Water International

ISSN: 0250-8060 (Print) 1941-1707 (Online) Journal homepage: https://www.tandfonline.com/loi/rwin20

Introduction to 'Transboundary River Cooperation: Actors, Strategies and Impact'

Selina Ho

To cite this article: Selina Ho (2017) Introduction to 'Transboundary River Cooperation: Actors, Strategies and Impact', Water International, 42:2, 97-104, DOI: 10.1080/02508060.2017.1279042

To link to this article: https://doi.org/10.1080/02508060.2017.1279042

Published online: 06 Feb 2017.

Submit your article to this journal

Article views: 5378

View related articles

View Crossmark data

Citing articles: 4 View citing articles

Full Terms & Conditions of access and use can be found at
https://www.tandfonline.com/action/journalInformation?journalCode=rwin20

WATER INTERNATIONAL, 2017
VOL. 42, NO. 2, 97–104
http://dx.doi.org/10.1080/02508060.2017.1279042

Routledge
Taylor & Francis Group

INTRODUCTION

Introduction to 'Transboundary River Cooperation: Actors, Strategies and Impact'

Selina Ho

Centre on Asia and Globalisation, Lee Kuan Yew School of Public Policy, National University of Singapore

This special issue is a collection of analytical and empirical articles that seeks to answer two related questions: Under what conditions do riparian countries cooperate over transboundary waters, and how do various actors/stakeholders facilitate or hinder cooperation? It is widely acknowledged that both cooperation and conflict exist on a spectrum in relations among riparian states. Conflict among riparians, however, tends to grab the attention of policy makers, academics and the media more than cooperation. The aim of this special issue is to refocus the discussion on riparian cooperation, by using a range of international relations theories to explain the conditions that promote cooperation, including rationalist, institutionalist, constructivist, realist and international political economy perspectives. They were carefully selected from papers written and presented by a team of leading scholars at a workshop organized by the Centre on Asia and Globalisation, Lee Kuan Yew School of Public Policy, National University of Singapore, 21–23 May 2015.

Specifically, this special issue looks at the roles of various stakeholders or actors in promoting or hindering cooperation in transboundary river basins around the world. These stakeholders include states, at both the national and subnational levels, and non-state actors, such as international organizations, non-governmental organizations, civil society, private and state-owned enterprises, and even individuals. By focusing on the various actors involved in international river basins, we seek to understand the motivations of different actors and groups, the strategies they use to promote cooperation, and the extent of their impact on the management of international rivers. The special issue also facilitates cross-regional comparisons of transboundary rivers by drawing cases from Asia, the Middle East, Europe and the United States. The problems of cooperation vary across regions, due to differences in geography, climate, resource endowment and economic, political and societal systems. Not only are the findings important theoretically and empirically, they also have significant policy implications: by identifying the conditions that facilitate cooperation among riparian stakeholders, the articles will help policy makers formulate policies that encourage cooperation, reduce conflict, and thus promote peace and stability among countries that share rivers.

CONTACT Selina Ho selina.ho@nus.edu.sg
© 2017 International Water Resources Association

Competition and cooperation in transboundary river basins

In international politics, the competition for water is a transnational non-traditional security issue[1] that has serious repercussions for regional stability. Water is a primordial concern that touches on issues of survival and basic sustenance. Rivers are particularly contentious, as they meander across political boundaries and hence are subject to competing interests. Most nation-states see themselves as sole proprietors of the portion of the river that flows through their territory; rivers are regarded as a national resource that states have sovereign rights to utilize as they deem appropriate for their self-interests. Water diversions and dam constructions by one riparian, because they can reduce water resources available to another riparian, often provoke strong emotion among those negatively affected by such activities. Tensions and conflict often ensue. A potential ultimate outcome could be war. Cutting off the water supply of a country, for instance, can be regarded as a *casus belli*.

