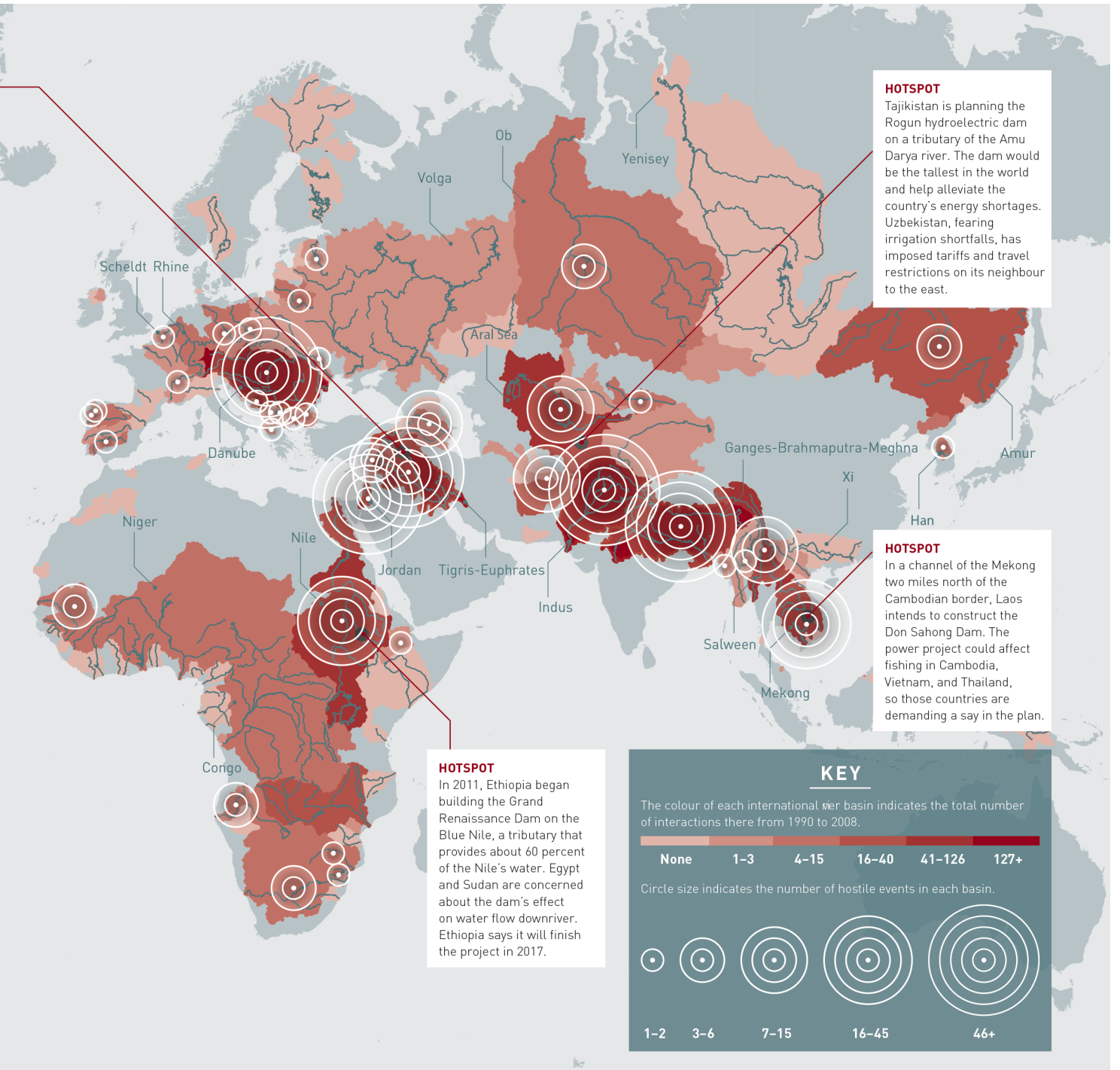
***There are strong links between water mismanagement, climate change, and social and political instability.***



**WATER: A MAP OF CONFLICT & COOPERATION**

The map displays nearly 2,000 incidents pertaining to conflict and cooperation in transboundary basins that took place between 1990 and 2008. The circles include another 200 disputes over resources beyond shared rivers during the same timeframe. Overall, cooperative events approximately outnumber conflictual events by a factor of two to one. Circle size does not automatically translate into conflict danger because the degree of hostility that they depict varies. More importantly, Wolf et al. (2003) showed that it is when external events overwhelm institutional mechanisms for coping with change that conflict becomes dangerous. The hotspots thus coincide with regions where resilient conflict resolution mechanisms (not separately depicted in this map) are absent. In the case of the Danube, for example, conflictive incidents were counterbalanced by the presence of strong incentives for cooperation, embedded above all in the process of European integration.





## 2. THE OPPORTUNITIES FOR COOPERATION

Foreign policy engagement on transboundary water governance is needed to contain the conflict potential of shared waters. Yet water may also present a 'bridging resource'. The need to cooperate on water management might (be used to) generate the political space necessary to address other contentious issues. It could thus serve as a tool for achieving positive spill-overs in terms of regional cooperation (*Conca and Dabelko 2003; see also box 03*). One example is the case of the Itaipu project between Brazil and Paraguay. The two countries could not agree on the border in the river, a certain stretch with various falls. In order to end this long-lasting

**Joint water management across borders can further regional cooperation.**

border conflict, in 1973 they agreed to build a jointly owned hydropower facility. Uncharacteristically for decision-making on hydropower infrastructure, this decision was taken by the two foreign ministries and then implemented jointly by both countries.

Another example of opportunities arising through cooperation on transboundary water is the improvement of relations between India and Bangladesh after the 1996 agreement on the sharing of the Ganges waters. Similarly, of the five multilateral working groups on the Middle East peace process, it was the working group on water that got furthest, even if cooperation on water is still insufficient (*Trondalen 1997*). Finally, the Indus agreement constitutes one of the few areas of continuous (if limited) cooperation between Pakistan and India. All examples show that water can serve as one of few paths of dialogue in otherwise confrontational relationships. Yet the latter three also imply missed opportunities in terms of extending cooperation on water to other issue areas.

The changes and uncertainty that climate change entails for many basins might bring about new opportunities for cooperation. Climate change has repeatedly been described as a 'threat multiplier' for unstable regions around the globe. The impact of climate change is likely to be felt primarily through the water cycle, reinforcing many worrying trends regarding water scarcity, salinisation, alteration of seasonal flow patterns, and flood risks. If climate change were to result in conflict, it would thus probably be over water. The political risks resulting from extreme weather events became apparent, for example, in the way fundamentalist forces were able to politically exploit government failures in Pakistan after the massive floods in 2010.

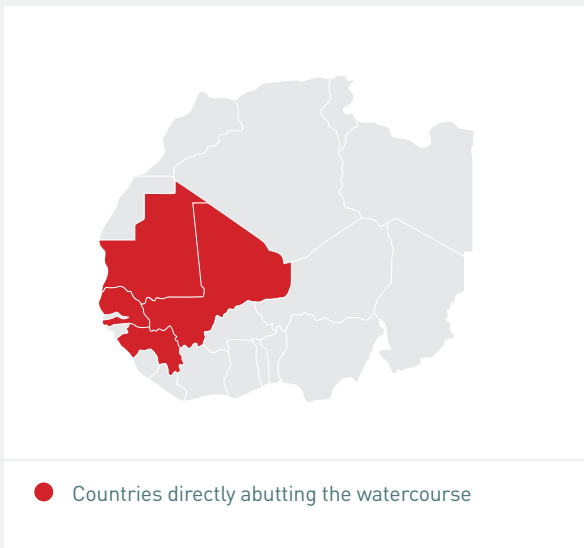
Yet extreme weather events may also open up new opportunities. Though hugely destructive, cyclone Nargis in 2008 arguably helped to bring change to Myanmar as officials came to appreciate that the foreigners who pressed for access for relief efforts were well meaning after all. A similar dynamic unfolded a few years earlier in the aftermath of the 2004 tsunami in Aceh. The extreme weather events that climate change is making more likely might have such positive side effects elsewhere, too, in part by drawing political attention to such regions. And whereas political progress in the presence of disaster might be a bitter blessing, preparing for possible disasters might release the positive potential of concerted political engagement without the attendant catastrophe. Adaptation to climate change might thus help secure the political engagement necessary to mitigate and resolve conflict. Beyond this form of disaster diplomacy, efforts to adapt to climate change can create further opportunities. As the latest IPCC report underlines, water is both the issue most affected by climate change and also the one through which most adaptation has to be managed, even for other sectors (*IPCC 2014*). New funds for adaptation and discourses that stress the need to address impending deteriorations in the supply and quality of freshwater may simultaneously help to address the current mismanagement of water resources (*Taenzler et al. 2013*).

Although currently 'climate is sucking water dry' in terms of financing, as one diplomat put it, the discussion about loss and damage from climate change is all about water. The (shared) threat of climate change might also 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 (Smith and Vivekananda 2007). 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.

***Climate adaptation finance should also be used to enhance resilience to conflict.***

### BOX 03

### THE SENEGAL RIVER BASIN



#### From unilateral vulnerability ...

The Senegal River is the second-longest river in Western Africa and forms a basin shared by Guinea, Mali, Mauritania and Senegal. The basin is characterised by a high variability in rainfall and river flow, both intra and inter-annually. Related floods and droughts have threatened riparian populations and states for many years and caused severe food shortages and obstacles to socioeconomic development more generally. At the same time, riparian states lacked the economic and financial means as well as the technical and human capacity to address these challenges and improve their water use and management, leaving the development opportunities provided by the river largely unexploited.

#### ... to achieving mutual economic gains through water cooperation

As a response to particularly devastating droughts in the early 1970s, the three downstream states (Mali, Mauritania and Senegal) decided to jointly engage in water resource exploitation projects that would exceed their respective unilateral capacities. To do so, they established the Organisation pour la Mise en Valeur du Fleuve Sénégal (OMVS), a supranational organisation charged with the development of the river's resources to support the economic development of its riparian states as well as economic cooperation and exchanges among them.

In the following years, the OMVS's efforts mainly focused on three sectors: irrigated agriculture, hydropower and navigation. Two dams were built, which increased the irrigated area and provided hydropower to the OMVS member states. However, the original targets in these sectors have not been reached. (Hydropower generation at Manantali Dam only commenced in 2002, 20 years after its construction began.) Moreover, the benefits of the work remain unevenly distributed among the participating countries, with most irrigation gains made in Senegal but not the other states.

Cooperation over shared water resources can hence generate economic benefits that riparian states might not be able to obtain through unilateral action. Promoting cooperation over shared water resources therefore not only contributes to conflict resolution in a direct manner, but can also improve development opportunities – ultimately providing the basis for long-term peace and stability.

