

Water International



ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/rwin20

Non-decisions are also decisions: power interplay between Bangladesh and India over the Brahmaputra River

Sumit Vij , Jeroen F. Warner , Robbert Biesbroek & Annemarie Groot

To cite this article: Sumit Vij, Jeroen F. Warner, Robbert Biesbroek & Annemarie Groot (2020) Non-decisions are also decisions: power interplay between Bangladesh and India over the Brahmaputra River, Water International, 45:4, 254-274, DOI: 10.1080/02508060.2018.1554767

To link to this article: https://doi.org/10.1080/02508060.2018.1554767

9	© 2019 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.	+	View supplementary material 🗷
	Published online: 04 Jan 2019.	Ø*	Submit your article to this journal 🗗
hh	Article views: 3293	Q ^L	View related articles ☑
CrossMark	View Crossmark data ☑	4	Citing articles: 6 View citing articles 🗹







Non-decisions are also decisions: power interplay between Bangladesh and India over the Brahmaputra River

Sumit Vij 60°, Jeroen F. Warner 60°, Robbert Biesbroek 60° and Annemarie Groot 60°

^aPublic Administration and Policy Group, Wageningen University & Research, Wageningen, the Netherlands; ^bSociology of Development and Change Group, Wageningen University & Research, Wageningen, the Netherlands; 'Wageningen Environmental Research, Wageningen University & Research, Wageningen, the Netherlands

ABSTRACT

This article shows how Bangladesh and India intentionally maintain the status quo for the Brahmaputra River at the transboundary level, using material and ideational resources. Results show that India wants to reduce its hegemonic vulnerabilities and Bangladesh aims to maintain its control over the Brahmaputra river, simultaneously building its technical and negotiation skills. We conclude that the underlying processes of maintaining the status quo can be comprehended as 'non-decision making'. The analysis presented will help policy actors to push towards a forward-looking climate change adaptation planning for the Brahmaputra River.

ARTICLE HISTORY

Received 26 July 2018 Accepted 12 November 2018

KEYWORDS

Power interplay; climate change adaptation; hegemonic vulnerabilities; non-decision making; Brahmaputra

Setting the scene

Transboundary watercourses in South Asia such as the Brahmaputra River are experiencing significant challenges from climate change (Eriksson et al., 2009; Wijngaard et al., 2017). Climate change is having an adverse effect on the community livelihoods and the natural ecology of the Brahmaputra (Fischer, Pietroń, Bring, Thorslund, & Jarsjö, 2017; Mosselman, 2006). Communities in the floodplains of the lower Brahmaputra basin continue to face extensive flooding due to increased river flows and extended droughts as a result of changes in monsoon rainfall (Immerzeel, 2008; Lutz, Immerzeel, Shrestha, & Bierkens, 2014; Wijngaard et al., 2017). Moreover, there are increasing socio-economic pressures on the river in both Bangladesh and India, such as increasing population and energy demand (Rasul, 2014).

Perhaps unsurprising, then, are the increasing calls for design and implementation of climate change adaptation measures at the transboundary level to reduce the current and future climate impacts in the basin (Tilleard & Ford, 2016). However, limited progress has been made in Bangladesh and India in this regard (Vij et al., 2017). Throughout South Asia, adaptation measures are still mostly designed and implemented at the country level (Ford et al., 2015; Lwasa, 2015). This is because the implementation of adaptation measures depends on cooperation between the riparian countries (Tilleard & Ford, 2016; Zeitoun, Goulden, & Tickner, 2013). Transboundary water cooperation between riparian countries can influence the coordination of adaptation measures and reduce the possible negative impacts of unilateral adaptation measures (Milman, Bunclark, Conway, & Adger, 2013). But transboundary-level adaptation and water cooperation between Bangladesh and India are limited (Barua, Vij, & Zulfiqur Rahman, 2018; Hill, 2013).

There are persistent conflicts between India and Bangladesh with regard to the specific ways of controlling floods and tapping the potential of the Brahmaputra River. For instance, to reduce the impacts of flooding, the national government of India follows a technocratic approach (Bassett & Fogelman, 2013). To elaborate, India considers building tangible adaptation measures for large infrastructure development (e.g., storage structures and hydropower development) to meet the growing energy demand and reduce climate change impacts. But if the upstream Brahmaputra is controlled and dammed as a result of adaptation measures in India, it will impact the livelihoods of millions in downstream India and Bangladesh (Fischer et al., 2017). Historical practices of water negotiation also matter to Bangladesh, as it has experienced power asymmetry in bilateral negotiations with India over the Ganges and Teesta Rivers (Biswas, 2011; Ho, 2016). Such experiences do not offer a good start for negotiating issues related to other transboundary rivers.

In recent decades, Bangladesh and India have engaged in a continuous power interplay for transboundary waters, using material and ideational resources to negotiate for their own interests, undermining the benefits of cooperation. Material resources may include finance, popularity, military power, political skills, scientific knowledge, control over data and information, and networks. Ideational resources include knowledge constructs, narratives, ideas, rules, social values, international pressure, and experience (Cascão, 2009; Zeitoun & Warner, 2006). However, there is limited explanation in the literature about the use of material and ideational resources by the two countries and what it means for the Brahmaputra River.

In this article, we aim to answer the question, How does the power interplay between Bangladesh and India result in intentionally maintaining the status quo for the Brahmaputra River? We use the framework of power interplay to analyze and answer this question and argue that Bangladesh and India use material and ideational resources to maintain the status quo. In such a scenario, climate change adaptation planning and development at the transboundary level looks unlikely, implying the possibility of continued climate-induced disasters and socio-economic pressures.

The remainder of this article is structured as follows. The next section elaborates the conceptual framework to operationalize the concepts of power interplay and material and ideational resources. The third section provides the political and climate context of the Brahmaputra River, focusing on the river basin in Bangladesh and India. The fourth describes the methodology and discusses the data collection methods and analysis. The fifth presents the key findings, demonstrating how Bangladesh and India use material and ideational resources intentionally to pursue the status quo. The discussion section elaborates how the use of material and ideational results in 'non-decision making' and key policy-relevant insights of this study, followed by the conclusion.

Theoretical approach

The concept of power has various connotations, with different meanings and interpretations (Berenskoetter & Williams, 2007; Lukes, 2005). Power and power asymmetry have been discussed in several strands of international relations literature, including in the realist and neo-institutionalist schools of thought. Realists accentuate material resources, while neo-institutionalists emphasize both the material and the ideational resources (or 'power') used by actors in high-level negotiations on transboundary issues (Daoudy, 2009; Turton & Ashton, 2008).

Lukes (2005) brought together three 'faces of power' in a coherent framework. The first face, deriving from Robert Dahl's (1957) work, explained power as a relation among actors and defined it as the ability of actor A to get actor B to do something that actor B would not otherwise do. Expanding on Dahl's work, Bachrach and Baratz (1963) explained the second face of power, relating to non-decision making and keeping conflicts from being discussed in political fora. Lukes (2005) added the third face of power: the ideological power shaping the perceptions of the actors involved in the power interplay.