Rivers are also contentious because they are a key resource closely knitted into the history of human development. Water resources can be used to alleviate abject poverty. River economies sustain millions of people who live by rivers, and who depend on rivers for their livelihoods. This is particularly true in Asia, where poorer sections of the population tend to congregate around rivers, but less so in Europe. Rivers have multiple uses and are a renewable energy resource. They are a source of drinking water, and are important for navigation, transportation, flood control, irrigation and hydropower generation. As a result, there are often conflicts over how rivers should be used. For instance, building dams to generate hydropower affects flood levels, fisheries and navigation. Diverting water from one area to another pits one group of users against another. In regions where relations among riparians are historically conflictive and where water resources are scarce, for example in the Jordan River area, the management of water resources is even more contentious. This is because water disputes are seldom about water itself, but are an extension of broader relations between states.

Wars, however, are rare. Water disputes are more accurately defined as a form of low-intensity conflict, that is, a political-economic-military confrontation between contending states or groups below conventional forms of war, and above routine, peaceful competition (US Army and US Air Force, 1991). Conflict short of armed violence is a regular occurrence between parties, whether within or between nation-states, sharing water resources. For instance, in the history of Malaysia and Singapore, Malaysia's occasional threat to 'turn off the tap' was a constant source of insecurity for water-scarce Singapore, which until recently was dependent on Malaysia for most of its water supply. Such episodic threats were a source of tension between the two neighbouring states.

In *Politics: Who Gets What, When and How* (1936, p. 295), Harold Laswell states that "the study of politics is the study of influence and the influential", and "the influential are those who get the most of what there is to get". In other words, politics is about power, which is manifested in the ability to influence the allocation and distribution of resources. The politics surrounding the allocation of water resources clearly illustrates Laswell's thesis. The power distribution among riparian states influences the allocation of scare water resources. Power in transboundary river basins has two aspects: the geographical position of the riparian, and the economic and military prowess of the

riparian. Upstream riparians usually have the upper hand vis-à-vis downstream riparians; they are able to export negative externalities to lower riparians while suffering few consequences. In some cases, downstream riparians can be more powerful than upstream riparians if they have control over a disproportionate share of the river. The power distribution among states, independent of their geographical position on the river they share, also impacts the management and allocation of water resources. States with a larger economy, military and population are more likely to dominate river systems. These states are known as hydro-hegemons (Zeitoun & Warner, 2006).

When hydro-hegemons are also upstream countries, there are few restraints on their behaviour. This is particularly true in the case of China. Not only do the most important rivers in Asia have their water source in the Tibetan Plateau, China is also the largest and most powerful actor in Asia. Realism predicts that in such a situation, cooperation can only come about when the hydro-hegemon imposes it. By this reasoning, it seems that when hydro-hegemons are downstream countries, cooperation is more likely to result. Yet, other studies have shown that conflict is more probable when a downstream country is highly dependent on river resources, is stronger than the upstream countries, and believes that it has the military capacity to rectify the allocation of water resources to its advantage (Homer-Dixon, 1994).

Given the difficulties in upstream–downstream relationships, collective action or joint management of shared river basins around the world has been difficult. Studies by John Waterbury (2002) on the Nile River basin illustrate the problem of collective action among 11 riparian states. In his keynote speech for the workshop in Singapore, Waterbury (2015) spelt out the problems of commitment, compliance and defection in collective action. Interestingly, he concludes that first, voluntary compliance is probably the only way to sustain collective action, and second, in the absence of commitment, positive unilateralism in terms of "to do at home what you would hope all your neighbours would do" can set the stage for collective action. However, there are significant obstacles for states to arrive at voluntary compliance and positive unilateralism at the interstate level, since states themselves often find it difficult to exercise best practices, such as water recycling, efficient and rational use, and water pollution control, at home. Collective action is also difficult when large numbers of domestic actors with differing interests are involved in decision making. Local governments, businesses, non-governmental groups, civil society and private individuals can influence the management of rivers in multiple ways.