### 3. THE CHANCE FOR DIPLOMACY

Multilateral and bilateral donors have facilitated and encouraged international treaties in many basins, along with the establishment of river basin organisations (RBOs) to support cooperative behaviour and contain conflict over shared waters. With the 1997 UN Convention on the Law of the Non-Navigational Uses of International Watercourses, the international community has also created a framework agreement that can serve as 'model legislation' for basin-specific agreements. The World Bank-sponsored Indus Waters Treaty, the Mekong River Commission and the Nile Basin Initiative are probably the best known RBOs set up to promote cooperation between riparian states. Many RBOs continue to be financed primarily by international donors.

Besides their importance for water-related development goals, development agencies often justify these investments by emphasising how transboundary water management institutions can prevent conflict and

***Even small investments in trans-boundary institutions can yield considerable 'peace dividends'.***

promote their political agenda of facilitating deeper regional cooperation. The logic underpinning this argument is compelling: to the extent that non-cooperation might lead to costly conflicts, very limited investments into transboundary institutions can yield considerable 'peace dividends' in the form of avoided hostilities (Trondalen 2013). Since the

difficulty of resolving conflicts rises as more stakeholders become involved, preventing these conflicts from arising in the first place is far more efficient than interventions at a later stage.

The rationale above constitutes a convincing call for engagement in transboundary basins. Yet, by its nature, the technical work on the ground is rarely geared towards directly realising political objectives. The 'low politics' of technical and development cooperation do not automatically add up to the 'high politics' of pursuing conflict prevention and regional integration (Conca et al. 2005; Kramer 2008). 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). In seeking to support and build on technical collaboration, greater engagement by foreign policy makers could provide added value in three ways:

1.

**First, in contrast to technical experts and/or development agencies, foreign policy makers have the mandate to get involved in the political issues that often underlie water conflicts and to help mediate disputes, especially where these issues pertain to inter-governmental conflicts.**

2.

**Second and related, foreign policy makers can play a helpful role through their political leverage and ability to get access to the highest political levels. Few foreign ministers or heads of government want to discuss the political challenges of bi- or multi-lateral cooperation on transboundary waters with 'technical' experts. Yet successful water negotiations often necessitate substantial compromises across several sectors, which can only be made at the highest level, not at the level of the water or development policy minister.**

3.

**Third, foreign policy makers can help host country decision makers to defend international compromises domestically. They might be able to offer additional political gains in other issue areas, draw on their public diplomacy resources to directly intervene in the debate, or help government counterparts to couch these compromises in domestically palatable discourses.**



In asking foreign policy makers to more systematically consider engaging on transboundary water, this paper is primarily addressing the international community at large. It thus takes the perspective of 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. Yet this is not to imply that primary responsibility for transboundary basins lies with these external actors. In fact, they can only support the riparian governments that are the direct actors and vehicles of water conflict and cooperation. The latter's foreign policy makers are thus crucial to "adding value" in all of the three manners mentioned above. Moreover, they are the necessary interlocutors of foreign policy makers from the international community. While they are usually part of the political struggles that complicate greater intra-basin cooperation, they can play a critical role through their ability to mediate disputes and frame and defend compromise and cooperation. Thus, many recommendations also – and often primarily – apply to the foreign policy makers of the riparian countries within a particular basin (which may overlap with the 'international community', as is notably the case with of India and China with respect to the basins that they do not share).



#### **Bridge in Vang Vieng, Laos**

Although shared waters have spawned conflicts, they also present diplomatic opportunities. In recent decades, water has more often than not been a 'bridging resource'.

## BEWARE THE RISKS

Foreign policy makers can play an instrumental role in nudging governments into cooperative behaviour, and/or in helping to extend the latter. Yet the advantages of greater foreign policy engagement on transboundary waters should not be taken as a plea for foreign policy makers to always barge in. Many countries resist (external) engagement on water-sharing issues. For example, India has been reluctant to allow the involvement of external actors in its bilateral discussions with Nepal and Bangladesh on the Ganges, and Turkey has resisted US involvement (and any other external involvement, for that matter) regarding the Euphrates-Tigris basin.

There are also risks insofar as foreign policy makers might make things worse by inserting (perceived) outside agendas, whether it is balancing against rivals, putting environmental concerns above economic development, or promoting economic self-interest. Greater US engagement in the Mekong basin (for example through the Lower Mekong Initiative) has probably contributed to keeping China away from the Mekong River Commission. Moreover, foreign policy makers might in fact use water as an 'outside' tool in other areas. That the upstream country will use its 'control' of water to leverage other foreign policy issues is what the downstream riparian often fears. Some Indian strategists, for example, have suggested that India should use its position on the Indus to pressure Pakistan on terrorism issues. Greater foreign policy engagement might thus foster rather than reduce the securitisation of water resources.

***Greater foreign policy engagement might foster rather than reduce the securitisation of water resources.***

Even successful foreign policy engagement – as measured by an intergovernmental agreement to cooperate – may fall short because it might paradoxically stoke conflict at the subnational level as societal groups that feel disadvantaged by or excluded from international deals may object (*Conca 2012*). The 1960 Indus agreement has thus created a number of internal conflicts in India and Pakistan. In electricity-starved Jammu and Kashmir, for example, the state legislature in 2002 called for a review and annulment of the treaty in a near unanimous resolution because the Indus Waters Treaty assigns the three rivers running through Jammu and Kashmir to Pakistan (*Swain 2013*). Intergovernmental cooperation is particularly problematic in fragile states where (trust in) the rule of law is weak. For example, Chinese dams in Myanmar have led to the displacement of ethnic minorities, which in turn may feed into armed conflict in adjacent regions (*Peel 2014*).

Intergovernmental deals thus need to involve relevant sub-state stakeholders and foster institutions where their interests are adequately represented because otherwise they might prove counterproductive in terms of conflict prevention (*see also box 04*). In short, neither foreign policy engagement nor international cooperation is a panacea. Yet there are many instances where greater engagement on the part of foreign policy makers, and greater cooperation between the foreign, development and technical communities, could help attenuate conflict over shared waters and foster greater regional cooperation.

## 4. WATER GOVERNANCE IS ALSO POWER POLITICS

Current efforts to support international collaboration on transboundary waters are characterised by a relative underinvestment in the diplomatic pillar as compared with the techno-managerial pillar of co-operation. The international community's response to the issues surrounding internationally shared river basins has focused on the optimisation of water use (*Conca 2013*) and the encouragement of riparian states to sign international agreements and subsequently form international river basin organisations (*Schmeier et al. 2013*). The underlying idea has been to de-politicise transboundary water management issues, with a view to expanding the collective pie that can be shared rather than haggling over its distribution.

***Currently, there is too little investment into diplomatic efforts.***

Yet relying on technically focused management institutions is not enough because basin management is often eclipsed by basin politics. Focusing on overall optimisation of water management assumes that all parties are genuinely interested in identifying and implementing the 'most rational' solution, in achieving compromise and absolute gains. Such a technical-economic mindset should indeed be the objective of third-party involvement in transboundary water governance issues. Yet we should not assume that all parties can easily be convinced to adopt this mindset at the outset. More fundamentally, we should not assume that a single, optimal, 'most rational' solution in fact exists.

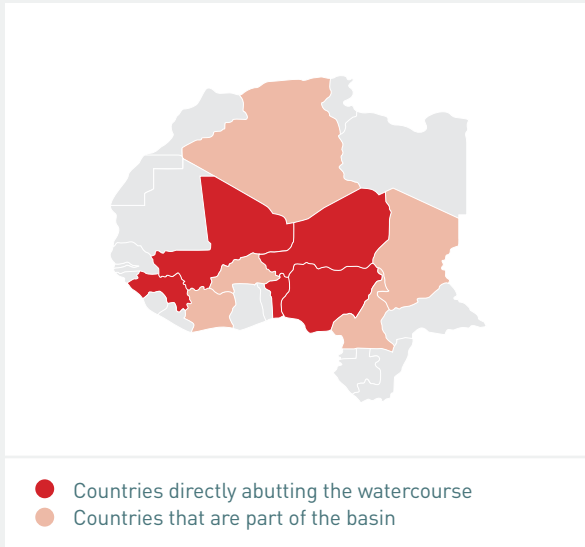
Countries and the constituencies within them may legitimately disagree as to which solution brings the 'greatest overall benefit'. This is because different solutions embody different trade-offs between benefits (hydropower generation, flood protection, irrigation) and – even more problematically – trade-offs or conflicts between different subjective values such as security, justice and fairness. When providing the benefit of flood control, how much risk is acceptable? When providing the reservoir for the benefit of water storage, which landscapes, or species, or ways of life must be protected and which may be sacrificed? When siting the dam for the benefit of hydropower, how many communities can be required to leave their ancestral homes? When designing the procedures to make these decisions, who may decide?

These questions simply do not have a single 'most rational' answer. Nor is it clear that the basin is always the appropriate scale on which to maximise utility. When both food and power produced within the basin are routinely exported beyond the basin (and food and power produced beyond the basin imported to it), why should these benefits be optimised at the basin level rather than another scale? A techno-economic approach is hence often insufficient as a means to achieve a utility-maximising mindset. Technical solutions alone cannot transcend the logics of domestic politics, relative gains or securitisation. Consequently, the 'ideal' of maximising benefits and benefit sharing should be the goal of third-party involvement. However, third-party foreign policy makers should not proceed on the premise that there exists just one technical-economic, utility-maximising solution that would achieve the greatest overall benefits for all (if only the parties were 'rational' enough to recognize the one true answer).

***Technical solutions alone can rarely resolve political problems.***

## BOX 04

## THE NIGER RIVER BASIN

**Severe challenges ...**

The Niger River Basin is the largest river basin in Western Africa and it demonstrates the influence of water scarcity on the stability of an entire region. It is inhabited by more than 100 million people, most of them living in severe poverty. Part of the explanation for such severe development challenges lies in the high water scarcity some parts of the basin are facing and the droughts that come with it, leading to drinking water shortages and related health problems as well as severe food security problems and limited opportunities for agriculture, employment and other economic activities.

**... but beware of only displacing the problems**

These challenges are increasing due to population growth and the effects of global climate change. They have led to severe economic and political crises in the Niger River riparian states (Benin, Guinea, Mali, Niger, Nigeria) as poverty and a lack of socioeconomic opportunities leave parts of the population under the impression that they have little choice than to join extremists groups and fight for their [perceived] needs. Most recently this can be seen in the uprising in Mali and the terrorist activities of Boko Haram in Nigeria, which threaten stability nationally and regionally.