Material resources relate to economic growth, military, stability, capacity for hydropower development, access to external political and financial support, and especially in hydro-politics, the country's geographical position – upstream or downstream (Menga, 2016b; Cascão, 2009). States use material resources to legitimize their actions and to strive for relative advantage against other (often weaker) states (Luttwak, 1990). For example, India is undertaking a massive river interlinking programme, with little consideration of the upstream and downstream Nepal and Bangladesh, respectively. Realists argue that material resources can also provide a state with decision-making power during and before the interplay by excluding or including certain actors (Fuchs & Glaab, 2011).

Although often referring to the same material resources, neo-institutionalist scholars question the central role of the state in transboundary issues, claiming institutional complexities and interdependencies between intra-state actors (Warner et al., 2017). In addition to material resources, states can use ideational resources, which refers to knowledge constructs, narratives, ideas and rules used during or before the negotiations to influence transboundary decisions (Cascão, 2009; Cascão & Zeitoun, 2010; Nye, 2009). A state uses ideational resources to shape social norms, values and choices in favour of their interests at the transboundary level. Ideational resources can act as sources of power to prevent certain actions. For example, in the Nile basin Egypt has delayed negotiations on the 1959 treaty by being present in the negotiations and maintaining its hegemonic position.

In transboundary river basins, a state that can influence other riparian states by means of material and ideational resources to achieve desired outcomes is called a hegemon, and the other riparian states, which use material and ideational resources to comply (or implicitly comply) with the hegemon can be referred to as non-hegemons (Evans & Newnham, 1998; Zeitoun, Mirumachi, & Warner, 2011; Zeitoun & Warner, 2006). In this article, the interaction between a hegemon and a non-hegemon using various material and ideational resources is what we shall call power interplay. Examples where a hegemon and a non-hegemon are enmeshed in power interplay

include issues of water sharing, water resources development, joint research, data sharing, and flood and erosion management (Mirumachi & Allan, 2007).

Such power interplay can result in zero-sum or non-zero-sum outcomes, but there is also a possibility of partial or complete status quo (Hanasz, 2017). Status quo is a situation where no concrete decisions are made between the hegemon and non-hegemon on issues such as water sharing, water resources development, flood and erosion management, navigation routes, construction of storage structures and dams, and joint research. In this article, power interplay exemplifies a specific variety of the 'second phase of power' - where the hegemonized party seems to condone the lack of decision making stemming from the hegemon's (non-)agenda setting.

The literature on transboundary waters has a limited focus on domestic power interplay, with some notable exceptions, such as Warner and Zawahri (2012), Menga (2016a), and Petersen-Perlman and Fischhendler (2018). Clearly, such power interplay takes place in a nested governance system, where both internal and external forces shape the power interplay and influence transboundary negotiations (Putnam, 1988). In decentralized states such as India, where national and sub-national tiers of government have substantial authority in decision making over certain topics, domestic challenges such as institutional complexities, citizens' preferences, state politics and interdependencies create internal tensions that despite the hegemon's power weaken their role in negotiations. These domestic challenges which can limit a hegemon are referred to as 'hegemonic vulnerabilities' (Petersen-Perlman & Fischhendler, 2018). In these circumstances, a non-hegemon can make strategic use of these vulnerabilities to create a more level playing field by using their own material and ideational resources to negotiate or pursue certain outcomes, including the status quo.

In analyzing the case, we emphasize not only the material and ideational resources used by both countries but also (in case of India) the interplay between national and state governments, as this has a strong influence on the transboundary outcomes. For instance, a hegemon may prioritize resolving domestic water conflicts over transboundary issues, to gain the trust of the citizens and take short-term political advantage. We specifically elaborate on how domestic politics influences transboundary water relations and the way the hegemon uses domestic interactions as an ideational resource to pursue the status quo.

Methodology

We use an interpretive approach (Angen, 2000; Islam, 2017) to systematically analyze the transboundary relationship between Bangladesh and India. Such an approach informs the way transboundary interaction is made sense of by policy actors and other relevant actor groups involved in the interaction processes (Yanow, 1999). The interpretive approach helps in explaining how different material and ideational resources are used to pursue a partial or complete status quo, instead of the obvious zero-sum and non-zero-sum outcomes.

For the purpose of this research, we study the Brahmaputra Dialogue (BD) meetings and interviews with the transboundary actors. The BD project was initiated by the South Asian Consortium for Interdisciplinary Water Studies (SaciWATERs) to work towards a basinlevel institutional framework for cooperation on the Brahmaputra. The BD project started as a bilateral dialogue platform between Bangladesh and India and eventually became a multilateral platform including all the riparian countries (Figure 1). BD is the only continuous Track 1.5 dialogue initiative sharing various insights on the complexities of the Brahmaputra River.² The BD meetings were conducted at two levels: national and regional.³ National-level meetings were focused on discussing the country's internal issues related to flooding, erosion, hydropower development and institutional mechanisms for

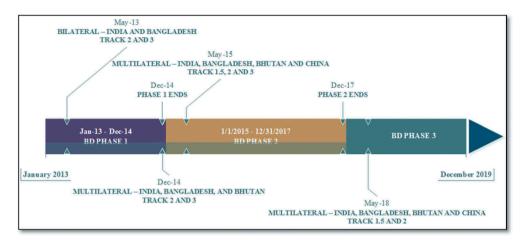


Figure 1. Brahmaputra Dialogue meeting timeline.

conflict resolution. The regional meetings emphasized issues such as hydrological data sharing, joint research at the basin level, technical discussions on inland navigation, basinlevel erosion and flood control.

We have included only the lower Brahmaputra (India and Bangladesh) in this study for two reasons. First, climate change is intensifying the impacts of floods and droughts, in conjunction with land-use changes and population explosion in the lower Brahmaputra region (Bangladesh and India). Climate change adaptation measures are urgently needed in this part of the Brahmaputra basin. Second, the BD included China only after 2015, and only Chinese academia (Track 3) is represented in the second phase of the dialogue meetings. However, in the third phase of the BD project, Chinese Track 2 participation is expected.

Data collection

Two data-collection strategies were used. First, meeting reports of the BD project were collected. Fourteen meetings were held between 2013 and 2017 in India (New Delhi, Guwahati and Itanagar), Bangladesh (Dhaka) and Singapore (see Table A1 in the online supplementary material, at https://doi.org/10.1080/02508060.2018.1554767 for a detailed list of the meetings). These meetings included Bangladeshi and Indian participants from Track 3 to Track 1.5. Audio recordings of 14 meetings (approximately 80 hours) were also used for the analysis. Notes from three separate closed-door meetings were also collected. Second, 18 interviews were conducted between August 2017 and February 2018

in Bangladesh and India with key people involved. Interview respondents were selected during the informal interaction with participants of BD meetings and through their referral. The interviews also helped in triangulating the data of the BD meeting reports. The respondents included Brahmaputra river experts (BE), influential academicians working on the Brahmaputra River (AB), retired foreign service officials and retired water bureaucrats (RB), serving bureaucrats in the water ministries of Bangladesh and India (BW), serving bureaucrats of the Joint Rivers Commission in Bangladesh and India (BJ) and representatives of think tanks working on transboundary issues in Bangladesh and India (TT).

The interviews were conducted in English and lasted between 45 and 180 minutes. During each interview, broad questions were asked, including: What level of communication exists between Bangladesh and India for the Brahmaputra River relating to issues of water sharing, climate change and disaster risk reduction? How do Bangladesh and India discuss flood management and adaptation measures at the transboundary level for the Brahmaputra River? What are the internal and external challenges relating to the Brahmaputra River within India and Bangladesh? How do India and Bangladesh influence each other (or not) during their interactions? Such questions allowed the interviewee to talk freely. Follow-up telephone and Skype interviews were conducted to clarify responses and to solicit additional information in February and March 2018.

