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## **Soft Power, Discourse Coalitions, and the Proposed Interbasin Water Transfer Between Lake Chad and the Congo River**

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**ABSTRACT:** Since the 1960s, Lake Chad's declining water level has been a hot topic on the political agendas of the Sahel region. For some decades, diverting water from the Congo River to Lake Chad via an interbasin water transfer (IBWT) has been considered to be the only way that Lake Chad can be saved. Accordingly, two IBWT projects have been put on the table. The first one, the Transaqua Project, has been in development since the 1970s; it involves the construction of a 2400-kilometre-long canal between the two basins. The second proposal was drafted in 2011 and entails the construction of a shorter canal (1350 km) which aims to divert water from two reservoirs that are to be constructed on the Ubangi River, one of the main tributaries of the Congo River. In 2018, the Lake Chad Basin Commission (LCBC) chose the first proposal as their preferred option to revive Lake Chad. While the IBWT idea has been promoted as part of political agendas, French scientists and the Democratic Republic of Congo (DRC) have been firmly opposed to it. This article focuses on the discourse coalitions which are competing to promote or block the IBWT project and include companies, the riparian states of both basins, non-riparian states, international organisations, NGOs, and experts. The paper applies a mixed methods approach of discourse, document, and media analysis. Diplomatic and technocratic processes related to the IBWT issue, and the motivations of multiple actors to promote or object to the IBWT projects, are revealed through an examination of soft power tactics and strategies such as agenda setting, knowledge construction, securitisation, issue linkage, and exclusion from negotiation processes. Overall, this article examines the transboundary water interactions between the two relatively under-researched basins of Lake Chad and the Congo River; it highlights how non-state actors (particularly companies) have led to a reshaping of transboundary water politics.

**KEYWORDS:** Transboundary water politics, discourse coalitions, soft power, interbasin water transfer, Lake Chad, Congo River

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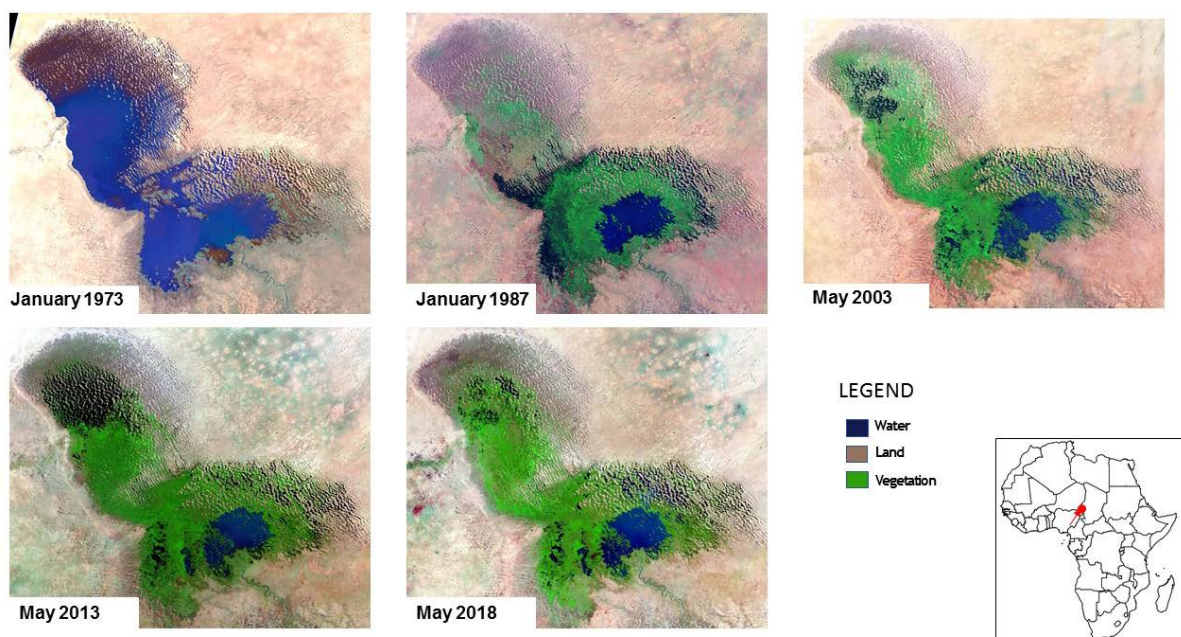
### **INTRODUCTION**

Lake Chad, which until the 1960s was classified as the sixth largest inland water body of the world, has historically been central to maintaining the social, economic and cultural activities of Western and Central

Africa (Okpara et al., 2016). Located in the Sahel region, south of the Sahara, the lake is a transboundary water system that is shared by Niger, Nigeria, Chad and Cameroon. The lake basin and the tributaries of its major sub-basins stretch beyond the region as far as Libya, Algeria, Sudan and the Central African Republic (CAR). The allocation of the lake's water, and unilateral decisions with regard to, for example, water discharge for agriculture and dam constructions on its feeders, have been the source of multiple political problems in the region (Asah, 2015).