However, despite the difficulties of collective action and headline-grabbing cries of 'water wars', armed violence is rare in transboundary river basins – "there has never been a single war fought over water" (Wolf, 1998, p. 257). In the limited incidents of wars between states where water is involved, the underlying or primary cause was not water. In these incidents of armed conflict, hostile relations already exist, and water either acts as a catalyst for the conflict or becomes embroiled in the conflict. Indeed, studies show a high incidence of cooperation among riparians. An Oregon State University–UN study found that the instances of cooperation among riparian states outnumbered the conflicts; since 1948, there have been 37 incidents of acute violent conflicts over water (30 of these between Israel and its neighbours), while during the same period, about 295 international water agreements were negotiated and signed (Wolf, 2002).

Of course, history is not necessarily the best guide for the future. Changes in our economic and physical conditions produce new circumstances that could lead to increased water conflict and even war. The review article by Jacob D. Petersen-Perlman, Jennifer C. Vellieux and Aaron T. Wolf, 'International water conflict and cooperation: challenges and opportunities', argues that as transboundary river basins undergo rapid changes, both physical and economic, the field of water conflict and cooperation needs to be re-examined in light of these new realities. Water conflicts could increase as populations grow and climate change continues to manifest. Human security and water security become increasingly intertwined, as a result. The authors propose solutions for reducing water conflicts, and underscore the importance of institutional capacity and third-party involvement for resolving conflicts and promoting cooperation. They also pointed to future directions and techniques for addressing the new problems that have arisen in transboundary water resources management.

Greater awareness of the possibility of increased conflict has led to both state and non-state actors taking action to lower the risks of acute conflict. The high costs of war and the sensitivity surrounding water resource issues often prompt states to engage in strategies to prevent the outbreak of armed hostilities. For instance, states may try to desecuritize water as an issue with their neighbours and employ inclusive rhetoric, such as promising not to harm the interests of others, to diffuse some of these tensions. They also join international conventions and rely on international law to ensure the peaceful settlement of disputes. States also engage in institution building and joint development programs at the river basin level. No matter how imperfect water institutions and treaties can be, they nevertheless help routinize issues, lower the risks of crises, facilitate issue-linkages, and provide platforms for reducing differences, thus helping promote stability at both river basin and regional levels.

Civil society and non-state actors are also playing an active role to deal with water shortage, water pollution and dam-building problems. Many of these groups have cross-border networks and links and hence are helpful in encouraging cooperation across national borders. Some work closely with national governments to address issues such as water pollution, while others create areas of contestation to encourage change in water management. By skilfully framing water-related issues and constructing narratives around these issues, non-state actors have become effective as a source of pressure on national governments and in encouraging a process of dialogue among various stakeholders that helps improve transboundary water governance.

Incentives and strategies for change and cooperation

Some questions this special issue seeks to address include:

- Why and how do riparians cooperate?
- How does the power distribution among riparian states affect the allocation of water resources? Why would hydro-hegemons cooperate? What strategies could weaker downstream states use to induce cooperation from stronger upstream states?

- How do non-state actors affect the management of international rivers? What are their strategies and tools for ensuring that they are able to influence national policies?

Following Petersen-Perlman et al.'s review article, the next two articles focus on the role of national governments and the issue of power asymmetries in shaping transboundary river cooperation. Marc Jeuland, Xun Wu and Dale Whittington's 'Infrastructure development and the economics of cooperation in the Eastern Nile' uses an international political economy approach to consider riparian cooperation. Their article demonstrates how large infrastructure projects can alter the dynamics of cooperation between riparian countries in transboundary river basins. The authors employ a hydro-economic optimization model to analyze the effects of the Grand Ethiopian Renaissance Dam on the distribution and magnitude of benefits in the Eastern Nile. They show that large infrastructure can shift power asymmetries at the basin level in complex ways, modifying incentives to participate in river basin institutions, as well as opportunities for cooperation. For example, new cooperative institutions and approaches to benefit sharing may become viable as a result of infrastructure development. At the same time, shifting power dynamics may strain existing and previously stable governance regimes. Infrastructure development therefore has important implications for cooperation, which perhaps explains why large projects are often contentious even when they are developed to include compensation, benefit-sharing mechanisms, or provisions to limit adverse downstream impacts. This in turn may help explain why some riparians and stakeholders appear willing to obstruct projects even when they could deliver substantial basin-wide economic benefits.