Data analysis

An iterative process of data analysis was followed to make meaning out of the data collected. A process of continuous meaning-making was developed by using both inductive and deductive ways of finding patterns and themes in the data (Srivastava & Hopwood, 2009). The iterative method was created using two fundamental questions. First, what is the data telling us? - engaging with interviews and meeting documents. Second, what is it we want to know? - based on the research question of the study. We used these two questions to create a dialectical relationship between the data and the research question of the study. Data were analyzed in two steps. First, we read each meeting document in detail, marking keywords, phrases and sections, and identified the use of different material and ideational resources. For example, who participates in BD meeting, who should participate, and who influences were points of discussion in certain meetings. Based on that, participation emerged as a theme. We used participation as a keyword (code) for the rest of the data. The sections with marked keywords and phrases were separated. Second, the separate sections of the meeting documents and interviews were interpreted for dialectical connection. For instance, from our data we found that power can be characterized by who participates and who prevails in decision making. Schattschneider (1975) mentions that powerful actors not only make decisions (or prevent decisions from being made) but also decide who participates. Then we interpret it in terms of our research question, to answer how Bangladesh and India use material and ideational resources. In this way, we completed the two steps of data analysis to derive key empirical themes and narratives.

Climate and political context of the Brahmaputra River

Bangladesh and India share 57 transboundary rivers, including the Brahmaputra (Joint Rivers Commission, 2018). It is the fourth-largest river in the world in terms of average discharge, at approximately 20,000 m³/s (Ray et al., 2015). Originating in Tibet (China), the Brahmaputra flows through India and ends in Bangladesh (Figure 2), covering a distance of 2840 km (Wang et al., 2017). The Brahmaputra can be divided into three different physiographic zones: the Tibetan Plateau (China), the Himalayan belt (China and India), and the floodplains (India and Bangladesh). Approximately 66 million people depend on the Brahmaputra River for their livelihood, with the most in the floodplains, and thus any change in the river's discharge may hurt the dependent basin communities (Islam, 2017).

Warming climate impacting the snow and glacier melt processes can affect the precipitation in the Himalayan belt of the Brahmaputra, changing the discharge in the floodplains. Immerzeel, Van Beek, & Bierkens (2010) and Gain and Wada (2014) expect an increase in intensity and frequency of seasonal water scarcity due to the hydrological impact of climate change and increasing population and development pressures. Hydrological impacts of climate change in the floodplains are expected to be strong due to the combined effects of snow melt, variability in monsoon, and sealevel rise.

The Brahmaputra basin is rich in biodiversity and has a huge potential for infrastructure-related operations such as irrigation, navigation and hydropower development (Barua et al., 2018). Within the Brahmaputra basin, there are the stereotypic

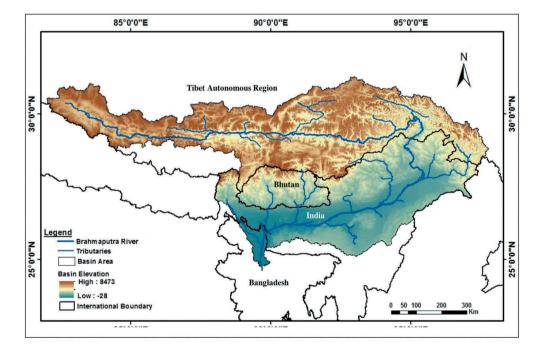


Figure 2. Map of the Brahmaputra River basin.

Source: Indian Institute of Technology, Guwahati, India

conflicting interests between Bangladesh and India, related to water resources development and the water-diversion plans of the upstream authorities, including around the massive hydropower potential of the river (Liu, 2015). Bangladesh and India have different interests with regard to the river. The Brahmaputra provides 67% of the total annual river discharge of Bangladesh in the dry season and supports farming and fishing communities (Thakkar, 2003). India wants to tap the hydropower potential of the river to meet the growing demand for energy and to develop the north-east region of the country. Of the total hydropower potential of India, 44.4% lies in the Brahmaputra basin (Rahaman & Varis, 2009).

The Brahmaputra River flows through a historically contested geography between China, India and Bangladesh (Gleason & Hamdan, 2017). The contestation between the countries is mostly related to border disputes and security issues, making the river securitized. Securitization is a process in which an actor declares a particular issue or an interplay to be an 'existential threat' to a state (McDonald, 2008). The Brahmaputra River flowing through contested geography has become an issue of existential threat to India and hence securitized. Due to the securitization of the river, hydrological data sharing is limited between the countries. In fact, India shares data in limited domains with Bangladesh, making it an instrument of power interplay (Barua et al., 2018). Inadequate data-sharing mechanisms and the securitization of the does not promote basin-level research into flooding and erosion issues (Jung et al., 2010; Ray et al., 2015). The only memorandum of understanding between India and Bangladesh is an agreement to share hydrological data on the monsoon season via annual Joint Rivers Commission meetings (Barua et al., 2018). There is no ongoing formal negotiation on the Brahmaputra River on issues of water sharing, water resources development, joint research, impacts and benefits of hydropower development, or flood management.

In India, the Brahmaputra River is shared by two federal states, Arunachal Pradesh (upstream) and Assam (downstream). The river enters India through Arunachal Pradesh from the Tibet Autonomous Region of China. The two states have different interests in the Brahmaputra. Assam is dependent on agriculture, fisheries, and hydropower benefits for rapidly agglomerating cities such as Guwahati (Joy et al., 2017). Arunachal Pradesh, with a smaller population, sees the potential to produce and sell hydropower to other states. Of the 63 hydroelectric schemes in the Brahmaputra basin, 42 are in Arunachal Pradesh (Rahaman & Varis, 2009). However, many Indian academics, environmentalists and civil society groups oppose the ongoing hydropower projects for issues such as submergence of large tracts of forest and agricultural lands, destruction of the river, and massive demographic changes. Baghel and Nusser (2010) argue that numerous hydropower projects in India defy major recommendations of the World Commission of Dams.

Results

The results are presented in three subsections. The first discusses the material and ideational resources used by India, followed by a subsection explaining India's hegemonic vulnerabilities. The last subsection presents Bangladesh's use of material and ideational resources.

The status quo begins with non-participation – India's use of material and ideational resources

BD meetings give riparians opportunities to openly share interests and challenges with each other, but India is reluctant to participate and indulge in such deliberations. Respondents (BW, Bangladesh; RB & TT, India) mentioned that Track 1.5 participation from India has remained weak in the BD regional meetings. India is unilaterally deciding where, when and who should participate, without being questioned by weaker riparian countries. A respondent (BW, Bangladesh) said, 'India uses its geographic position, military might and trade agreements to make decisions and influence us [Bangladesh] in water-related discussions and has always shown a Big Brother attitude.'