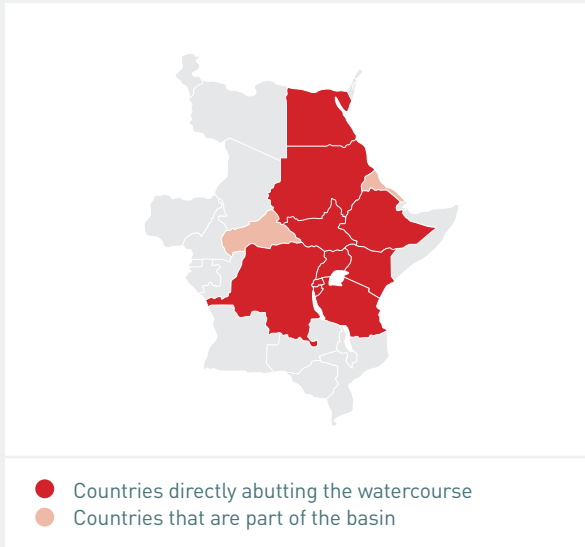
To respond to these challenges and improve the living conditions of people in the upstream parts of the basin (especially in Guinea, Mali and Niger), some riparian countries have engaged in the construction of dams for irrigation, water storage and regulation as well as hydropower generation. The most well-known projects on the agenda are Fomi (Guinea), Taoussa (Mali) and Kandadji (Niger), with Fomi, for example, being actively supported and financed by the international community, namely through the World Bank's Cooperation in International Waters in Africa (CIWA) Trust Fund.

While they offer potential economic benefits, these upstream projects might negatively affect opportunities for water use downstream – for example by decreasing the available flow for existing dams on the Niger River in Nigeria, the most downstream country. With Nigeria itself being threatened by extreme poverty and extremist movements, a further decrease in water availability and hence socioeconomic development opportunities could have disastrous consequences, not only for the country itself but for the entire region. Thus, this example points at the dangers of focusing on water development in only one part of a basin. Without a political perspective on the regional situation, attempts to address poverty and instability might well help foment it elsewhere.

In short, technical solutions alone can rarely resolve political problems. In the case of the Nile, for example, Egypt has historically taken most of the Nile's waters (*see box 05*). Concurrently, the country's water reservoir, Lake Nasser, is losing far more water to evaporation than a hypothetical reservoir in Ethiopia would. Yet an external actor seeking to ease tensions in the basin by focusing on saving water may easily be perceived by the Egyptian government as hostile to its interests because conserving water might seem to imply putting the onus of adaptation on Egypt's political economy (in particular regarding its water-intensive agricultural practices), as well as a loss of control by relocating a potential reservoir beyond its borders. To achieve real progress, any outside support in identifying possible benefits of (closer) cooperation therefore needs to be carefully embedded in complementary diplomatic and political engagement (*Trondalen 2010*).

## BOX 05

## THE NILE RIVER BASIN

**A volatile situation ...**

The Nile basin counts among the most important river basins globally, comprising eleven riparian countries. Although the Nile's annual flows are smaller than those of other internationally shared rivers, they are essential and irreplaceable for Egypt's land and economy. In defending its claims to the biggest share of the Nile's waters, downstream Egypt invokes historic rights and colonial-era treaties to which upstream riparians were not (sovereign) parties. These upstream countries in turn insist on their right to use a greater share of the Nile's water for irrigation and hydropower.

**... persisting despite strong international engagement**

Recognising the potential benefits of cooperation, in 1999 the Nile basin countries founded the Nile Basin Initiative (NBI). This mechanism, which sought to open up new investment opportunities through 'benefit sharing', was supported by numerous donors that were coordinated by the World Bank. As a transitional mechanism, the NBI was intended to result in a framework agreement on a permanent river basin organisation. This Cooperative Framework Agreement (CFA) has meanwhile been signed by upstream riparians, but has been stalled due to the objections of downstream states Sudan and especially Egypt. Despite earlier 'NBI successes' at both the technical and political level, the initiative thus risks resulting in confrontation rather than the hoped-for closer cooperation (*IDS 2013*).

For a long time, Egypt's relative power vis-à-vis its upstream neighbours and their lack of financial resources prevented their construction of large dams. Demographic and economic developments are, however increasing the pressure on upstream countries to develop their water resources. This is most relevant in Ethiopia, which is where some 86% of the Nile's volume originates (*Swain 2011*).

These changes are moreover changing the balance of power between upstream and downstream riparians. In February 2011, at a moment when Egypt was experiencing great political instability, the Ethiopian president announced the construction of a new 6000 MW dam, the Grand Ethiopian Renaissance Dam (GERD), on the Blue Nile. Egypt's government responded with belligerent rhetoric, raising the possibility of violent conflict and serious doubts about future cooperation in the basin (*IDS 2013*). This development in turn challenges foreign policy makers to find a way out of the current impasse in the interest of regional stability and development.

Although disputes over water often represent real conflicting interests, they are also frequently used as an instrument for other political ends. To return to the Nile, conflict over water also serves as an instrument of identity politics. Egypt's and Sudan's resistance to the revision of colonial-era treaties on water division has led upstream countries to use the issue to bolster African solidarity against Arab countries. Behind these alliances lurks a struggle between the Egyptian and Ethiopian governments as to who enjoys pre-eminence in the region (*IDS 2013; von Lossow 2013*).

This dynamic was insufficiently taken into account by the donor community, whose approach reflected the somewhat naïve belief that once the technical opportunities and potential ‘benefits beyond the river’ (Sadoff and Grey 2002) became clear, political agreement would be much easier to reach. Technical support can of course be immensely helpful for reaching agreement, but is by itself often insufficient. The donor community’s lack of political perspective was evident, for example, in an imprudent letter drafted in 2009 in response to political manoeuvring between basin governments. The letter’s call for an ‘inclusive agreement’ was interpreted by several riparian governments as partial and supportive of Egypt’s stance (Doya 2009). It would be grossly unfair to blame the resulting deadlock over the planned Comprehensive Framework Agreement (CFA) on such missteps on the part of the donor community, but greater diplomatic sensitivity regarding intra-basin politics could have helped to mitigate the fall-out.

Politics is key in other basins, too. In South Asia, both Pakistan and Bangladesh have been quick to blame India for ‘stealing water’ from the Indus and Ganges basins (see box 06). With respect to the Indian-built Farraka barrage, for example, which is used to divert Ganges basin water that would otherwise flow through Bangladesh, the issue has repeatedly been raised when either Bangladeshi or Indian domestic politics needed a culprit or diversionary conflict (Swain 1996).

Similar dynamics appear in other international basins. If there is political interest in creating or preserving conflict or deflecting blame (or even just a habitual prioritisation of thinking in terms of the national polity), technical solutions to water governance issues are obviously of little help. The political context must become more accommodating for technical solutions to be helpful, which in turn demands political-level engagement of would-be interveners. Simultaneously, such dynamics challenge technical experts to make their proposed solutions as politically palatable as possible.

Basin politics are often compounded by power asymmetries, begging the question of how to deal with riparian hegemony such as Turkey, Egypt, India and China, but also Nigeria or South Africa. These hydro-hegemony frequently refuse to be drawn into cooperative multilateral basin fora, preferring to deal with

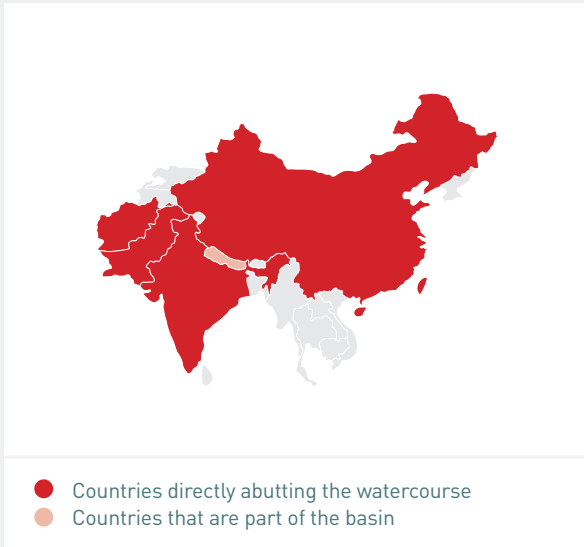
***Basin politics are often compounded by power asymmetries.***

weaker partners individually on a bilateral basis. Their absence from RBOs might in some cases help these institutions to function, especially where their flow contribution is not crucial for the river basin management. Yet because these hegemony loom large in the respective river

basins, the international community’s focus on the river management organisations falls short in political terms where a comprehensive settlement is the objective.

## BOX 06

## THE INDUS RIVER BASIN

**An inauspicious beginning ...**

The Indus basin is the most often-cited example of international cooperation on water in an otherwise conflictual context. When India and Pakistan partitioned violently in 1947, the basin was divided such that India controlled the Indus's headwaters and much of the existing water infrastructure necessary for irrigation while Pakistan's predominantly agrarian economy depended on its waters.

**... but a remarkable though incomplete success**

Given the war of independence and the ensuing need to resettle millions of refugees within the basin, negotiations over the Indus waters proved difficult but eventually succeeded due to both states' interest in foreign aid for developing their water infrastructure and their dependence on reliable access to water (*Zawahri 2014*).

With the help of the World Bank's good offices (and coordination of funding for the development of Pakistan's water infrastructure), in 1960 Pakistan and India concluded the Indus Waters Treaty. The bilateral Permanent Indus Commission – which is tasked with implementing the treaty and negotiating any issues that arise – has fulfilled its requirement to meet every year, even during periods when diplomatic relations between the two states had been broken off.

In view of the circumstances, this history of cooperation certainly constitutes a remarkable success story (*Zawahri 2014*), even if the two countries continue to disagree over the development of water infrastructure. However, given that demographic developments and climate change are expected to exert huge pressures on the Indus basin's water resources, there is a need (and considerable scope) for closer cooperation so as to move from a river-sharing agreement to the integrated development that will be better suited to respond to the coming social, economic and environmental demands (*Swain 2013; Indus Basin Working Group 2013*).

RBOs themselves often lack the mandate and clout to address these political issues. To be sure, this lack of political leverage is not inherent or automatic: during the Mauritanian-Senegalese conflict mentioned before, the only means of exchange between the conflicting parties was the respective RBO – the OMVS – which engaged even on non-water related issues. Yet the important role that the OMVS was able to play only underscores the importance of adopting a broader, political approach to basin governance rather than focusing on facilitating technical cooperation mechanisms only. Politics may be harder when bringing the regional hegemon in, but there is no way to manage water issues in the long run without them. This implies the necessity of stronger political engagement: transboundary water governance is also power politics, and attempts to institutionalise cooperation often need the political support that foreign policy makers are well placed to provide.