Selina Ho's article, 'China's transboundary river policies towards Kazakhstan: issue-linkages and incentives for cooperation', assesses the conditions under which the Chinese government is likely to cooperate with its neighbours in managing transboundary rivers. She argues that China cooperates with some of its riparian neighbours more than others. Using the Basins at Risk scale, she shows that China cooperates with Kazakhstan on the Ili and Irtysh Rivers more than it does with the Indochina states of the Mekong, and cooperates least with India on the Brahmaputra. Cooperation takes the form of institution building and joint development. Although problems in managing shared waters persist and China does not always consider the impact of its actions on Kazakhstan, China has nevertheless taken the unprecedented step of beginning negotiations on a water-sharing agreement with Kazakhstan. Why does China engage in a higher level of institutionalized cooperation with Kazakhstan, a weaker downstream neighbour? Ho demonstrates that linkages between water and issues 'beyond' the river basin offer a plausible explanation for China–Kazakhstan transboundary river cooperation. A reciprocal relationship exists between China and Kazakhstan; in return for Kazakhstan's cooperation on a variety of issues vital to its security, economic and strategic interests, China is incentivized to cooperate and accommodates Kazakhstan's concerns over their shared rivers. China–Kazakhstan transboundary water cooperation offers important lessons for weaker downstream states seeking cooperation from stronger upstream states.

In contrast to the state-centric views of Jeuland et al.'s and Ho's articles, Pichamon Yeophantong's 'River activism, policy entrepreneurship and transboundary water

disputes in Asia' takes a bottom-up approach to understanding the issue of cooperation. Based on three case studies, namely the Mekong, the Nu-Salween and the Brahmaputra, Yeophantong focuses on the role of river activists across different countries and contexts in Asia. Drawing from a policy entrepreneurship framework, Yeophantong investigates how river activists strategically frame rivers as areas of contestation. She argues that contestation in turn becomes desirable for policy change, which in the long run is potentially constructive for transboundary water cooperation. By defining hydropower development as a 'problem' worthy of public concern, with attendant effects on legitimacy and national interests, policy entrepreneurship arising from the contestation can trigger procedural changes that enhance the reach and effectiveness of transboundary water governance through the inclusion of a wider array of stakeholders. Yeophantong's study also shows how non-state actors work together across borders to advocate for different aspects of their cause. For instance, in the case of Laos's Xayaburi Dam in the Mekong River, Thai activists focused on the legal aspects of the issue, while Cambodian and Vietnamese activities emphasized the dam's threat to regional stability.

Carla Freeman's 'Dam diplomacy? China's new neighbourhood policy and Chinese dam-building companies' plugs a critical gap in current literature on the interactions between the Chinese government and the business sector in dam building, and the consequent implications for China's relations with its neighbours. Under President Xi Jinping, China has announced a 'new neighbourhood policy', which emphasizes good neighbourliness and deepening of economic benefits for the region. Freeman's article investigates whether China's renewed emphasis on managing relations with countries along its periphery is reflected in changes to its role in hydropower development affecting neighbouring countries. Freeman focuses on the principal–agent problem, specifically how the Chinese government is managing its dam-building corporations as foreign policy actors in its neighbourhood. In her article, Freeman details the activities of Chinese dam companies in Asia, and preliminarily concludes that despite exhortations from Chinese officials to improve their environmental practices, there is little evidence that Chinese dam-building companies have fundamentally altered the way they build dams. Their primary motivation remains profit-seeking. Much of Freeman's article focuses on the Myitsone Dam controversy and its impact on Chinese policies. Her article shows how despite the intentions of policy makers, agents on the ground, in this case the business sector, can be a stumbling block to greater cooperation at the river basin level. It also dispels the myth that Chinese companies operating abroad necessarily represent the strategic interests of the Chinese government.