In India, there has been no discussion or consent between state governments (Assam and Arunachal Pradesh) and the central government (Ministry of Foreign Affairs and Ministry of Water Resources, River Development and Ganga Rejuvenation) to participate in any formal or informal dialogue with Bangladesh over the Brahmaputra River. The lack of deliberation between the state and central governments has created an unclear directive on the Brahmaputra River for transboundary negotiations. One of the respondents (RB, India) mentioned that if Track 1.5 actors were to participate in BD meetings, it would reflect that they are committing to a dialogue with another riparian country. Due to internal lack of clarity, India avoids active participation in the BD meetings leading to the status quo, but successfully exercises its material resources, such as trade agreements and geographic position, to make unilateral decisions on non-participation in the BD meetings.

Further, India is an upper riparian with strong material resources and does not relish open confrontation with lower and weaker riparians. Bangladesh has been confronting India during BD meetings on two issues. First, during a BD bilateral meeting (May 2015), a Bangladesh bureaucrat clearly stated that India is not very cooperative in flood management and hydrological data sharing. Second, a respondent from Bangladesh (RB, Bangladesh) mentioned that India is responsible for delaying the signing of the Teesta treaty. Negotiations for Teesta water sharing have been going on since 1983, with an interim treaty to be signed in 2011. But due to disagreements between India's state (West Bengal) and central governments on water sharing, the interim treaty has not been inked until now (Huda, 2017). As India is not able to find a solution to her internal political struggle, India is delaying the Teesta negotiations. A respondent (RB, India) emphasized that if high-ranking officials from India participate in BD regional meetings, there is a likelihood of heated discussion around the Teesta River treaty. Indian participants were discontented with confrontations on the two issues and therefore avoid participation in regional BD meetings. India uses the narrative of open confrontations and loss of dignity as an ideational resource to avoid participation in the BD regional meetings.

In cases of participation of India, such as during the regional dialogue meeting (New Delhi), India was mostly represented by lower-ranking bureaucrats and retired bureaucrats, compared to Bangladesh. This does not lead to fruitful discussions, as they are not in a position to make any decisions, nor do they represent India's interests and challenges. Their only purpose in being present appears to be for them to share the concerns of other riparians with the senior officials in India. In fact, Indian bureaucrats

	Material resources	Ideational resources
India's non- participation leading to the status quo	India uses its geographic position, economic growth and military strength to make unilateral decisions on participation in the Brahmaputra Dialogue meetings.	India uses the narrative of confrontations and loss of dignity to a weaker riparian to avoid discussions on the Brahmaputra River. India uses the narrative of complex bureaucratic channels and permissions to decline participation in regional Brahmaputra Dialogue meetings.

have declined participation on the grounds of delay in getting permission to travel abroad to attend regional dialogue meetings. The narrative of challenges of denying permissions through complex bureaucratic channels is used by India as an ideational resource to not allow actors to participate in the BD meetings.

These instances show that India has been using material and ideational resources to maintain the status quo through non-participation (Table 1). A combination of material and ideational resources has allowed India to develop hydro-hegemonic status and to decide when to participate and who should participate in the BD meetings. India realizes that its position is so pervasive and secure that they can be unaware of Bangladesh's challenges. Further, the non-participation of India in the BD meetings can be associated with tokenism and manipulation. India's tactics of participation fall under the categories of 'placation' and 'manipulation' in Arnstein's (1969) 'ladder of participation'. Placation is a higher level of tokenism; it allows the hegemons (power holders) to continue to decide and maintain the status quo. With manipulation, India informs itself of what others are thinking about the river, but not to enable active participation in the policy process.

Hegemonic vulnerabilities drive the status quo

Material resources becoming ideational resources – hydropower development in India

The state governments of Assam and Arunachal Pradesh disagree with each other, and both states disagree with the central government. The domestic conflicts between the actors limit India's use of material and ideational resources. The following paragraphs elaborate why these disagreements emerged and how India is using these internal conflicts as an ideational resource to maintain the status quo at the transboundary level.

A respondent (RB, India) explained that hydropower development in the Brahmaputra River is a material resource to India. India wants to construct hydropower projects to have control over water, to become energy-secure, and to gain a stronger position in the negotiation process over water sharing with Bangladesh. The Farakka Barrage was constructed before the treaty on the Ganges River was signed. The case of Teesta River negotiations is similar. However, India has not been successful in constructing hydropower infrastructure on the Brahmaputra due to the internal conflicts between the state and central governments. A respondent (RB, India) explained that the central and the state governments asked the National Hydroelectric Power Corporation and private corporations to tap the hydropower potential of the Brahmaputra to cope with increasing energy demand. Large private corporations such as Jindal and Reliance have proposed 167 small hydroelectric projects in Arunachal Pradesh and showed the potential of huge profits from

power generation (Rajshekhar, 2013). Considering the large number of hydropower projects proposed for Arunachal Pradesh, environmental activists in the lower-riparian state of Assam started agitation against the private companies and the government of Arunachal Pradesh with the narrative that these small hydroelectric projects will make the river run dry, impacting the livelihoods of the downstream people as well as the ecology of the river. Further, our respondents confirmed that during the planning and dam construction of the Subansiri Lower Hydroelectric Project, flood management strategies were not incorporated, and there was lack of transparency in conducting environmental and social impact assessments and public consultations.

Mistrust between the government and civil society organizations has made communication between the state and citizens difficult, leading to a situation of conflict and status quo over the hydropower development in India's part of the Brahmaputra River. The situation reflects the neo-institutionalist understanding of the state failing to uphold hegemonic control. Hence, all political actors are currently waiting for the right alignment of actors and conditions to restart the discussion over hydropower development.

In one of the national-level BD meetings in India (Guwahati in 2016), an actor (BJ, India) emphasized the importance of reducing the conflicts between Assam and Arunachal Pradesh. In the same meeting, the BJ presented measures to improve the relationship between the government and civil society and to reduce the conflicts around hydropower development. A respondent (BJ, India) said,

China has three dams planned in Yarlung-Tsangpo (upper Brahmaputra). Unless India has some storage in Siang, we will not be able to go to the international court and claim our right to water during the time of the dispute. The importance of these dams is in the lean-period flow. If this lean-period flow stops because of the dams in China, the proposed projects in India may not remain viable. We will have no right of first use on Siang water, and we won't have a legal argument if China wants to pursue the building of the dams.

The bureaucrat urged holding on to the transboundary negotiations and working towards improving interstate relations within India. BJ used two narratives to keep the focus on resolving domestic conflicts (an ideational resource). First, the bureaucrat explained how hydropower projects in Siang and Subansiri could reduce the annual devastation from the floods in Assam and Bangladesh. Second, the respondent mentioned that India has to build these dams to claim rights over the water before China starts building dams in the upper Brahmaputra River. Use of the two narratives supports India's strategy to intentionally pursue the status quo on transboundary negotiations and focus on domestic challenges on the Brahmaputra River. Currently, India is unable to use hydropower dams as a material resource to gain control of Brahmaputra water but is using hydropower conflicts as an ideational resource to avoid transboundary dialogue with the riparians.