## II. ENHANCING HYDRO-DIPLOMACY

So what should the international community do? As the preceding analysis argues, foreign policy connected to transboundary water governance has the following objectives: facilitating the containment and resolution of conflicts in the short term, managing resources so that conflicts are avoided in the longer term, and harnessing the water cooperation mechanisms for the purpose of stronger regional integration. Progress on these fronts will face many challenges; three in particular stand out:



### FACILITATING AGENCY

First and most fundamentally, there is a lack of agency at the international level. Our call for more agency is not about creating new organisations, but about establishing an institutional setting that connects pivotal actors and reinforces and complements existing frameworks, initiatives and expertise to coordinate and execute political action. Its purpose should be to ensure systematic early warning and to support coordinated action to prevent conflicts, facilitate timely responses to emerging crises, and build the appropriate institutions for sustainable and self-reinforcing cooperation.



### IMPROVING COORDINATION

Second, there is a need for a more coordinated and strategic approach among external actors. They need to engage jointly, with a particular focus from whichever actor has the most leverage in a given situation. The need for closer cooperation applies not only to cooperation between, but also within governments. In particular, the international community should more vigorously pursue the potential synergies between 'high' and 'low' politics.



### ENABLING ACTORS

Third, there are a number of capacity-related problems that hinder greater cooperation on transboundary waters. The international community and individual donors can thus undertake a number of specific policies to develop institutional, human, and financial capacities and to enable basin stakeholders and external actors to contain the risks and harness the opportunities of engaging on transboundary water governance.



## 1. FACILITATING AGENCY

Although (and because) there is a multitude of international stakeholders whose activities impact on transboundary waters, we simultaneously face a lack of ‘agency’. This is not primarily about an agency, but about the state of being in action and of exerting influence. In other words, what is needed are effective international structures that are able and willing to systematically address the present and future challenges and opportunities of transboundary waters. There are numerous international institutions that deal with various aspects of shared waters, but their lack of individual political clout and fragmentation (across UNEP, UNDP, UN-Water, UNESCO including UNESCO IHP, the UNECE Water Convention plus other regional conventions, even when looking only at the UN system) prevent them from adopting a convincing coordinating role (for a more comprehensive overview, see *van Genderen and Rood 2011*).

There is no single institution charged with, and responsible for, systematically and proactively pursuing water diplomacy – be it in terms of conflict prevention, acute crisis management, or conflict resolution. This is not to imply that a single, unitary actor would provide the solution. On the contrary, such an organisation may exacerbate the problem since charging one international organisation with the responsibility for conflict prevention and management would very likely require widespread international accord on the appropriate trigger for intervention, possibly leading to a least common denominator approach. The existence of multiple and divergent institutions and stakeholders with varying levels of interest and influence dealing with various aspects of transboundary waters allows for the possibility of multiple triggers at different levels of action and intervention.

How can this lack of agency and institutional capacity be overcome? This section starts out by analysing three aspects of strengthening international agency: the ‘who’, the ‘where’, and the ‘how’. The ‘who’ discusses the shape and institutional embedding of any prospective institutional platform for international hydro-diplomacy. The ‘where’ looks at the shape and context for engagement in specific basins, whereas the ‘how’ examines the timing and appropriate objectives of potential interventions. The section then analyses what is arguably the biggest diplomatic challenge for external actors seeking to foster greater transboundary cooperation on shared waters, namely the question of how to engage riparian hegemony. Overall, it advances four arguments, which the subsequent pages set out in greater detail:

1.

**Foreign policy-makers should seek to connect and strengthen existing institutions for coordination so as to be better able to facilitate political processes in transboundary basins. These networks should go beyond donor coordination to allow for concerted foreign policy approaches.**

2.

**Prospective interveners in transboundary basins need to beware of the inherent difficulties that often necessitate long-term commitment, selective engagement and sometimes preparedness to bow out after years of effort for the sake of preventing a retrenchment of inequitable or politically counterproductive results.**

3.

**Prospective interveners should focus on achieving a basic political settlement between the key parties, if need be at the expense of a more comprehensive settlement.**

4.

**The asymmetric distribution of power prevalent in many transboundary basins underlines the need for diplomatic instruments beyond building basin institutions and promoting international water law. This is particularly true when it comes to engaging riparian hegemony that remain reticent with respect to multilateral engagement.**

## AN INSTITUTIONAL PLATFORM

***There is no established institutional home for global engagement on transboundary water issues.***

There is no established institutional home for global engagement on transboundary water issues that could credibly claim to enable systematic and proactive hydro-diplomacy. In an ideal world, we would have an international actor that transcends the various (national, bureaucratic, ideological, etc.) interests that external actors bring to the table. Moreover, that international actor would combine legitimacy and leverage in the basin in question with the political will to engage. In practice, however, these properties often do not coincide, as powerful governments lack legitimacy (and/or the political will to engage as impartial mediators) and NGOs, international organisations or other third parties lack leverage.

Theoretically, one way to address the lack of agency would involve endowing the UN Secretariat with the mandate and capacity to engage in systematic hydro-diplomacy. The UN Secretariat, however, already has extensive responsibilities (combined with considerable resource and bureaucratic constraints) and may thus not be best placed to take on these tasks. Its mediation team is of course on call also for water-related conflicts, but may not be called upon. It is, in any case, primarily targeted at acute crises rather than long-term proactive engagement, and therefore only suited to one aspect of the necessary engagement. Moreover, even the UN Secretariat will in many cases find it difficult to exert the required leverage, unless it is backed by states that have both influence and legitimacy in a basin – and are willing to put these at the mediators' disposal. Given the diversity of the various transboundary basins and their attendant politics, it is moreover questionable whether any one institution would be best placed to engage the different stakeholders. The absence of one designated international actor may thus turn out to be advantageous insofar as it allows for a more differentiated approach in terms of which external actors engage. However, in order to allow for systematic engagement, these external actors need to create an institutional setting in which to coordinate political action.

The demand for an international institutional platform dedicated to supporting transboundary water issues has been spelled out before (*ODI 2001*). With UN-Water, the UN system has established an inter-agency mechanism that aims to coordinate other UN agencies working on water issues. However, given its limited resources, mandate and standing as a 'mechanism', UN-Water hardly has the ability to play a role in coordinating proactive hydro-diplomacy. Yet a prospective institutional platform should in some way be attached to the UN system and constitute a partnership between the main players in this field. It could be tasked with promoting, coordinating and supporting relevant initiatives, in fields such as standards for data collection and dissemination, monitoring of process developments, leveraging financing; perhaps it could even serve as a source of arbitration. This would allow the institution to engage in proactive hydro-diplomacy at all stages, from conflict prevention to crisis management and conflict resolution.

A similar institution, the Water Cooperation Facility, was proposed by UNESCO and the World Water Council in 2003. The initiative included the Permanent Court of Arbitration and the Universities Partnership for Transboundary Waters and aimed to provide a range of services, including technical and legal advice, training in water negotiations, conciliation, fact-finding missions and the provision of "good offices" or favourable conditions for high-level negotiations. The establishing process, however, stalled after two years of consultation as it lacked linkages to ongoing processes and political support from other UN organisations and bilateral donors (*Carius 2005*).

More recently, a platform with similar objectives was created in 2010 under the UNDP's umbrella and hosted by the Stockholm International Water Institute (SIWI). The Shared Waters Partnership (SWP) provides technical, process and financial support to combine both diplomatic and development initiatives aimed at enhancing water cooperation and to prevent transboundary water-related conflicts. By supporting and coordinating such joint efforts, the SWP may become a nucleus of the necessary agency on hydro-diplomacy. To achieve this, it will need to build up sufficient demand from both conflicting states and major donors such that the key stakeholders are interested in proactively using the SWP as a platform and tool for their engagement on hydro-diplomacy.

In the absence of an established international platform willing and able to take on this task, an informal network of policy makers engaged in transboundary water issues could seek to fulfil a similar role and assign both emerging conflicts and conflict resolution opportunities to an appropriate (coalition of) actor(s). Whereas the legitimacy of such a network would benefit from being linked to the UN in one way or another (drawing perhaps on the Group of Friends of Water, an informal voluntary association of likeminded countries in promotion of the UN water agenda), it might also gain from being able to draw on informal links to the G7 or G20 formats, so as to ensure that powerful external actors do not end up working at cross purposes. As a complementary step, the European Union, which encompasses a significant subset of third-party actors in this field, could consider establishing a similar network. In fact, the July 2013 EU Council conclusions on water diplomacy provide a good mandate to that effect. This network could draw on the numerous engagements of the EU and its member states as identified in the EU water security mapping initiative. It can, moreover, build on existing donor coordination frameworks such as the EU Water Initiative and its various working groups.

As argued before, such coalitions should also involve foreign policy makers because donor agencies alone might lack the mandate, the leverage, and sometimes the self-interest to give the appropriate signals. In the EU context, this might involve drawing on frameworks such as the Green Diplomacy Network, which connects foreign policy officials working on international environmental issues. This interest in seeing foreign policy makers getting involved systematically might seem self-evident. However, senior diplomats from some G7 foreign ministries indicated that they considered topics such as the Nile Basin Initiative an issue for their development agencies to deal with, and that they had never discussed them with their G7 counterparts. Even at the donor level alone, there is currently no coordination on transboundary water issues at the global level – although there are of course numerous coordination forums for individual basins.

***There is currently no coordination on transboundary water issues at the global level.***

## SELECTIVE ENGAGEMENT

Depending on the political context, the appropriate coalition for taking action in a specific basin could feature various formats. In some basins where particular donors enjoy influence and legitimacy, a bilateral mediation effort might be promising. One example is the US' role in the Jordan River basin. In other cases, a more indirect role of 'leading from behind' might be more effective if waving certain flags would arouse suspicions. Interested outsiders may thus task the UNDP, NGOs or other third parties to mediate on their behalf and, with their support, in formats that perhaps comprise a direct bilateral track as well. Whatever the setting, it is important to avoid opportunities for 'forum shopping', which can result in the parties to the conflict getting stuck in protracted tactical games.

Moreover, using water for political purposes is fraught with the danger of diplomatic missteps that can easily block progress for a long time. The difference in time horizons is important here; water infrastructure planning often spans decades, whereas diplomats change posts every three to four years. Mediators

***The instrumentalisation of water management for political ends is both difficult and risky.***

often need years to win the trust of stakeholders, as a precondition to serious negotiations. The attendant prerequisite of long-term commitment grates against the incentives for foreign policy makers to shift priorities and political capital according to the demands of the crisis of the day. Thus, the instrumentalization of water management for political

ends on the part of the international community is both difficult and risky. Therefore, a consolidated approach requires the sort of international network for risk management and policy coordination (called for above) that can safeguard consistency and credibility. This is not to say that the network itself should lead the negotiations, but that it could help build trust and understanding among interested outside parties and provide political backing for the mediators.

