The United Nations Security Council unanimously expressed concern about the possible impacts of climate change on peace and security in its session of 20 July 2011. The open debate with a record participation of UN member states clearly underlined the need for climate protection and early action to reduce the security implications of climate change. With contributions from policy makers and leading scholars, this edited volume offers the reader the opportunity to learn about key positions in the debate on the security risks of climate change and the prospects of climate diplomacy. Particular emphasis is given to water resource management, global food security, and rising sea levels that threaten coastal areas and low-lying island states. The authors explore ways to further develop regional cooperation and dialogue in light of a changing climate and provide strong arguments for urgent action that complements international climate negotiations. To this end, they stressed the importance of enhancing the dialogue on climate change and security, building early warning capacities and fostering partnerships for early action and conflict prevention.

This book builds on a conference on Climate Diplomacy in Perspective hosted by the German Federal Foreign Office and adelphi in Berlin in October 2011. Opened by the German Minister of State Cornelia Pieper, UNEP Executive Director Achim Steiner, Bangladesh’s Minister of Environment Hasan Mahmud, and Mohamed Shareef, Minister of State in the Republic of Maldives’ Environment Ministry, the conference welcomed 100 policy-makers and experts from over 30 countries.
Dennis Tänzler, Alexander Carius (eds.)

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From Early Warning to Early Action
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Introduction

In a nutshell, the challenge facing environmental diplomats is to de-securitise and de-politicise environmental issues, while avoiding the appealing apolitical view that technology alone can sort them out. This chapter addresses the diplomatic challenge directly, specifically in relation to water conflicts. The assertion made is that effective water diplomacy is assured through consideration of three components: a) knowledge, b) objectivity, and c) the quest for sustainable water security. The former two are a call to a return to the fundamentals of diplomacy, while the latter builds on the growing awareness of interdependencies of people and resources on an ever-changing globe.

It is yet unclear if climate diplomacy may serve alongside other environmental diplomatic efforts (over oil, forests, water, etc.) or serve as the sum of these parts. Certainly, the biophysical aspects of water distinguish water conflicts from climate conflicts in particular ways. International water conflicts are chiefly distributional, and the tired question of which state or nation gets how much water cannot be wished away. Second, space is opened up in distributional water conflicts by the fact that the ‘pie’ can be enlarged as it is divided equitably – through the production of food, electricity or restoration of environmental quality. As the other contributing authors of this volume demonstrate, the nature of international climate tensions is in many ways quite different.

Just as with climate concerns, however, the biophysical and social processes over water cannot be coherently separated. Attempts to cleave the physical aspects of water scarcity (drought, climate variability, etc.) from the social drivers of water scarcity (inequitable distribution, high cost, etc.) tend to result in initiatives of an apolitical nature (see e.g. Mehta 2001), which are not usually the realm of diplomats, nor effective or necessary. There certainly is enough scope, then, to reconcile water and climate diplomacy – either as complementary or as one.

Identification of the three components of the frame stem from personal experience delivering water to people in conflict zones, studying water conflict theory, and advis-

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1 The frame is usefully augmented by capacity-building and dialogue platforms, as identified by the Water Working Group of the “Climate Diplomacy in Perspective” conference.
ing on water conflict negotiations. The first component – knowledge – is fundamental to all diplomatic efforts. Each river basin has unique biophysical characteristics that must be considered. But the quality of the physical science should be questioned, and not be over-emphasised, just as the social science should not be under-played. The second component is also not new: neutrality and standards can help. Standards can assist the (supposedly) impartial and uninterested diplomat, by being a reference goal of and guide to conflict resolution. Regardless of his or her perceived objectivity, the diplomat operating in the absence of international norms has little leverage over existing power structures and will tend to a pragmatic rather than principled compromise. The third component of the frame – sustainable water security – builds on the growing awareness of the interdependencies of all people with all environmental resources. What John Ashton (2011) refers to as the “resource pillars” (climate – food – water – energy) are presented here as ‘security resources’ linked together in a web of sustainable water security.