Internal security challenges

Apart from the hydropower-related controversy among the states, a respondent (RB, India) mentioned that the protests against hydropower development are supported by a violent anti-government group, the Naxalites (people's struggle is known as Naxalism).⁵ In India, Naxalites operate in the interstate border areas to make an easy escape from



Table 2. Hegemonic vulnerabilities and use of material and ideational resourc	Table 2. Hegemonic	vulnerabilities and	use of material	and ideationa	l resources
---	--------------------	---------------------	-----------------	---------------	-------------

	Material resources	Ideational resources
Hegemonic vulnerabilities leading to the status quo	=	India uses the narrative of domestic hydropower conflicts to avoid transboundary negotiations. India uses internal security and securitization narrative to not discuss the Brahmaputra River at transboundary level.

the state armed forces. The Assam-Arunachal Pradesh border also includes the construction site of the controversial Subansiri Lower Hydroelectric Project and is considered to be under the influence of the 'Red Corridor'. Since the 1970s, the southern and central states of India have been infested by Naxalism due to poverty, failure in agriculture, and youth unemployment. But the north-eastern states were never under the realm of Naxalism, and a respondent (RB, India) stated that 'the possibility of Naxalite infiltration in the north-eastern states, especially linked to hydropower in Brahmaputra, raises concerns.' The rise of Naxalism in the two states is connected to India-China land disputes, and the possibility of China plotting to weaken India in the region makes the situation even more complex (Baruah, 2017; Hussain, 2014). The central government in India is prioritizing internal security and using the narrative of internal security as an ideational resource to avoid committing itself to transboundary negotiations. India is reluctant to show its weaknesses to lower and weaker riparians and therefore wants to intentionally maintain the status quo to get more time to resolve domestic conflicts. In the last five years no conflicts around Naxalism have been reported in the two north-eastern states; still, the narrative of securitization of the Brahmaputra River is very prominent.

These arguments show the hegemonic vulnerabilities of India (Table 2). India considers hydropower development a material resource, but it turned into a vulnerability due to sloppy planning and lack of transparency. The state has lost the trust of the public and civil society due to lack of transparency and poor public hearing mechanisms during hydropower development (Alley, 2016). Focusing on domestic conflicts, India wants to maintain the status quo for negotiations with riparian countries. By maintaining the status quo, it takes time to reduce its hegemonic vulnerabilities and simultaneously amplify hegemonic capacities.

The Bangladesh story - use of material and ideational resources

Respondents in Bangladesh (AB, RB, BE) mentioned that they do not want the Ganges or Teesta experience to repeat. They emphasized that for the people of Bangladesh the Brahmaputra is a lifeline, and they do not want an inequitable institutional arrangement on water sharing. One of the respondents (RB, Bangladesh) said, 'It is better that Jamuna⁶ brings floods than drought. Bangladesh has a large population to feed, and in the lean season if the Brahmaputra River dries it will have be cumulative challenge.' Bangladesh is very sceptical about coming forward, and it is not advantageous for the government to push India into negotiations over the Brahmaputra River. Bangladesh is aware of the domestic conflicts in India, and conflicts between the two Indian states do not allow the damming of the river, which allows Bangladesh to maintain its control over the Brahmaputra water. A respondent (BJ, Bangladesh) mentioned that Bangladesh's interests are aligned with the lower-riparian state of Assam in India. Assam also wants the flow of the river to be maintained to protect the livelihood of the people and ecology of the river. Bangladesh uses the conflicts between the two states in India as an ideational resource and aligns its interests with Assam to pursue the status quo.

A respondent (BW, Bangladesh) mentioned that the political situation of Bangladesh has been stable since 2009. The respondent elaborated that the national government has increased its bargaining power by virtue of weak opposition parties and strong public support. Political stability helps Bangladesh in understanding neighbours and developing a consistent strategy to pursue the country's interests. Bangladesh uses its political stability as a material resource in the way they negotiate with the riparian countries on issues of water. Bangladesh is aware that India's current right-wing government may negotiate aggressively and use its material resources against Bangladesh when the issues around the Brahmaputra are discussed. Hence, Bangladesh would like to maintain the status quo, and once it has liberal counterparts, in the near future, to negotiate a more equitable arrangement for the Brahmaputra River.

Most Bangladeshi and Indian respondents emphasized that the knowledge on the Brahmaputra River is securitized. India considers the Brahmaputra of strategic importance, and related data are classified. This securitization of data does not allow basin-wide research, and most studies are conducted in parts, either in India or in Bangladesh. There are no conclusive studies on the impacts of storage structures and hydropower projects in the lower basin areas. A respondent (BW, Bangladesh) mentioned, 'We are not sure of how to manage this river at the basin level or what will happen to water, sediments or erosion if India constructs a dam. In fact, many of our water experts have not seen the river in India or China. It is just too difficult to conduct research for the Brahmaputra basin.' With such knowledge gaps, Bangladesh is keen to cooperate on basin-wide research but does not want to push for an immediate water-sharing arrangement. Bangladesh uses the lack of research and knowledge as an ideational resource to not push for negotiations on the Brahmaputra River.

India's bilateralism and past negotiations

A respondent (RB, Bangladesh) mentioned that India always follows the bilateralism principle to negotiate with Bangladesh to maintain its control over the shared water resources. Although bilateralism has not been praised by international scholars and agencies, India continues to use it to limit contestations and prevent the possible coalition of other weaker riparians. This bilateralism has created scepticism and lack of trust among Bangladeshi actors. Bangladesh uses the narrative of experience of bilateral negotiations with India as an ideational resource to pursue the status quo. Bangladesh argues that issues related to water sharing and flood management are to be discussed multilaterally, while more country-specific issues related to trade and navigation can be debated bilaterally. Bangladesh realizes that bilateralism has supported India to gain strategic autonomy and secure substantial relative gains (Saran, 2017). It give

Table 3. Use of material and ideational resources by Bangladesh.

Table 51 03e of Material and Meational resources by Bangiagesin.	
Material resources	Ideational resources
Bangladesh's stable political situation helps to develop a consistent strategy to negotiate with India in the near future.	Bangladesh uses the narrative of lack of research and knowledge on the Brahmaputra to pursue proactive discussions and negotiations. Bangladesh is against the use of bilateralism principle in flood management and water sharing issues.

India enough space to design its responses to particular situations and to reduce the transaction costs associated with multilateral arrangements.

With these challenges in place (Table 3), Bangladesh has been taking a thoughtful and patient approach in maintaining the status quo and strategically pushing India for more basin-wide research and knowledge sharing. During the BD meetings, Bangladesh has asked India to share hydrological data for the dry season and open up classified data.

Discussion

Throughout this article, we have argued that Bangladesh and India have been maintaining the status quo for the Brahmaputra river by using material and ideational resources. India uses material resources such as geographical position, military might and economic growth to make unilateral decisions on participation. India uses ideational resources such as the narrative of confrontations and loss of dignity to lower and weaker riparians, complex bureaucratic channels and permissions, and hegemonic vulnerabilities to prioritize domestic issues on the Brahmaputra and to pursue the status quo. Similarly, Bangladesh uses its stable political situation as material resources to develop a consistent strategy of negotiation, and the narrative of lack of research and knowledge and use of bilateralism as ideational resources.

In the following paragraphs, we reflect on the conceptual and policy contributions of this article.