Marco Verweij's article, 'The remarkable restoration of the Rhine: plural rationalities in regional water politics', examines how the complex interactions between state and non-state actors can lead to cooperation. In Europe, the problems facing transboundary rivers like the Rhine and the Danube are different from those in Asia and the Middle East. The impact of dams and water diversions is less salient, while the primary focus is on cooperation to deal with water pollution. According to Verweij, the clean-up of the Rhine has been characterized by a number of puzzling developments. These include chemical companies reducing their toxic effluents by more than legally required, and riparian governments quarrelling internationally over environmental measures that

each of them are undertaking domestically. To address these puzzles, Verweij explains how states, at the national and municipal levels, and non-state actors, such as international institutions, chemical multinationals, water treatment companies, scientists, environmental NGOs, farmers' associations and the media, all came together to clean up the Rhine. His article argues that plural rationality theory explains how a virtuous cycle consisting of creative, though not always harmonious, interactions between stakeholders with different interests and alternative policy perspectives has resulted in the cleaning up of the Rhine.

The last article, Scott Moore's 'The dilemma of autonomy: decentralization and water politics at the subnational level', offers a different take on transboundary river cooperation from the other articles by focusing on the subnational politics of international rivers, specifically the Colorado River in the United States. Moore's article considers how conflict dynamics at the international level differ from those at the subnational level. It develops a framework for understanding the role of subnational states in water politics in decentralized federal systems. First, the process of decentralization has increased the role of subnational states in water resource management. Second, the quest for autonomy sometimes leads subnational officials to prefer loose forms of cooperation. Third, the interactions among subnational states, central governments and non-governmental actors create the constituency for collaboration in shared river basins. This framework helps explain the long-term shift from weak institution building to more institutionalized and cooperative relationships between the riparian states of the Colorado River.

Note

1. Non-traditional security issues are non-military threats to state and human security. They are usually transnational, arise quickly, and can be mitigated even if not prevented (definition from the Consortium of Non-Traditional Security Studies in Asia, http://www.rsis-ntsasia.org).

Acknowledgments

The guest editor would like to thank the Lee Kuan Yew School of Public Policy for sponsoring the Water Politics and Regional Stability workshop in Singapore in May 2015. She is also grateful to the team of research assistants and event organizers for ensuring the smooth running of the workshop. This special issue would not have been possible without the valuable comments and feedback provided by the discussants of the workshop, the reviewers and the editor-in-chief of *Water International*. Special thanks to Jing Bo-jiun for his assistance in helping put together this special issue.

References

Homer-Dixon, T. (1994). Environmental scarcity and violent conflicts: Evidence from cases. *International Security*, *19*(1), 5–40. doi:10.2307/2539147

Lasswell, H. (1936). *Politics: Who gets what, when, how*. New York, NY: McGraw-Hill Book Co.

US Army and US Air Force. (1991). *FM 100-20/AFP 3-20: military operations in low intensity conflict*. Washington, DC: Department of the Army. Retrieved from http://www2.gwu.edu/~nsarchiv/NSAEBB/NSAEBB63/doc4.pdf

Waterbury, J. (2002). *The Nile basin: National determinants of collective action*. New Haven, CT: Yale University Press.

Waterbury, J. (2015). *Puzzles of commitment, compliance and defection in collective action*. Keynote Speech at the Workshop on Water Politics and Regional Stability, May 2015. Singapore.

Wolf, A. (1998). Conflict and cooperation along international waterways. *Water Policy*, *1*(2), 251–265. doi:10.1016/S1366-7017(98)00019-1

Wolf, A. (2002). *Atlas of international freshwater agreements*. Nairobi, Kenya: UNEP.

Zeitoun, M., & Warner, J. (2006). Hydro-hegemony – a framework for analysis of trans-boundary water conflicts. *Water Policy*, *8*, 435–460. doi:10.2166/wp.2006.054