**The Wazzani Springs Dispute**

The case used to test the frame is the 2002 Wazzani Springs dispute over the Hasbani River between Lebanon and Israel. While it fortunately did not escalate into a full-blown war, the dispute was not resolved – and lingers as a source of tension until this day (see e.g. Maternowski 2006; Nasrallah 2006; Allès 2007).

As one of the sources of the Jordan River, the Hasbani River, originates in Syria and Lebanon before flowing into Israel. The Wazzani is a river-side set of freshwater springs on the Lebanese side that discharge roughly half of the flow of the river, just upstream from the border with Israel. Since about 1967 Israel has used essentially all of the Hasbani, Lebanon about one percent, and Syria none. Lebanese use of the river was essentially halted during the 1978–2000 Israeli occupation of southern Lebanon. International tensions rose when the Government of Lebanon began its second attempt to build a pumping station drawing from the Wazzani for drinking water purposes for nearby villages. The drums of war beat loudly in Tel Aviv as the Lebanese development efforts were portrayed as an existential threat, and the otherwise insignificant pumping station became a front-page issue of international media (Zeitoun et al. 2012a). Diplomatic intervention was sought by both sides, with Israel seeking it from the US, and Lebanon from the UN (while the EU was also involved). Mediation status was not granted by either side to any of the envoys because of their perceived partiality, thus considerable shuttle-diplomacy resulted.

The envoys generally concurred that the Lebanese drinking water project posed no real threat to Israel. Along with the heavy rains that followed that winter, the issue became less securitised, and the Government of Lebanon built the pumping station. The asymmetric distribution of river flows remains, however, and takes on a sense of urgency with each dry season and political event.
Knowledge

The seasoned diplomat Lakhdar Brahimi has emphasised that knowledge – with a capital K – is the first task of all who are serious in that profession. It follows that knowledge of water science and of the basin in question are crucial components of any water diplomacy efforts. Three types of knowledge are relevant to us here: contextual information; natural resource science theory; social science theory.

Understanding the context means more than just uncovering hidden interests and weighing-up the stated and back-room issues; it means gathering information about the climatic, social, and political context. Being aware of the importance of the Mekong’s flood pulse for Cambodian fishermen is the first step, for instance; engaging with the complexities of the impact which mainstream or tributary dams have on water quality and temperature (and thus on fish populations) would take one even further.2

Second, the natural resource sciences – biology, physics, and chemistry – can help interpret the biophysical information of a particular basin. But the limits of the state of knowledge must be borne in mind. Watershed models developed from hydrological science have not yet fully incorporated groundwater into their water balance models.3 The hidden resource is difficult even to observe revealing the considerable uncertainty about the quantity and quality of water in question. An even bigger gap befuddles hydrological and hydro-geological efforts at water balances: the soil water that sits above the groundwater to sustain all rainfed vegetation is not typically accounted for, including the bulk of water used to grow food globally (Taylor 2009). And only a few researchers are beginning to explore the evaporation and evapotranspiration processes that provide soil water that falls as rain sometimes far beyond the watershed it evaporated from4 (Van der Ent et al. 2010). It follows that diplomats be well-versed in the limitations of science and perhaps be trained from scientific backgrounds – as to an extent was the case during the Wazzani dispute.

Third, understanding the context also means interpreting the international political context. The way that distributive tensions over the Rhine play out is radically different to the way they do along the Jordan, for instance. There is a Union making the playing field (arguably) level in the first, force keeping it tilted in the second.

Contextual knowledge is also key, of course, for the diplomat shuffling from the monsoon and politics of Bangladesh to the deserts and politics of Iraq, who would do well to shift gears or focus on one particular area instead. The diplomat is advised to understand one context in-depth, and/or the best-positioned diplomatic mission should gather the relevant contextual information.