A call for greater foreign policy engagement also raises the question of the appropriate trigger for intervention. Should diplomats act (only) on an invitation from all basin states, from one (group of) riparian(s), or on their own initiative? As always, context matters. An invitation from all concerned parties is of course the ideal backdrop to external involvement, but it will likely be forthcoming primarily in cases where basin countries seek international support to be able to develop their shared water resources for increased supplies, such as in the case of the 1960 Indus Waters Treaty. Limiting engagement to these cases would entail a selection bias for comparatively easy interventions, where host country financial interests imply significant donor leverage. Clearly, the international community should support such ventures, but that leaves questions about the hard cases unanswered. If an invitation originates from only a sub-group of states in the basin, the respective external actor should evaluate whether its intervention would help foster agreement across the basin (assuming this is the objective) or risks a backlash from the remaining basin states.

In case of the latter, the appropriate response may be to turn down any formal role, redirect the requesting authorities to another mediator more widely perceived as impartial, or to prompt them to broaden the actors invited for mediation so as to balance perceived partiality. Intervening without the request from basin governments may sometimes be appropriate and helpful, but the respective external actor's appetite for risk would have to be substantially greater. In some cases, the external party might have to work for years to gain the trust of the various parties involved only to conclude that a solution is not politically feasible. Prospective external interveners should in any case seek to assess whether there is potential political space for any prospective deal and be fairly confident that their intervention would be unlikely to cause harm to intra-basin politics.

## HOW TO ACT

The lack of agency not only relates to the question of who should act, but also to the question of when action should be taken. A crisis may be harder to diffuse once it has 'gone public' and positions have hardened, yet simultaneously it is difficult to muster sufficient political energy and local ownership for setting up anticipatory crisis management mechanisms. For example, had the Rogun Dam that is currently being built in Tajikistan been developed cooperatively with downstream Uzbekistan, it could have created benefits for both countries. Yet instead of becoming a potential catalyst for greater cooperation, the Tajik government's unilateral announcement (in the context of tit-for-tat measures by both governments) led to public condemnation, and the two sides have remained locked since. Preventing similar dynamics elsewhere necessitates greater awareness of the importance of transboundary water governance among high-ranking foreign policy makers, so that they can seek to intervene before it is too late.

High-level engagement is necessary, but not sufficient. Many of the challenges of transboundary water governance – quality, control and the allocation of variable water flows – are long-term. Since not all future challenges can be foreseen, in particular when it comes to exogenous shocks such as climate change, it is crucial to establish cooperative institutions that are sufficiently resilient and ideally self-reinforcing (*Wolf et al. 2003*). The end game of solving conflicts over water is thus building the appropriate institutions to safeguard and extend cooperation.

***The end game of solving conflicts over water is building the appropriate institutions.***

This in turn raises the question of how these institutions should be designed. For some time, international actors have aimed to achieve comprehensive agreements for an entire basin, but the latter have frequently proven elusive. Often there are either states unwilling to (constructively) engage with other basin countries on a multilateral basis, or agreement can only be achieved regarding specific issue areas. We therefore frequently face a 'patchwork quilt' of institutional arrangements such as on the Nile basin.

Yet the perfect must not become the enemy of the good. It is better to reach a basic agreement between Egypt and Ethiopia on the mutually beneficial use of Blue Nile water than to pursue in vain a divisive and perhaps ultimately unachievable comprehensive agreement on the entire Nile basin. Balancing such options comes back to the need for a coordinating institution in which such decisions could be weighed and taken collectively. In the current landscape, the international community may instead split on the question of the Comprehensive Framework Agreement for the Nile basin: some donors may end up supporting it because it was their development money that made it possible, even if it is politically counterproductive in its divisiveness.

## ENGAGING RIPARIAN HEGEMONS

The lack of a designated agent to address questions of transboundary water cooperation is particularly palpable when it comes to engaging riparian hegemony. These hegemony often do not participate in the multilateral basin management institutions, but their shadow clearly looms large. The greatest challenge in this respect is the emerging role of China. China has become the biggest stakeholder on transboundary water issues, both through its control of the upstream waters of key international basins (such as the Brahmaputra, the Mekong or the Salween) and its economic, financial and political engagement regarding water infrastructure (and agriculture) in other countries. This external activity is most pronounced in the aforementioned basins in South East Asia (where Chinese-financed dams on the Mekong in Laos, for example, might have potentially damaging impacts on Cambodia and Vietnam downstream) but has effects far beyond (*see boxes 07 and 08*).

China's traditional emphasis on sovereignty and non-intervention has translated, in the water domain, into an unwillingness to sign onto multilateral legal commitments such as the 1997 UN Convention on the Law of the Non-Navigational Uses of International Watercourses. Together with Turkey and Burundi, it was also one of only three countries that voted against the convention in the UN General Assembly. This convention, which enters into force in August 2014 after a long slog of few ratifications, is a framework convention setting out norms that should inform basin-specific agreements to be negotiated by riparians. Specifically, it provides for equitable and reasonable utilisation of shared watercourses, an obligation not to cause significant harm, regular exchange of data and information, the principle of prior notification of planned measures that may have significant adverse effects on another riparian, provisions on the protection and preservation of international watercourses, and peaceful settlement of disputes (*McCaffrey 2008; Salman 2007*).

When it comes to building water infrastructure on rivers to which it is the upstream riparian, China is unwilling to multilateralise disputes, let alone have them adjudicated by international courts. It has, however, de facto cooperated to a limited extent with downstream neighbours, for example in terms of sharing some data (e.g., for flood management). It is hard to dispute Beijing's justification for large hydropower projects;

***China's stance demonstrates the need for a broader range of foreign policy instruments.***

climate change mitigation necessitates greater investment in renewable energy such as hydropower, and the international community wants China to invest into climate change mitigation. China's reluctance to engage in multilateral legal instruments demonstrates the need for a broader range of foreign policy avenues, rather than a reliance on multilateral basin

management institutions alone. China's accommodating stance regarding de facto cooperation simultaneously shows that shared interests – such as trade and investment opportunities and political interests in cooperation with downstream countries – allow for mutually beneficial cooperative arrangements, if on an ad hoc basis. In this context, one crucial task for foreign policy makers is to somehow establish an effective dialogue with China as to how its global water policy objectives could be systematically reconciled with the need for a predictable framework for conflict management in transboundary basins.

## BOX 07

## THE MEKONG RIVER BASIN

**Strong interdependencies ...**

The Mekong river basin covers large parts of mainland South East Asia. Originating in China, it also passes through Myanmar, Laos, Thailand, Cambodia and Vietnam. The basin's bountiful waters have for a long time primarily been used for agriculture and fisheries, which in turn have sustained large parts of the basin's population. The Mekong's seasonal flooding has supported this usage but simultaneously threatened riparian populations. This may, however, change as a result of the recently spurred development of the river's hydropower potential, probably the most contested aspect of basin politics.

Cooperation and policy coordination on the Mekong river basin is primarily conducted through the Mekong River Commission (MRC). Founded in 1995 and building on earlier forms of cooperation, it has struggled to commit its members to a multilateral approach. In part, this is due to the fact that only the four lower riparians – Laos, Thailand, Cambodia and Vietnam – are members, whereas Myanmar – most importantly – China are not.

**... and challenges for multilateral diplomacy**

However, the MRC members have also struggled to reconcile their diverging interests multilaterally. Laos thus took a unilateral decision in 2012 to build the Xayaburi dam despite the initial objections of downstream riparians, though they later appear to have agreed informally (Schmeier 2013). In 2013, Laos similarly announced that it would move ahead with the Don Sahong hydropower project, just two kilometres upstream of its border with Cambodia. Laos boldly tried to circumvent the MRC's principles by arguing that no prior consultation was needed because the project was located on just one (though very important) channel of the Mekong. In June 2014 Laos agreed to undergo the prior consultation process, yet simultaneously announced that the construction of the project would go ahead anyway.

China has already constructed four large dams on its own basin stretch and plans to build another ten (plus more in downstream countries). Although China contributes less than 20% of the overall volume of the Mekong River, this number is somewhat misleading as it applies to the river's mouth. The percentage – and hence the potential impact of its dams – is much higher mid-river. Depending on how these dams are operated, i.e. whether they even out floods or otherwise, some riparians benefit from the Chinese dams whereas others suffer losses (Hui 2010).

Whereas China's interest in hydropower and its ability to unilaterally determine the development of its water infrastructure might entrench non-cooperation, the country's interest in promoting closer regional cooperation on other issues (such as trade and preventing hostile alliances) might yet lead it to embrace a more cooperative approach. It is most likely, however, that partial cooperation and partial conflict will continue to co-exist.

China's position has created new challenges, but it has also had salutary effects. First, China's insistence that building water infrastructure on international rivers in China is not a multilateral issue has prompted – India, whose position used to mirror that which China currently embraces – to recalibrate its own discourse vis-à-vis its neighbours. As a result of being confronted with the consequences of what Indian observers perceive as an upstream country's lack of consideration, the Indian government might currently be willing to embrace a more multilateral approach to basin management on the Ganges-Brahmaputra Basin. This is an opportunity for persuasion that the international community should not miss. More generally, the fact that key states are situated in multiple basins creates opportunities that can be exploited, provided there is sufficiently strong political engagement.

Second, China's emergence as an alternative banker for large dams in other countries has started bringing a strategic shift to intra-basin power dynamics in many parts of Africa. One example is Ethiopia, which had for a long time been unable to use a greater share of the Blue Nile water because Western donors and multilateral lenders refused to finance such projects, no doubt in part because the West politically prioritised Egypt over upstream countries (IDS 2013). The advent of alternative sources of finance has contributed to changes in the balance of power and may yet force Egypt to adopt a more cooperative stance – or trigger conflict.

Chinese investments in water infrastructure are, of course, only part of the explanation for the changing balance of power in the Nile basin. However, the perception that China supports the rights of countries to unilaterally build water infrastructure on transboundary rivers arguably bolsters the position of energy-hungry upstream countries in Africa (IDS 2013). Insofar as such empowerment is seen as positive, it lends weight to Beijing's argument for a case-by-case approach regarding infrastructure in other countries. Yet a case-by-case approach implies considerable challenges in terms of creating reliable and shared expectations as to what constitutes appropriate behaviour. In particular, it hampers attempts to implement the guiding principles developed by the World Commission on Dams as well as efforts to codify the principles of international water law. In short, China's emerging role is changing the landscape of international water cooperation, and these changes will bring both challenges and opportunities. Above all, they underscore the fact that shaping global hydro-politics is not only a technical, but also a diplomatic challenge.

***Hegemons are not necessarily impediments to cooperation; they can also facilitate it.***

Hegemons are not necessarily impediments to cooperation; they can also facilitate it. South Africa, for example, has supported river basin organisations in Southern Africa by providing an example in terms of national water management plans and institutions. Brazil has facilitated the Amazon Cooperation Treaty and supported the respective river basin organisation. Similar dynamics unfolded in the Danube basin (*see box 09*). The economically strongest basin countries, Germany and Austria, are situated upstream and use the river for wastewater discharge, hydropower, etc., while downstream countries depend on the river for their drinking water supply and other uses (*Schmeier 2013*).