In theory, power interplay in transboundary waters can have two kinds of outcomes: zero-sum and non-zero-sum (Susskind & Islam, 2012). But in certain cases, with the use of material and ideational resources, a partial or complete status quo can be maintained by riparian countries. In this article, we have explained status quo as the third possible outcome of power interplay. There are various underlying processes that prevent the process from reaching a zero-sum or non-zero-sum outcome. Our research shows that Bangladesh and India deploy resources such as non-participation, use of hegemonic vulnerabilities, the narrative of lack of research and knowledge, unsuitable political conditions, and negative experience of past bilateralism to maintain the status quo. Over the years, the Brahmaputra River has become a conflictual and controversial issue, and both riparian countries are unable to achieve their domestic interests and therefore pursue the status quo in transboundary negotiations. Consequently, the Brahmaputra River issue has been shielded from the highest level of political deliberation by these material and ideational resources, with no suitable alternatives existing. Preventing the politicization of the BD and steering towards the status quo can be explained through the process of 'non-decision making'.

Non-decision making is a practice of purposefully limiting the scope of decision making by manipulating the ideas and rules of interaction, power relations and instruments of force during the power interplay (Bachrach & Baratz, 1963, p. 632; Robertson & Beresford, 1996). The point of non-decision making is to not let certain choices materialize that are not aligned with the current interests of the hegemons and nonhegemons. Rose and Davies (1994, p. 57) define non-decision making as the 'exclusion of some alternatives from the agenda of collective choices because dominant values make them politically impossible for the moment'. Non-decision making is operationalized by 'mobilization of bias' (Schattschneider, 1975, p. 71), which refers to institutional characteristics and knowledge frameworks that give importance to a certain issue and exclude others. McCalla-Chen (2000) operationalizes non-decision making as hiding information and tabooing a topic. Although popular in the 1970s and 1980s, theoretical debates on non-decision making are very limited, particularly due to the inherently covert nature of the concept (Bachrach & Baratz, 1975, pp. 902-903). However, if not studied empirically, non-decision making will leave a void in the understanding of power interplay in decision-making processes.

In this article, we argue that the use of material and ideational resources is a novel way to operationalize and better understand non-decision-making processes. This operationalization keeps the unit of analysis (power interplay) intact and robust. It allows us to uncover those actors and groups influencing political institutions and values through their use of material and ideational resources and their effect in limiting the scope of decision making. As Bachrach and Baratz (1975) note, in the political system, power is mainly exercised neither by those who make decisions nor by those who decide the agenda, but by individuals who use material and ideational resources to shape and reinforce the norms, values, institutions and procedures that characterize the larger political process. Put simply, it addresses who uses material and ideational resources, how they use them, and what the outcome is. Developing this research agenda will be an important next step to uncover the politics of transboundary river basin management, especially in light of pressing societal issues such as climate change impacts and sustainable development. Moreover, the framework used in this article can be used to analyze and empirically understand the non-decision-making outcomes in other sectors and situations. For example, non-decision making may serve as an interesting framework to analyze cases such as the weak effort of the United Nations Framework Convention on Climate Change to bind countries in a robust framework to cut down carbon emissions and why global wildlife protection programmes have not been able to reduce poaching and trade of endangered wildlife species.

Considering the case of the Brahmaputra River, the concept of non-decision making can provide an important insight on which actors are to be pursued to change the status quo. It further opens the door to analyzing the covert power interplay between actors on sensitive issues such as securitization of data and transboundary adaptation measures related to the Brahmaputra River and other river basins of the world. Based on the empirical findings from the BD, two policy insights have emerged that are important to consider regarding breaking the status quo.

First, water policies and practices in India focus on bilateralism, which does not allow strategic manoeuvring to respond to evolving transboundary water issues. The Water Policy of India (2012) and the new draft National Water Framework Bill (2016) do not refer to issues of water sharing, water resources development or joint basin-level research for transboundary rivers. The Water Policy explicitly mentions bilateral data sharing, with the Brahmaputra River being an exception, as it is 'securitized'. Similarly, the National Water Mission (2011) under the National Adaptation Plan for Climate Change (2008) discusses the intersectoral and basin-level measures to improve water efficiency but does not refer to design and implementation of adaptation measures in transboundary river basins. Consequently, bilateralism is overshadowing the water policy approach in India. Including such a narrow and inflexible directive can impede India's influence in South Asia with changing geopolitics. Reformulating its approach to multilateralism on the diverse aspects of flood risk management and joint research could help transboundary actors resolve current and future conflicts, keeping the instrumental position of India intact.

Second, during the dialogue meetings and interviews, respondents from both Bangladesh and India mentioned that there are some points of cooperation where both India and Bangladesh would like to make positive decisions. These points of cooperation include navigation and improving trade routes in the Brahmaputra River. In the last couple of years India has been determinedly planning to improve trade routes and make north-east India transport-friendly (Barua & Vij, 2018). For these navigation and trade routes there is no comprehensive research showcasing the benefits of navigation and optimization of routes. Transboundary water policy has to be informed by joint research on such topics for equitable benefits. Joint basin-wide research on the Brahmaputra River can create momentum to build trust, and such small steps of cooperation could gradually transform the relationship between Bangladesh and India. Such transformative steps could create opportunities to discuss thornier issues, such as climate change, in a productive way.

Concluding remarks

In this article, we addressed the question of how Bangladesh and India use material and ideational resources to intentionally maintain the status quo for the Brahmaputra River at the transboundary level. We conclude that India is maintaining the status quo due to its hegemonic vulnerabilities and unclear directives on the Brahmaputra River. Bangladesh is patiently waiting to pursue negotiations with India, and simultaneously strengthening its technical and negotiation skills through more research and dialogue. This results in a status quo where discussions are not moving forward, and the basin communities continue to face the impacts of climate change-induced disasters. The status quo prevents developing and implementing basin-level adaptation plans, which means that in the long term the impacts of climate change will be exacerbated. Currently, in the absence of a transboundary agreement, individual countries manage the Brahmaputra River. An important first step towards transboundary basin-level adaptation is to bring all riparians together and build trust to recognize the benefits of transboundary-level climate change adaptation.

Notes

- 1. The Ganges and Teesta are other transboundary rivers between Bangladesh and India (see Figure 3).
- 2. Diplomatic efforts by the concerned governments are called Track 1 diplomacy (Nishat & Faisal, 2000). Track 2 diplomacy refers 'to a broad range of unofficial contacts and interaction aimed at resolving conflicts, both internationally and within states' (Montville, 1991). Track 1.5 is senior bureaucrats of the concerned governments interacting to deliberate on an issue of concern.
- 3. The BD project is in its third phase and is coordinated by four different academic institutions from riparian countries. For more details on the structure of the BD, see Barua and Vij (2018).
- 4. Gain and Wada (2014) do not consider annual water scarcity (see Falkenmark, Lundqvist, & Widstrand, 1989 and Vörösmarty, Douglas, Green, & Revenga, 2005). Their analysis is based on seasonal water scarcity considering other socio-economic, land-use and development pressures.
- 5. Naxalism is a particular kind of militant and violent armed struggle by peasants and tribes who accept Marxist-Leninist ideology. Naxalism is attributed to social problems like unemployment, poverty and other forms of socio-economic injustice. The Naxalite movement first came to the forefront in the late 1960s, when Naxalbari became famous for the left-wing revolt that took place in West Bengal. Since then, it is perceived as the greatest threat to law and order within India.
- 6. The Brahmaputra is called the Jamuna in Bangladesh.