The manner in which the climate research community deals with uncertainty is relatively sophisticated, compared with the way it is dealt with by the water community.

The implications are important: diplomats may be facing claims in the not too distant future between China and Russia for the water originating as clouds in the former but falling as rain in the latter!
Here, social science theory can be directly useful to diplomats. Elegant and timely deployment of social data can serve to address the asymmetries in power, enable enlarging of the pie, and lead to water security (Jägerskog and Zeitoun 2009). The political ecology work (that sees social and physical processes as inseparable) (e.g. Forsyth 2003) can empower diplomats to see through securitised representation of issues, furthermore. The approach can oblige, for instance, the examination of both the physical and social aspects of water scarcity. Likewise, the subtle ways in which basin hegemons can maintain an unfair distribution of resources – through ineffective or skewed treaties, or by presenting a face of cooperation – may be interpreted through the research on hydro-hegemony and counter-hegemony (Zeitoun and Warner 2006; Van Genderen and Rood 2011). Cultural theory can also help disentangle the formation of interests, in ways already made relevant to water diplomacy (see Gyawali 2010). There are equally a number of tools and concepts that are available to diplomats, including conceptions of benefits ‘beyond the river’ (Sadoff and Grey 2002), Transboundary Diagnostic Assessments (UNEP/MAP/MED POL 2005), Transboundary Water Opportunity analysis (Phillips et al. 2008).

The diplomats involved in the Wazzani incident appear not to have drawn upon such science, or tools, and to have limited their leverage of information to the identification of common interests (Zeitoun et al. 2012b). This reminds us that the reception of knowledge is as important as its acquisition. Skilled diplomats can use knowledge wisely, and serious diplomatic initiatives can prepare the ground for its uptake by the parties. For this latter, games and gaming techniques that temporarily lift the weight of responsibility shouldered by decision-makers – such as Lankford’s River Basin Game5 – can be of great help.

Objectivity

Objectivity here relates both to the interests of the diplomat/mediator and to standards that are applied – such as international law. It would be naïve to think that national representatives and law ever were or could be purely objective. But in the diplomatic arena, people with perceived lack of interest gain authority, and actions that are generally held as acceptable become ‘international norms’. Without perceived objectivity, diplomats lose either credibility as an impartial mediator or leverage to shift towards resolution. The recent Clingendael report on water diplomacy makes the point emphatically, and calls on the Government of the Netherlands to be both a “neutral broker” and “norm entrepreneur” (Van Genderen and Rood 2011).

Some mediators and diplomats have a leg up over others, as a result. Diplomats from the US are not able to shrug off the political ‘baggage’ they carry in parts of the world where the effects of national interests are clear, for instance. UK involvement

5 See www.uea.ac.uk/dev/People/staffresearch/blankfordresearch/RiverBasinGame.
in transboundary issues on the Euphrates River following the 2003 US/UK occupation of Iraq, in the same way, would be seen as distorted by current and historic politics. The leverage gained over the governments in question can be more substantial and quicker than traditional diplomacy, to be sure, but coercion through ‘gunboat’ or ‘chequebook’ diplomacy will simply transform, not mitigate (much less resolve) conflicts. As a counter-example, consider how the role of Brazilian or Swedish envoys would be perceived by the governments in question on the Euphrates – or at the height of the Wazzani dispute.

Lending agencies have their own sets of interests and leverage which may be less politically (but more economically) ideological, and thus more effective: consider the transboundary efforts of the Asia Development Bank or the World Bank. Diplomats from international organisations are (in theory) structurally less interested and so may be the best-suited in many cases. UNESCO’s transboundary efforts and training, for example, complements the work of the World Bank and US State Department. With less funds and political weight, however, their relatively greater objectivity appears to be traded-off against capacity for political leverage.