## BOX 08

## THE GANGES-BRAHMAPUTRA-MEGHNA RIVER BASIN

**Under-utilized potential ...**

The 700 million people living in the densely populated Eastern Himalayan region depend on the uneven water supplies of the Ganges-Brahmaputra-Meghna Basin. The third largest river system in the world by volume, it remains largely under-utilized in terms of its potential for irrigation, energy production and other uses.

**... but huge opportunities for benefit sharing**

This is despite the poverty of the region, where some 20% of the population lack access to safe drinking water and energy consumption per capita is very low. Periodic floods and droughts undermine economic growth and food security. The resulting vulnerabilities could, in principle, be addressed through greater regional cooperation: upstream dams might help with flood control, provide energy and irrigation water during the dry season and facilitate navigation – all crucial services for which downstream riparians could reward their upstream neighbours.

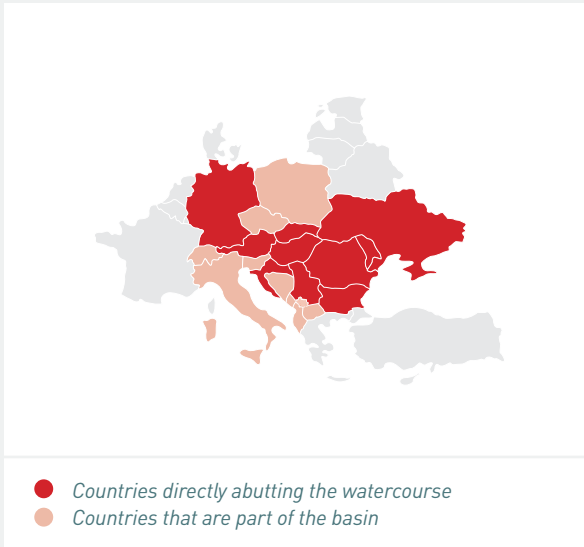
Yet cooperation has remained limited so far. Shared by China, India, Nepal, Bhutan and Bangladesh, the basin lacks any multilateral basin agreement. Instead, basin development has been fragmented, with governments focusing on national development priorities and thereby foregoing huge potential benefits that could be shared. There are, however, also promising examples of benefit sharing, if only at the bilateral level. Environmentally sustainable dams in Bhutan provide energy for the Indian market, and India guaranteed Bangladesh minimal water volumes during the dry season (which come at the expense of a feeder seeking to flush out silt from the port in Kolkata) for 30 years in a 1996 treaty. Such cooperative practices could spread further if the sharing of data across national boundaries made the potential benefits of cooperation and the costs of non-cooperation more transparent (*Rasul 2013*).

Theoretically, this would be a situation that does not favour cooperation. However, from the beginning Germany and Austria have been active supporters of cooperation, especially in the context of the International Commission for the Protection of the Danube River (ICPDR). They have, for example, covered a greater share of the costs than they were obliged to, intermittently funded the participation of representatives from poorer downstream countries, and volunteered to fund a study on the potential effects of climate change in the Danube Basin, laying the basis for the development of an adaptation strategy (*Schmeier 2013*). Political interest in collaboration and regional integration has thus trumped any potential interest in exploiting the favourable distribution of power (*see also boxes 10 and 11*).

The context in Europe is, of course, very different to those basins where different national (water) development strategies compete and security concerns may prevail. Yet even in these basins hegemonic riparians will often have an interest in cooperation. A Chinese scholar has thus pleaded for a more transparent Chinese approach to its infrastructure projects on, and plans for, the Mekong (*Hui 2010*). Researching in the downstream riparian countries, he heard allegations from flood-threatened Laotians that China would operate its dams such that they released more waters during floods (so as to prevent dam sedimentation). In Cambodia, by contrast, riparians alleged that China was evening out flooding, threatening the seasonally differentiated way of life around the Tonle Sap Lake where people switch between agriculture and fishing.

## BOX 09

## THE DANUBE RIVER BASIN



### Ensuring water cooperation ...

Cooperation in the Danube River basin has a long history, dating back to the 1850s. In spite of the many potential or perceived gains from unilateral action such as the intrusion of pollutants, the exploitation of fish resources or the construction of water infrastructure, riparian states have expressed their continued will to cooperate throughout the centuries, even in times of (cold) wars. In 1920, for instance, the Treaty of Trianon established the Hydraulic Commission for the Danube, regulating non-navigational disagreements among riparian states, including those related to irrigation, hydropower or fisheries. Moreover, 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.

### ... in spite of political conflicts

Building on such strong cooperative history, the fall of the Iron Curtain provided even more incentives for cooperation, manifested in the signature of the Danube River Protection Convention in 1994, which created the International Commission for the Protection of the Danube River (ICPDR). The ICPDR mainly works on the environmental side of water resources management (including water quality, sustainable water resources use and the implementation of the EU WFD in the Danube River Basin) as well as newly emerging challenges such as climate change adaptation and flood risk management.

However, the ICPDR also plays a crucial role in promoting cooperation more generally by bringing together policy makers and water managers from the numerous Danube riparian states – in spite of all the political, socioeconomic and cultural differences between them. Even the Yugoslav Wars in the 1990s did not derail the cooperation. This is also reflected in the fact that, after the war, all former Yugoslav riparian states to the Danube joined the Danube River Protection Convention and the ICPDR, which now covers all significant riparians in the basin, making it the most international RBO in the world.

The case of the Danube River basin thus illustrates 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.

Clearly, it is impossible for both suspicions to be true. Hui therefore argued that China would gain from sharing hydrological data as the results should please at least some of the stakeholders, rather than leaving everyone convinced that China was hurting their interests (Hui 2010). Stronger political engagement could amplify such messages in China and elsewhere and thereby help overcome the barriers to realising cooperative gains, which may often come down to bureaucratic inertia, short-term thinking, lack of imagination, or uncertainty about the likely results of cooperative strategies. Political-level engagement can help identify cooperative opportunities, reduce uncertainty about them, and provide incentives for their realisation.

## 2. IMPROVING COORDINATION

The need for greater international agency is closely connected to the second challenge, that of a more coordinated and strategic approach within and among donor countries. In this respect, the next section makes the following arguments:



The challenge starts at home. In the case of Norway, for example, Norwegian companies designed dams in Ethiopia, with Norwegian state guarantees, even as Norwegian diplomats tried to prevent Ethiopia from taking such ‘provocative’ actions. The lack of coordination in supporting cooperation on transboundary waters is also evident in the fact that nine US programmes were involved in supporting the Mekong River Commission, apparently in part without knowing about each other. Similarly, more than 40 people in the US government had to clear its Nile strategy. Widespread interest in these issues is positive, but it requires strategic leadership.

Similarly, national embassies frequently embrace a rather narrow, host country-focused view of transboundary rivers. In the case of one G7 member, the embassy in Bangkok supported the Xayaburi dam in Laos for the sake of Thai energy security. Its counterpart in Vientiane by contrast opposed the dam for the sake of upholding a multilateral approach within the Mekong River Commission, and because it rated the environmental concerns and potential consequences for Laos (e.g., in terms of food security) higher than energy security in Laos or in the region.

Goal conflicts are of course the unavoidable staple of government. Yet the above examples illustrate that questions of transboundary water policy have thus far not been treated as sufficiently important to warrant greater ex ante coordination, either within or among governments. To achieve this, governments will need to give their bureaucracies greater incentives to invest in strategic thinking and planning on transboundary water issues. Thus, a paragraph on the issue in the US National Security Strategy (and equivalent documents in other countries) might help to facilitate internal justification. A strategic approach to transboundary waters should also see basin-wide thinking take root in embassies and foreign ministries.

***Engagement in transboundary basins needs better political leadership.***

A more strategic approach regarding foreign policy objectives would raise a number of challenges for development policy, most of which are well known. Fundamentally, there might be a need to adjust overall objectives insofar as they encapsulate trade-offs between different goals, such as peace-building, economic growth and sustainable development. Although there is no inherent contradiction, the different objectives often reflect diverging priorities. For example, much development aid is still focused on supporting economic growth and energy production, which introduces a certain bias for (large water) infrastructure projects. Such large projects might be detrimental to peacebuilding, as in post-conflict Myanmar where big dams on the Salween are creating many new conflicts (Peel 2014). Many people in fragile countries depend on agriculture and thus on the availability of water for irrigation. A strategy intended to bolster peace through water might thus re-direct donor investments into a more sustainable use of water in agriculture (Swain 2014; Troell and Weinthal 2014).

Beyond these trade-offs between seminal goals, there is also the perennial issue of earmarked funding (particularly in the US), which complicates any 'strategic' approach to designing and adapting projects depending on political priorities. If 90% of development funding for a given country is reserved for specific, technical projects, achieving a minimally coherent country programme is already a strategic challenge, especially in view of the multiple issues that need to be mainstreamed into programming. Adding a regional, political perspective to include potential conflict risks or cooperation opportunities may seem to be asking too much, with the ultimate threat of raising expectations so high as to make development policy impossible. Yet this is where development actors can and should be able to draw on the help of foreign policy makers. Diplomats in turn can often profit from the local knowledge that implementing agencies acquire. Such collaboration is undoubtedly already taking place. The respective hierarchies, however, need to credibly demonstrate that they want and will reward such cooperation.

There is another fundamental challenge. Development cooperation at its best is longer-term and focused on achieving measurable improvements for the local population. Its reliance on metrics, however, introduces a bias for easily measurable outcomes (or even just inputs) that grates against a focus on political and more ambiguous objectives.

***A reliance on metrics grates against a focus on political, more ambiguous, objectives.***

In terms of budgetary opportunity costs, how many lives saved due to better sanitation present 'equal value' to work on facilitating an agreement on transboundary water cooperation? The focus on metrics moreover contributes to an inbuilt self-interest in finishing projects, irrespective of whether these projects

ultimately represent the politically most appropriate outcomes. As mentioned earlier, the potential support of some donors for the Comprehensive Framework Agreement for the Nile basin might be politically counter-productive, but writing off the investment by disowning the most visible result of the initiative is counterintuitive from a donor perspective.

## BOX 10

## REGIONAL WATER COOPERATION IN SOUTHERN AFRICA

**A regional cooperation framework as a foundation for water cooperation ...**

Building on an earlier version from 1995, the Southern African Development Community's (SADC) Revised Protocol on Shared Watercourses from 2000 defines binding rules and requirements for water resources governance in the region. It also provides riparian states to Southern African basins with well-defined cooperation practices. This includes, among other things, the requirement to establish institutions for managing water resources at the basin level – implemented subsequently by the establishment of basin-wide RBOs in those basins that did not previously have RBOs (or did only have bilateral institutions). The Limpopo Watercourse Commission (LIMCOM), for instance, refers explicitly to the SADC Protocol as the legal basis for cooperation among Limpopo riparian states. The same applies to the Orange-Senque River Commission (ORASECOM).