Acknowledgments

This work was carried out by the Himalayan Adaptation, Water and Resilience (HI-AWARE) consortium under the Collaborative Adaptation Research Initiative in Africa and Asia (CARIAA), with financial support from the UK's Department for International Development and the International Development Research Centre, Ottawa, Canada. The authors would like to acknowledge Dr Anamika Barua (Indian Institute of Technology, Guwahati, India) for her useful insights on the analysis presented in the manuscript. We also thank the two anonymous reviewers and Prof. James Nickum (editor-in-chief of *Water International*) for valuable comments on the previous versions of this manuscript.

Disclaimer

The views expressed in this work are those of the creators and do not necessarily represent those of the UK Department for International Development, the International Development Research Centre of Canada, or its board of governors.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This work was supported by the International Development Research Centre [107641].



ORCID

Sumit Vij (b) http://orcid.org/0000-0001-5252-797X

Jeroen F. Warner http://orcid.org/0000-0003-2847-8770 Robbert Biesbroek http://orcid.org/0000-0002-2906-1419 Annemarie Groot http://orcid.org/0000-0002-7111-1088

References

Alley, K. D. (2016). Governance, connectivity, and knowledge transparency in the Brahmaputra basin. In K. S. Farrell & S. Ganguly (Eds.), Heading East: Security, trade, and environment between India and Southeast Asia. Oxford University press.

Angen, M. J. (2000). Evaluating interpretive inquiry: Reviewing the validity debate and opening the dialogue. Qualitative Health Research, 10(3), 378-395.

Arnstein, S. R. (1969). A ladder of citizen participation. Journal of the American Institute of Planners, 35(4), 216-224.

Bachrach, P., & Baratz, M. S. (1963). Decisions and nondecisions: An analytical framework. American Political Science Review, 57(3), 632-642.

Bachrach, P., & Baratz, M. S. (1975). Power and its two faces revisited: A reply to Geoffrey Debnam. American Political Science Review, 69(3), 900-904.

Baghel, R., & Nüsser, M. (2010). Discussing large dams in Asia after the World Commission on Dams: Is a political ecology approach the way forward?. Water Alternatives, 3, 2.

Barua, A., & Vij, S. (2018). Treaties can be a non-starter: A multi-track and multilateral dialogue approach for Brahmaputra basin. Water Policy, 20(5), 1027-1041.

Barua, A., Vij, S., & Zulfiqur Rahman, M. (2018). Powering or sharing water in the Brahmaputra River basin. International Journal of Water Resources Development, 34(5), 829-843.

Baruah, S. (2017). Whose river is it, anyway? The political economy of hydropower in the Eastern Himalayas. In K. J. Joy et al. (Eds.), Water Conflicts in Northeast India (pp. 140-168). India: Routledge

Bassett, T. J., & Fogelman, C. (2013). Déjà vu or something new? The adaptation concept in the climate change literature. Geoforum, 48, 42-53.

Berenskoetter, F., & Williams, M. J. (2007). Thinking about power. In F. Berenskoetter & M. J. Williams (Eds.), Power in world politics (pp. 11–32). Abingdon, UK: Routledge.

Biswas, A. K. (2011). Cooperation or conflict in transboundary water management: Case study of South Asia. Hydrological Sciences Journal, 56(4), 662-670.

Cascão, A. E. (2009). Changing power relations in the Nile river basin: Unilateralism vs. cooperation? Water Alternatives, 2(2), 245.

Cascão, A. E., & Zeitoun, M. (2010). Power, hegemony and critical hydropolitics. Transboundary Water Management. Principles and Practice, 27, 42.

Dahl, R. A. (1957). The concept of power. Behavioral Science, 2(3), 201-215.

Daoudy, M. (2009). Asymmetric power: Negotiating water in the Euphrates and Tigris. International Negotiation, 14(2), 361-391.

Eriksson, M., Xu, J., Shrestha, A. B., Vaidya, R. A., Santosh, N., & Sandström, K. (2009). The changing Himalayas: Impact of climate change on water resources and livelihoods in the greater Himalayas. Kathmandu: International centre for integrated mountain development (ICIMOD).

Evans, G., & Newnham, J. (1998). The Penguin dictionary of international relations (pp. 235-236). London: Penguin Books.

Falkenmark, M., Lundqvist, J., & Widstrand, C. (1989, November). Macro-scale water scarcity requires micro-scale approaches: Aspects of vulnerability in semi-arid development. Natural Resources Forum, 13(4), 258-267.



- Fischer, S., Pietroń, J., Bring, A., Thorslund, J., & Jarsjö, J. (2017). Present to future sediment transport of the Brahmaputra River: Reducing uncertainty in predictions and management. Regional Environmental Change, 17(2), 515-526.
- Ford, J. D., Berrang-Ford, L., Bunce, A., McKay, C., Irwin, M., & Pearce, T. (2015). The status of climate change adaptation in Africa and Asia. Regional Environmental Change, 15(5), 801-814.
- Fuchs, D., & Glaab, K. (2011). Material power and normative conflict in global and local agrifood governance: the lessons of 'golden rice' in india. Food Policy, 36(6), 729-735.
- Gain, A. K., & Wada, Y. (2014). Assessment of future water scarcity at different spatial and temporal scales of the Brahmaputra River basin. Water Resources Management, 28(4), 999-1012.
- Gleason, C. J., & Hamdan, A. N. (2017). Crossing the (watershed) divide: Satellite data and the changing politics of international river basins. The Geographical Journal, 183(1), 2-15.
- Hanasz, P. (2017). Muddy waters: International actors and transboundary water cooperation in the Ganges-Brahmaputra problemshed. Water Alternatives, 10(2), 459-474.
- Hill, D. P. (2013). Trans-boundary water resources and uneven development: Crisis within and beyond contemporary India. South Asia: Journal of South Asian Studies, 36(2), 243-257.
- Ho, S. (2016). 'Big brother, little brothers': comparing China's and India's transboundary river policies. Water Policy, wp2016103.
- Huda, M. S. (2017). Envisioning the future of cooperation on common rivers in South Asia: A cooperative security approach by Bangladesh and India to the Tipaimukh Dam. Water International, 42(1), 54-72.
- Hussain, W. (2014). The Naxal spread and its local linkages. IPCS special report, 157
- Immerzeel, W. (2008). Historical trends and future predictions of climate variability in the Brahmaputra basin. International Journal of Climatology, 28(2), 243–254.
- Immerzeel, W. W., Van Beek, L. P., & Bierkens, M. F. (2010). Climate change will affect the Asian water towers. Science, 328(5984), 1382-1385.
- Islam, S. (2017). Complexity and contingency: Understanding and managing complex water problems. Water Diplomacy in Action: Contingent Approaches to Managing Complex Water Problems, 1, 3.
- Joint Rivers Commission, (2018). About JRC, retrieved from http://jrcb.gov.bd/new/
- Joy, K. J., Das, P. J., Chakraborty, G., Mahanta, C., Paranjape, S., & Vispute, S. (Eds.). (2017). Water conflicts in Northeast India. New Delhi: Routledge.
- Jung, H. C., Hamski, J., Durand, M., Alsdorf, D., Hossain, F., Lee, H., ... Hoque, A. K. M. (2010). Characterization of complex fluvial systems using remote sensing of spatial and temporal water level variations in the Amazon, Congo, and Brahmaputra Rivers. Earth Surface Processes and Landforms, 35(3), 294-304.
- Liu, Y. (2015). Transboundary water cooperation on the YarlungZangbo/Brahmaputra-A legal analysis of riparian state practice. Water International, 40(2), 354–374.
- Lukes, S. (2005). Power and the battle for hearts and minds. Millennium, 33(3), 477-493.
- Luttwak, E. N. (1990). From geopolitics to geo-economics: Logic of conflict, grammar of commerce. The National Interest, 20, 17-23.
- Lutz, A. F., Immerzeel, W. W., Shrestha, A. B., & Bierkens, M. F. P. (2014). Consistent increase in High Asia's runoff due to increasing glacier melt and precipitation. Nature Climate Change, 4 (7), 587.
- Lwasa, S. (2015). A systematic review of research on climate change adaptation policy and practice in Africa and South Asia deltas. Regional Environmental Change, 15(5), 815-824.
- McCalla-Chen, D. (2000). Towards an understanding of the concept of non-decision making and its manifestation in the school sector. Educational Management & Administration, 28(1), 33-46.
- McDonald, M. (2008). Securitization and the construction of security. European Journal of International Relations, 14(4), 563-587.
- Menga, F. (2016a). Domestic and international dimensions of transboundary water politics. *Water Alternatives*, 9(3), 704–723.
- Menga, F. (2016b). Reconceptualizing hegemony: The circle of hydro-hegemony. Water Policy, 18(2), 401–418.