Regardless of the institution they represent, water diplomats will be served to an extent by international norms. As is normal in the development of international norms, those related to sharing of transboundary waters have also shifted. Whereas territorial sovereignty and later ‘first in time, first in right’ (i.e. a state can do what it wants with the water, regardless of downstream impact or whoever else might need water later) were once invoked as principles, a more multi-lateral approach has developed through customary state practice. This practice was codified in the 1997 UN Watercourses Convention (UNWC) and is generally known as ‘international water law’ (IWL). Jan Kubis (2011) speaks from experience as Executive Secretary of the UNECE, when he notes that the UNECE Convention on the Protection and Use of Transboundary Watercourses (see UNECE 2011) is the ‘biggest’ tool available for water diplomacy, as it provides a legal framework that serves to de-securitise the discussion and allows public empowerment towards environmental justice. The three main principles of IWL are ‘no significant harm’, ‘prior notification’, and – most importantly for our concerns about distributive water conflicts – ‘equitable and reasonable use’. The UNWC provides the factors suggested to determine what equitable shares are, based on prior use, alternative water sources, population size, etc. The result of a collective effort of dozens of years of deliberation amongst scientists and lawyers, the principles of the UNWC are a distinct step towards a “community of interests” and “shared sovereignty” (PCIJ 1929; ICJ 1999) and away from international unilateralism.

6 Consider, for example, how human slavery was once common, then contested, then made illegal (and generally unacceptable, though it continues in a different format today).

7 This has recently been built upon by the 2008 Draft Aquifer Articles, which are currently under discussion.
The UNWC has been ratified by 25 UN member states, including 11 EU member states. Campaigns to reach the 35 accessions required for the Convention to enter into force have been led by the Worldwide Fund for Nature and UNESCO. But there is also considerable resistance to IWL and to the development of water-sharing norms. UK government officials have explained their reluctance to sign on the basis of futility – as none of the “large (…) countries Brazil, China, Egypt, India and Israel” support it (DFID 2008), for example. Upstream and powerful countries in particular have been opposed to it outright, typically on the grounds that it is not necessary and may compromise state sovereignty (Turkey, Israel, US, for example). Though severely contested, IWL remains the closest set of principles that may be considered international norms on transboundary waters.

The principles of IWL and water law itself were invoked by Lebanon as a basis of their right to develop the Hasbani River, during the Wazzani Springs dispute. ‘Established use’ (‘first in time, first in right’) was raised as justification of the Israeli retaliatory threats. IWL was not invoked as an objective standard against which to judge the relative claims by the international envoys (Zeitoun et al. 2012). There, as is common elsewhere, the outcome of international water conflicts was left more to the vagaries of power and political interests. The useful legal framework that serves to desecuritise in the UNECE does not exist yet at the global level, and negotiating space remains essentially closed-down.

Water Security through Interdependence

Efforts to seek water security through interdependence are a departure from the more traditional realms of diplomacy that have been discussed. As the planet is ever-more connected by social and biophysical forces, the interdependencies offer both risk and opportunity. The risk is that national water security policy sought by one country or group may come at the cost of water insecurity to another. That possibility is compelling reason to think beyond state boundaries towards multilateralism. The interdependencies that can lead to either water insecurity or long-term sustainable water security are both biophysical and social. These are presented as filaments in a web, in Figure 1.

The web positions six ‘security areas’ related to national water security. These include four intimately associated and interdependent natural ‘security resources’: water resources, energy, climate and food. Directly analogous to Ashton’s (2011) four ‘security pillars’, the biophysical components of the interdependencies are becoming increasingly well-quantified. The study of water – food (agricultural water use, water

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8 The ‘web’ metaphor comes from a draft WEF report by the Global Agenda Council on Water Security: “Water security is the gossamer that links together the web of food, energy, climate, economic growth and human security challenges that the world economy faces over the next two decades.” (WEF 2009: 5).
footprinting) or water – energy relations (energy for water (desalination) or water for energy (bio-fuels)) is giving way to the exploration of nexus including three or more security resources. Climate – water – national security links have been discussed in relation to the Middle East (Brown and Crawford 2009), for example, and more tangentially by water and agriculture think tanks concerned about impacts of climate change on food production (e.g. IWMI 2009; Houdret et al. 2010). Water, environmental and climate diplomats should be very handy with these interdependencies.