**... and its benefits**

Downstream states such as Botswana and Namibia on the Orange River Basin have benefited from this development as previously they had often been excluded from water resources management plans made upstream (between Lesotho and South Africa in the case of the Orange River) but felt the downstream impacts of large infrastructure schemes.

Many of these new RBOs have developed on the basis of significant external financial and technical support from bilateral and multilateral donors – both for their institutional development and for the implementation of specific activities required for sustainable water resources management (such as environmental state of the basins or the development of environmental projects) which had not been pursued before.

The 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.

These development policy challenges are reflected by mirror-image challenges in the foreign policy arena. More ad hoc and driven in its priorities by 'exogenous' events, the structural objectives of foreign policy are frequently eclipsed by crisis management. The challenge of sustainably managing transboundary waters, for example, will rarely see as much political capital invested as the preparation of the next Middle East initiative. This is in spite of the fact that many regional conflicts are directly and indirectly driven by development challenges and the attendant interest of the respective governments to deflect blame to outside forces. This example is not invoked to denounce politicians, but simply calls for realism regarding the incentives that they face. It also serves to underline the potential for complementarity and synergy between 'high' and 'low' politics: the structural development work on water governance issues in a given country can help reduce pressure on transboundary waters and thereby contribute to foreign policy objectives in terms of conflict prevention.

***Improved water governance contributes to foreign policy objectives.***

Thus, water shortages have often been blamed for triggering local and international conflicts (including the rise of terrorism) in the Sahel region. Better water management on the tributaries to Lake Chad (e.g., the rehabilitation of canals) could improve the hydrological situation of the lake and hence riparian people's livelihoods as well as international security issues. Similarly, better water management in the Nile Delta will lessen the need for additional water resources, thereby attenuating the consequences of greater upstream use of Nile water. The significance of such development challenges for overarching foreign policy objectives such as regional stability underlines the need for, and the potential of greater synergies between 'high' and 'low' politics.

## BOX 11

## REGIONAL WATER COOPERATION IN EUROPE

**Another regional cooperation framework as a foundation for water cooperation ...**

The adoption of the EU Water Framework Directive (EU WFD) in 2000 established the legal framework to protect and enhance the status of aquatic ecosystems, prevent their deterioration and ensure the long-term sustainable use of water resources. In order to achieve the EU WFD's goals, EU member states committed to establishing institutions for managing shared rivers and lakes and implementing joint river basin management plans, transcending national boundaries where water-courses do.

**... and its benefits**

The major achievement of the EU WFD has been the creation of institutions for managing shared waters across borders. The existence of institutionalised mechanisms for addressing differences in water use can contribute to better water resources management. By increasing the benefits of cooperation beyond the (perceived) losses of forgoing unilateral action, such transboundary mechanisms also provide a long-term means for avoiding or resolving water-related disputes and for promoting long-term cooperation within and beyond the water sector. The EU WFD, in combination with other regional instruments such as the 2009 EU Strategy for the Danube Region, has reduced conflict and generally improved cooperation among the respective riparian states – beyond its direct environmental influence, which has led to a significant improvement in the state of many European rivers and lakes.

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. The challenge thus consists less in setting up the different elements of a comprehensive and sustainable outside engagement in a specific region,

***The challenge consists in transcending the traditional foci on single sectors and quick results.***

as these elements are already in place. The challenge rather consists in leveraging these elements in a mutually strengthening way, and in transcending the traditional foci on single sectors and quick results. For this purpose, governments need to create institutionalised forms of cooperation that systematically and transnationally connect their officials from different fields. The challenges of a coherent and strategic approach apply not only to individual donors. They relate to the entire community of donors and investors, which comprises governments, international organisations, NGOs and private companies. In this context, the shift in financing water infrastructure projects from multilateral lending institutions to states and private financiers implies a loss of diplomatic leverage. For example, only two of more than 100 envisaged dam projects on the Mekong are financed by multilateral lenders. The rest are funded by new financiers from Asia, often with limited experience in hydropower and little interest in the long-term benefits for the host country.

This is all but certain to cause new challenges in the future at the transboundary and other levels, and further increases the need for coordination, and the attendant willingness to be coordinated. More specifically it also implies a need to coordinate with China (and other emerging players) on the financing of dam projects, or even on creating a common financing framework. Moreover, when it comes to water infrastructure projects (which tend to be long-term), such coordination needs to be maintained over long periods of time, and thus ensured at an institutional level that will survive individual actors. This need for long-term engagement often grates against the organisational structures of development organisations with their emphasis on financing projects rather than open-ended processes, underscoring the importance of a political coordination mechanism above the national level.

### 3. ENABLING ACTORS

How can we achieve the envisioned synergies between 'high' and 'low' politics? As argued before, the necessary political will for closer collaboration should be echoed within bureaucracies, whose mandates, training and professional reward structures should reflect a credible commitment to close collaboration beyond any agency's core mission. Furthermore, a more strategic approach should see the international community commit to similar collaboration at the international level. Under this umbrella of a stronger and better coordinated political engagement, such a strategy should integrate three pillars (*cf. van Genderen and Rood 2011*):

1.

Support for the necessary institutions, at the local, national, basin and global level.

2.

Support for building up relevant technical and diplomatic capacity, especially in and for weaker riparians.

3.

More substantial financial support for the politico-diplomatic pillar of basin engagement, e.g. for financing processes to initiate intra-basin consultations or to establish databases.



South Sudan, Maban, Upper Nile State

Because camp dwellers have to wait many hours at official camp water stations, they have dug for new water sources. Building adequate capacity and institutions for water management is crucial to improving livelihoods and, ultimately, preventing conflicts.

## STRENGTHENING INSTITUTIONS

The first pillar of engagement pertains to water institutions. In this realm, the international community should play a supportive role in building the necessary domestic and international institutions to improve transboundary water governance and its expected resilience to climate change. In the first instance, this means advocacy for better domestic water management practices so as to contribute to lesser pressure on limited and decreasing resources. Whereas the rhetoric of 'local ownership' has been mainstreamed into international development planning documents, it needs to become a practice that actually reaches down to the local level, rather than a euphemism for intermittently consulting with host country governments. Locally legitimate water management practices can directly contribute to preventing inter-group conflict and will likely have positive indirect effects as well in terms of enhancing governmental legitimacy, especially in the context of fragile states.

Support for national institutions is also important at the international level. Such support should include advocacy for bilateral and multilateral consultations, especially in basins that lack a strong institutional structure, so as to achieve transparency on policy responses and promote a shift towards climate adaptation approaches that are not exclusively domestic. Joint risk assessments offer particular opportunities in this respect. They encourage a shared understanding of the challenges, but they can also serve as a confidence-building measure that may in time help to facilitate the joint

***Trust can only be built through transparency.***

management of shared waters (rather than mere allocation or compensation mechanisms). Such cooperative efforts could be instigated either through 'track-two' initiatives or in combination with official bilateral and multilateral institutional cooperation and diplomacy. Trust can only be built through long-term transparency in terms of data-sharing and intentions regarding future infrastructure, which in turn requires long-term engagement. If investment in such confidence-building measures sounds underwhelming, it is worth remembering the role that they played in ending the Cold War. The international community should stand ready to (continue to) support such institutions.

Building and improving national water institutions is primarily a national responsibility, as are the efforts to connect them across transboundary basins. Since basin countries are the primary beneficiaries of measures to this effect – whether through the economic benefits of more efficient water use or the indirect benefits of closer cooperation and conflicts avoided – their governments often face strong incentives for investing in (transboundary) water institutions. Yet the international community can and should help to overcome the various barriers to such investments and seek to address the immediate water-related concerns of the riparian states in question. That entails a series of actions and efforts that would merge hydro-political issues with a broader political and development agenda. Beyond these national or basin-level steps, the first pillar should also include support for the principles embodied in the UN Convention on the Law of the Non-Navigational Uses of International Watercourses. Whether its entry into force in August 2014 will change the politics of transboundary waters is contested. On the one hand, the slow pace of ratifications despite an earlier, overwhelming majority in the UN General Assembly could indicate that many states may not quite accept the convention as codified customary law. On the other hand, the recent growth in the rate of ratifications could mean that states are finally ready to accept this (*Eckstein 2014*). However, this uptick in support for the framework convention coincides with a significant decline in the adoption of (sub-)basin agreements (*Rieu-Clarke and Loures 2012*).



Ensuring that the convention's principles become the undisputed point of reference in conflict mediation and that they pertain to as large an area as possible thus remain worthy objectives. Yet such advocacy for the ratification of the convention may not be an appropriate entry point for engaging in basin politics, given how politically contested it has become. In some of the most contentious water disputes (e.g., on the Euphrates and Tigris Rivers), the UN Convention is more of an obstacle to than a tool for cooperation, an instrument used to reprimand other parties rather than to seek viable compromises. A sensible strategy might thus be to lobby for the convention in New York, while embracing a pragmatic approach in the respective basin. The framework's principles may provide a good point of reference for initiating and extending basin-specific cooperative ventures without reference to the convention as they can also be linked to international customary law.

Finally, a further way to strengthen multilateralism in hydro-diplomacy is to support the development and codification of international norms for transboundary groundwater resources. To this end, the International Law Commission in 2008 submitted draft articles on this subject to the UN General Assembly. Extending the principles established for surface waters into the realm of groundwater (as the UN Convention foresees for groundwater connected to transboundary surface waters) should similarly help to prevent conflicts and provide opportunities for confidence-building and strengthening regional cooperation.

#### The UN Secretariat in New York

In the end, solving conflicts over water is about building the appropriate institutions for reinforcing and extending cooperative practices, from the local to the global level.



## BUILDING CAPACITY

Although legal norms and institutions can play a helpful role, they are not a panacea. In many regions the kind of rule of law that would quasi-automatically translate (international) norms into political practice does not exist. Moreover, the interpretation of legal principles will often be contested even where actors agree that their access to water should be subject to 'equitable and reasonable utilisation and participation'.

One way in which donors could make an impact in this respect would be to train diplomats in the basics of water development and water experts in the basics of negotiation and mediation. Foreign policy officials usually lack the technical knowledge to fully understand water-sharing dynamics, which has made them reluctant to enter into that territory. Water professionals by contrast often prefer a technocratic approach and do not want to securitise the water-sharing issue. Given the nature of the issue at stake, there is however a need for an integrated approach that ensures that the technical and political tracks move in sync rather than potentially undermine each other.

### ***Train diplomats and water experts to better understand each other.***

Such training should aim to give both communities a better appreciation of the likely consequences of actions undertaken in the other policy domain so as to help them better understand each other and, ultimately, create shared expectations of what constitutes appropriate behaviour. Specifically, the ability to design appropriate stakeholder processes should be systematically and widely diffused. Training on water conflict management, on the one hand, needs to become part of the general curricula for diplomats and development practitioners. On the other hand, there is a need to increase awareness of and participation in specialised training formats.