- Milman, A., Bunclark, L., Conway, D., & Adger, W. N. (2013). Assessment of institutional capacity to adapt to climate change in transboundary river basins. Climatic Change, 121(4), 755-770.
- Mirumachi, N., & Allan, J. A. (2007, November). Revisiting transboundary water governance: Power, conflict cooperation and the political economy. Proceedings from CAIWA international conference on adaptive and integrated water management: Coping with scarcity (Vol. 1215). Basel, Switzerland.
- Montville, J. V. (1991). Transnationalism and the role of track-two diplomacy. Approaches to Peace: an Intellectual Map, 255-269.
- Mosselman, E. (2006). Bank protection and river training along the braided Brahmaputra-Jamuna River, Bangladesh. Braided Rivers: Process, Deposits, Ecology and Management, 36, 279-287.
- Nishat, A., & Faisal, I. M. (2000). An assessment of the institutional mechanisms for water negotiations in the Ganges-Brahmaputra-Meghna system. International Negotiation, 5(2), 289-310.
- Nye, J. S., Jr. (2009). Get smart: Combining hard and soft power. Foreign Affairs, 88(4),160-163. Petersen-Perlman, J. D., & Fischhendler, I. (2018). The weakness of the strong: Re-examining power in transboundary water dynamics. International Environmental Agreements: Politics, Law and Economics, 18(2), 275-294.
- Putnam, R. D. (1988). Diplomacy and domestic politics: the logic of two-level games. International Organization, 42(3), 427–460.
- Rahaman, M. M., & Varis, O. (2009, February). Integrated water management of the Brahmaputra basin: Perspectives and hope for regional development. Natural Resources Forum, 33(1), 60–75.
- Rajshekhar, M. (2013, April 30). Hydelgate: Why Arunachal Pradesh's hydel boom is going bust. The Economic Times. Retrieved from https://economictimes.indiatimes.com/industry/energy/ power/hydelgate-why-arunachal-pradeshs-hydel-boom-is-going-bust/articleshow/19790466.
- Rasul, G. (2014). Food, water, and energy security in South Asia: A nexus perspective from the Hindu Kush Himalayan region☆. Environmental Science & Policy, 39, 35–48.
- Ray, P. A., Yang, Y. C. E., Wi, S., Khalil, A., Chatikavanii, V., & Brown, C. (2015). Room for improvement: Hydroclimatic challenges to poverty-reducing development of the Brahmaputra River basin. Environmental Science & Policy, 54, 64-80.
- Robertson, S., & Beresford, Q. (1996). Coordination in youth affairs: The politics of nondecision-making. Australian Journal of Public Administration, 55(1), 23-32.
- Rose, R., & Davies, P. L. (1994). Inheritance in public policy: change without choice in Britain. New Haven, CT: Yale University Press.
- Saran, S. (2017). How India sees the world: Kautilya to the 21st century. New Delhi: Juggernaut Books.
- Schattschneider, E. (1975). The semi-sovereign people. New York: Holt, Rinehart and Winston.
- Srivastava, P., & Hopwood, N. (2009). A practical iterative framework for qualitative data analysis. International Journal of Qualitative Methods, 8(1), 76-84.
- Susskind, L., & Islam, S. (2012). Water diplomacy: Creating value and building trust in transboundary water negotiations. Science & Diplomacy, 1(3), 1-7.
- Thakkar, H. (2003). Opposition to India's river-linking scheme grows. World Rivers Review, 18 (5), 3.
- Tilleard, S., & Ford, J. (2016). Adaptation readiness and adaptive capacity of transboundary river basins. Climatic Change, 137(3-4), 575-591.
- Turton, A. R., & Ashton, P. J. (2008). Basin closure and issues of scale: The southern African hydropolitical complex. International Journal of Water Resources Development, 24(2), 305-318.
- Vij, S., Moors, E., Ahmad, B., Uzzaman, A., Bhadwal, S., Biesbroek, R., ... Saeed, B. A. (2017). Climate adaptation approaches and key policy characteristics: Cases from South Asia. *Environmental Science & Policy*, 78, 58–65.



- Vörösmarty, C. J., Douglas, E. M., Green, P. A., & Revenga, C. (2005). Geospatial indicators of emerging water stress: an application to Africa. AMBIO: A Journal of the Human environment, 34(3), 230-236.
- Wang, P., Wang, X., Wang, C., Miao, L., Hou, J., & Yuan, Q. (2017). Shift in bacterioplankton diversity and structure: Influence of anthropogenic disturbances along the YarlungTsangpo River on the Tibetan Plateau, China. Scientific Reports, 7(1), 12529.
- Warner, J., Mirumachi, N., Farnum, R. L., Grandi, M., Menga, F., & Zeitoun, M. (2017). Transboundary 'hydro-hegemony': 10 years later. Wiley Interdisciplinary Reviews: Water, 4(6), e1242.
- Warner, J., & Zawahri, N. (2012). Hegemony and asymmetry: Multiple-chessboard games on transboundary rivers. International Environmental Agreements: Politics, Law and Economics, 12(3), 215–229.
- Wijngaard, R. R., Lutz, A. F., Nepal, S., Khanal, S., Pradhananga, S., Shrestha, A. B., & Immerzeel, W. W. (2017). Future changes in hydro-climatic extremes in the Upper Indus, Ganges, and Brahmaputra River basins. PloS one, 12(12), e0190224.
- Yanow, D. (1999). Conducting interpretive policy analysis (Vol. 47). Thousand Oaks, CA: Sage Publications.
- Zeitoun, M., Goulden, M., & Tickner, D. (2013). Current and future challenges facing transboundary river basin management. Wiley Interdisciplinary Reviews: Climate Change, 4(5), 331-349.
- Zeitoun, M., Mirumachi, N., & Warner, J. (2011). Transboundary water interaction II: The influence of 'soft'power. International Environmental Agreements: Politics, Law and Economics, 11(2), 159–178.
- Zeitoun, M., & Warner, J. (2006). Hydro-hegemony-A framework for analysis of trans-boundary water conflicts. Water Policy, 8(5), 435-460.