Figure 1. The web of sustainable water security (from Zeitoun 2011)

The web also positions two types of social groups concerned – individual/community and nation/state. The range of groups caught up in the web of interdependencies of the security resources (from the individual, through to river basin and global levels) are themselves intertwined through legal, political and social institutions. As an investigative tool, the web thus obliges asking (and answering) the question *water security for who?* – a necessary step to avoid unintended consequences of diplomatic or policy initiatives. In contrast to short-term national water security, sustainable water security
is guided by ‘balance’ in use of the natural ‘security resources’ and by ‘equitability’ of distribution of benefits and risks amongst the concerned social groups.

Tracing some of the filaments of the web demonstrates how, for example, an individual’s water security may coexist with national water insecurity. This is the case of wealthy Yemeni farmer-sheikhs with the deepest wells (who may be temporarily water secure) in the dry highlands of the country (which itself is not, on the whole, water secure) (e.g. Lichtentäehler 2002). Of greater consequence is the under-side of our consumption patterns. UK import of Peruvian asparagus, for example, may serve its national food security policies, but comes at the cost of unsustainable water use and labour exploitation in the Ica Valley (Hepworth et al. 2010) (leaving aside for the moment the carbon footprint of the behaviour). The web of water security, or climate security, for that matter, is sticky indeed.

The web serves not only to highlight how complex the situations are that diplomats must face, but also how to use the goal of sustainable water security as a tool for conflict resolution. Sustainable water security was not considered by any of the actors in the 2002 Wazzani dispute, leaving us to speculate how it may have helped to resolve the conflict rather than to let it linger. The 2010 break-down of the Nile Basin Initiative and the failure to resolve the asymmetric distribution of the Nile River can be seen as a result of Egypt’s pursuit of a strategy of short-term water security9 (Cascão 2009). And this ties into another lesson that John Ashton (2011) has pointed out – that the effectiveness of a treaty rests on the political foundation. As such, the quality of existing treaties should be questioned, and diplomatic efforts should remain focussed on the basics – that is, the political foundation.

Conclusion

The discussion has not sought to down-play the environmental diplomacy challenge at hand. Only very skilled and committed diplomats and diplomatic missions will be able to de-securitise and de-politicise environmental issues without a-politicising them. The discussion’s focus on knowledge, objectivity, and the quest for sustainable water security should be of some assistance to meet the challenge, however.

A chance to resolve the Hasbani River conflict was missed by diplomats during their involvement in the 2002 Wazzani dispute. With Lebanon and Israel at war with more politically important issues, it is certainly disingenuous to blame the water negotiators themselves for what may have always been an impossible mission. Nonetheless, it is possible to see how the (perceived) lack of objectivity on the part of some

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9 At the heart of the tensions there is the 1959 treaty, which is asymmetric in the extreme. In seeking to maintain its apparent advantage, the Egyptian government (of the time) refused in essence to negotiate the treaty itself.
mediators did not help the task at hand. And by not reaching for International Water Law as a basis for resolution of the dispute, the negotiators also missed a chance to act as ‘norm entrepreneurs’ by shoring up international water-sharing norms at a time when they are most needed.

A number of recommendations follow on from this brief analysis. For example, water (and climate) diplomatic missions should have social and natural resource scientists working alongside seasoned diplomats, to make the best use of knowledge and the analytical tools available. Ideally, the diplomats themselves would have been trained in these disciplines and be equipped with sufficient resources to ‘prepare the ground’, for instance through gaming. Finally, interested governments should support the development of international norms at every opportunity. Block-ratification of the UN Watercourses Convention by the European Union, for example, would be a step towards the objectivity and standards required for sustainable water security.

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