Such programmes are already being offered by organisations such as the Compass Foundation in Geneva; the Clingendael Institute in the Netherlands (in cooperation with UNESCO's Institute for Water Education); UNESCO's Centre for Water Law, Policy and Science in Dundee; and Oregon State and Tufts Universities. Moreover, several of the authors of this paper offer targeted training courses for specific basins and communities. However, such training needs to reach a greater share of the respective communities. Most existing training courses focus on water policy officials, whereas there are fewer courses that aim to sensitise diplomats to transboundary water issues. (The Compass Foundation offers training to this effect). An easy, practical first step to this end might consist in drawing up a consolidated list of the existing training courses and toolkits. Both donor and basin country officials would profit from this type of training. This is particularly important when it comes to smaller and weaker riparians: having parties negotiate on a level playing field should arguably create an enabling environment for sustainable cooperation (*Zeitoun and Jägerskog 2011; Troell and Weinthal 2014; USAID 2014*).

Apart from helping to prevent conflicts over water, efforts to enhance and systematise training might also provide an entry point for addressing ongoing water-related conflicts by taking officials out of their usual context to approach the issue from a fresh perspective. Interactive training formats such as, for example, policy games might both enable normative learning – i.e., a revision of assumptions about the appropriateness of others' objectives – and help to build and improve interpersonal relationships between professionals from different countries. This aspect might also be served by copying best practices from the past: the secret 'picnic table talks' between Israel and Jordan, in which officials discussed water management issues away from the public eye, might serve as an inspiration for similar settings for other basins. The international community might play an important role here by facilitating such talks, perhaps by inviting 'change agents' from the respective governments abroad in order to allow for substantial reflection on the larger issues at stake.

***Training may provide an entry point for addressing ongoing water-related conflicts.***

Preventing conflict over water and using water as a stepping stone for greater overall cooperation requires better understanding among the water, climate and foreign policy communities. Such understanding is also necessary to harness the opportunities that arise from the increasing focus on adapting to climate change. Climate adaptation planning needs to incorporate the development and potential conflict dimensions, rather than remain single-mindedly focused on climate (as arguably happened with the promotion of biofuels, whose advancement came in part at the expense of livelihoods in poor and fragile countries). Development policy thus needs to be re-thought so as to avoid perpetuating the institutional silos that divide the different interconnected sectors such as water, land, food, climate and energy (*Smith and Vivekananda 2009*).

As climate change will primarily impact peoples' lives through water, these adaptation resources should prioritise access to water in a way that also enhances resilience to conflict. In fact, water is often the real, palpable issue in peoples' lives, and climate change might provide a helpful frame for neutral discussions about water. One way to simultaneously enhance resilience to both climate change and conflict is to re-direct resources from (large-scale) energy projects to agriculture and its ability to cope with water scarcity. In fragile states, a (relative) majority of the population usually relies on agriculture, and food insecurity is a major driver of instability. To empower these communities, the international community should also consider the circumstances under which moving the debate from state rights to water to human rights to water might be helpful to finding sustainable solutions. This is particularly important in countries recovering from a long period of violent conflict. In pushing that agenda, donors may find (and should seek) support in the private sector. The private sector's record in recognising human rights to water may perhaps not seem encouraging, but private investors often have clout with host governments, self-interest in safeguarding their investments against the risk of conflict, and expertise in insuring against a great gamut of risks (see e.g. Goldman Sachs' 2013 'summit' on water risks and opportunities). At the same time, private investment in the form of 'land-grabbing' (which invariably involves 'water-grabbing') presents risks to local food security that both host country governments and investors need to take into account.

## PROVIDING FUNDING

Building awareness and capacity requires financial support, the third pillar. Such funding is particularly necessary for the 'soft', diplomatic aspects of water development. It serves to initiate and support processes of capacity and confidence-building in transboundary basins, from collecting and agreeing on data

***Funding is necessary for the 'soft', diplomatic aspects of water development.***

to training of riparian officials and facilitating appropriate institutional settings (Trondalen 1997). The amounts necessary for such awareness and capacity-building pale in comparison to what the hardware of water infrastructure costs. Moreover, these costs have to be put into perspective in view of the potential peace dividend in terms of the avoided costs

of conflict (Trondalen 2013). Yet such funding is currently lacking, especially when it comes to quick crisis response mechanisms meant to prevent impending conflicts over water from entrenching or escalating.

In particular, it might be helpful to have mediation teams that are specialised in resolving water conflicts ready on demand, drawing on renowned experts (and their networks and 'political capital' in terms of trust) in specific basins. To our knowledge, no such rosters yet exist, certainly none that would be widely known and hence easily accessible for foreign policy makers. The World Bank could, for example, consider extending its existing water expert roster to include a subcategory on transboundary waters. In any case, knowledge about the available instruments needs to be diffused more widely, among foreign policy makers and other actors – another aspect of capacity-building.

Finally, it might be worth establishing a protocol to the UN Convention that would create a dispute resolution and arbitration mechanism that states could use. Those states that are reluctant to sign the Convention will likely be wary of using a mechanism attached to it, of course, but as more states ratify it, such a mechanism may prove helpful.

The effectiveness of these three pillars of engagement discussed above – legal-institutional, capacity and financial – will clearly hinge on progress regarding stronger international agency and better coordination. The specific measures suggested in this section constitute steps towards achieving these goals, but depend on political will for more coordinated international political risk management, and thus on the institutional platform for facilitating cooperation on transboundary waters that this paper called for. None of these measures is entirely new, nor is every measure necessarily appropriate for each basin and conflict. Yet these measures deserve systematic and serious consideration when engaging in transboundary water governance. Apart from strengthening transboundary water governance, improving knowledge and skills will also help to build the necessary societal awareness of the challenges and opportunities that come with shared waters.

## INSTRUMENTS OF ENGAGEMENT

The table below provides an overview of these instruments, along with an indication as to which policy community would likely be best placed to take the lead in engagement. Yet this is not intended to be an exercise in carving out sectoral fiefdoms. This paper puts an emphasis on the role that foreign policy makers can play, but this is primarily a function of the fact that up to now they have had a relatively weak presence in transboundary water issues. As the table clearly shows, diplomacy alone is not enough. Almost half of the fields are genuinely shared tasks, and it is possible to argue that the same goes for (most of) the rest. In short, the potential synergies between development and foreign policy are manifold. Governments face the task of making better use of this potential.

	NATIONAL/SUB-NATIONAL	BASIN	GLOBAL
INSTITUTIONAL & 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, etc.)	Fund global early warning and crisis response mechanism
POLITICAL COORDINATION	Ensure cross-sectoral coherence (e.g., climate adaptation and conflict resilience)	Offer fact-finding support and engage preventively	Strengthen international agency / create institutional platform

- Tasks primarily for foreign policy makers
- Shared tasks
- Tasks primarily for the development community

### III. CONCLUSION

Transboundary water governance presents significant challenges and opportunities for foreign policy makers to prevent conflict and harness opportunities for greater regional cooperation. Both will become even more important as water quality deteriorates and demographic and socio-economic development increases the demand for freshwater resources. This trend is further aggravated by climate change contributing to supply shortfalls, salinisation, saltwater intrusion, floods, and extreme weather-related disasters. Environmental changes are likely to sharpen existing and trigger new social and political conflicts over water, in particular in regions that lack robust institutions for cooperation. As this report shows, various conflicts in the Sahel region are related to conflict over water and interstate tensions over water loom in the Nile basin, the Middle East, and South and Central Asia. Environmental change may even put hitherto successful institutions such as the Indus Waters Treaty at risk because they do not provide the necessary instruments for adapting to growing scarcity.

Yet environmental changes may also nudge governments and other stakeholders towards closer cooperation. They will make better, collective management of transboundary waters more urgent – to safeguard sufficient availability of water, but also to ensure that the measures undertaken by governments in the interest of water security do not undermine it elsewhere. The role of dams is particularly crucial in this respect. Dams are important for clean energy, irrigation and flood control, and they have served as focal points for sharing benefits, from South America via West Africa to South Asia. Yet when undertaken unilaterally and/or without regard to their environmental consequences – for fishing, agriculture, sediment transport, and water availability downstream, – they simultaneously constitute the most dangerous flashpoints of conflict over water. The benefits of collaborative management of transboundary waters therefore cannot only be counted in the direct economic gains, but also in the benefits of conflicts avoided.

The need for and prospective benefits of hydro-diplomacy are thus on the rise. Yet political awareness of and agency on the coming hydro-political challenges are currently lacking, as are the mediation and negotiation skills necessary to address them. This is where foreign policy makers need to step up their efforts. They have a range of useful tools to help alleviate the political consequences of transboundary water governance problems, and to foster greater cooperation. There is no silver bullet, but foreign policy-makers should use their political mandate and leverage to ensure that the (potential) benefits of cooperation are fully considered. They can help identify cooperative opportunities, reduce uncertainty around them, provide incentives for their realisation, and help frame issues such that cooperation becomes politically more attractive than unilateral action. These skills should become a bigger asset in the international community's arsenal for addressing transboundary water governance issues.

Transboundary waters need greater political and diplomatic engagement. Yet they also require better harnessing of the synergies between 'high' and 'low' politics, and between foreign, development, economic, and environmental policies. Improving water use and/or adapting to the effects of climate change can help prevent conflicts by sparing scarce resources and providing better livelihoods. Foreign policy efforts can make such work more effective by embedding it into broader transboundary cooperation and efforts at regional economic and political integration: greater scale and scope in cooperation lead to greater potential benefits. Yet to achieve such synergies across different sectors requires express political interest, not least in order to give bureaucracies sufficient incentive to invest in closer collaboration.

Given the substantial financial investments on the technical side of water infrastructure projects, there is a strong case for investing more on the diplomatic side. Puny by comparison, such investments can yield significant benefits where they help countries reach agreements that realise the rewards of greater scale in cooperation or at least help them avoid the costs of conflict. This report discussed various forms that such investments can take:

- **capacity building in national water institutions and foreign offices, with specific attention to the links between water management and conflict resolution;**
- **advocacy for bilateral and multilateral confidence-building processes, such as the promotion of joint (scientific) risk assessments and joint water monitoring systems;**
- **preventive engagement, including offers to support unbiased fact finding to reach transparency on water data and policy and the lending of 'good offices' in emerging or simmering conflicts; and**
- **strengthening of the existing institutions and legal instruments to enable both early warning and a clear pathway to early action**

All these instruments are individually useful, and investing in them will often amount to 'no regret' policies. Yet as helpful as they could individually be, their effectiveness will certainly benefit from internationally coordinated engagement. Such engagement needs to build on strong, political-level involvement by the foreign policy community. Ultimately, strengthening foreign policy for transboundary waters hinges on creating and reinforcing international institutions that can channel political will into coherent action.

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