In 1960s, the open water area spread of Lake Chad was around 25,000 km<sup>2</sup>; it shrank dramatically in the early 1970s, and then reduced further in the 1980s to under 2000 km<sup>2</sup>, less than 10% of its previous area (Leblanc et al., 2011). Since the 1990s, the lake's surface area has shown some signs of recovery due to rainfall trends in the western Sahel; by April 2013, the area spread of the Lake was estimated at 14,000 km<sup>2</sup> (Lemoalle and Magrin, 2014). In a recent synthesis that studied the hydrology of Lake Chad vis-à-vis climate change, Pham-Duc et al. (2020) provide a detailed account of seasonal and temporal variations in the lake's area. They state that the extent of Lake Chad's surface area declined in 2001/2002 to approximately 5800 km<sup>2</sup>, and that by 2010 it was at about 1800 km<sup>2</sup>; after 2010, however, it began showing signs of recovery. The minimum, maximum, and average dry season surface area of the lake vary significantly (Figure 1).

Figure 1. Date based satellite images outlining the declining water levels of Lake Chad.



Source: Created by the United Nations University Institute for Water, Environment and Health (UNU-INWEH), using Landsat images from the US Geological Survey website.

Since the early 2000s, Lake Chad has attracted the attention of international media and various global actors; the attention has been mainly due to the variability of its surface area and the implications of this for the political conflicts in the region, including those involving Boko Haram (BBC, 2018; Magrin and Perouse de Montclos, 2018). The focus has largely been on the shrinkage of the lake from 25,000 to 2500 km<sup>2</sup> between 1963 and 1987, though reports generally neglect the seasonal variability of the lake's surface area (Magrin, 2016; Nagabhatla et al., 2020). Such a gloomy depiction of the surface area flux of the lake has been primarily used to promote a large-scale interbasin water transfer (IBWT) project aimed at revitalising the lake (Asah, 2015; Magrin, 2016).

The first IBWT proposal, the Transaqua Project, was drafted in the late 1970s and was introduced to political agendas in the 1980s by an Italian engineering firm, Bonifica S.p.A. Bonifica was founded in 1961 as part of the IRI group (Istituto per la Ricostruzione Industriale, or Institute for Industrial Reconstruction) and was a state-owned company until the 2000s (Bonifica, 2020).<sup>1</sup> According to Bonifica's publicly accessible reports (Bonifica, 1982, 1984, 1985), the project outlined the construction of a broad navigable canal of 2400 km between the Congo River and Lake Chad, which would transfer 100 billion cubic metres (Bm<sup>3</sup>) of water per year – an estimated 5% of the annual flow of the Congo River – to Lake Chad (Figure 2). According to Bonifica's original project proposal, "a series of hydroelectric stations" was to be constructed along the canal to "produce energy to the extent of some 30 to 35 thousand million kWh" (Bonifica, 1982: 4). Furthermore, Bonifica (ibid: 5) expected this project to create 50,000-70,000 km<sup>2</sup> of irrigated area in the Sahel, which is around "the same size as southern Italy". The proposal also underlines that the Transaqua Project should be considered part of the wider African transport system, which includes the planned Lagos-Mombasa Highway (Trans-African Highway 8, connecting the Indian and the Atlantic Oceans) and the Lagos to Algiers Trans-Saharan Highway (connecting the Gulf of Guinea and the Mediterranean) (Bonifica, 1982: 5; Figure 2). Accordingly, Transaqua aims at connecting the Congo Basin with other African countries and two ocean ports (Mombasa and Lagos) via a navigable canal. This is intended to increase the region's access to international trade networks (ibid); Bonifica (1982) thus presented the Transaqua Project as an opportunity for the Sahel region and the Congo Basin to boost their food and energy security. Proposals to improve overall transportation and trade networks in Africa are presented as key components of the revitalisation of Lake Chad through increasing its accessibility to international markets. The project proposal did not materialise, however, due to socio-economic and political instability in the region, the high cost of the project (estimated at around US\$50 billion),<sup>2</sup> and the economic issues faced by the company in Italy during the 1990s.

In the mid-2000s, the IBWT issue resumed its place on the political agendas of Lake Chad's riparian states. After a series of negotiations that took place under the mandate of the Lake Chad Basin Commission (LCBC), which is an intergovernmental organisation that concerns itself with water and natural resources management in the basin,<sup>3</sup> the Commission highlighted the necessity of an IBWT project for the region and asked for a feasibility study of the potential of such a project (Kombe, 2009). CIMA International, a Canadian consultancy firm, was contracted to do what was referred to in political debates as the 'pre-feasibility' study. This study resulted in a second – alternative – IBWT proposal for the Lake Chad and Congo Basins which involved the construction of two dams on the Kotto and Ubangi tributaries of the Congo River (Figure 2). It would result in 6.4 Bm<sup>3</sup> of water being transferred to Lake Chad from the reservoirs produced by these proposed dams; this water would flow from the Ubangi to the Chari River (Lake Chad's main water source) through a 1350 km navigable canal (CIMA International, 2011).

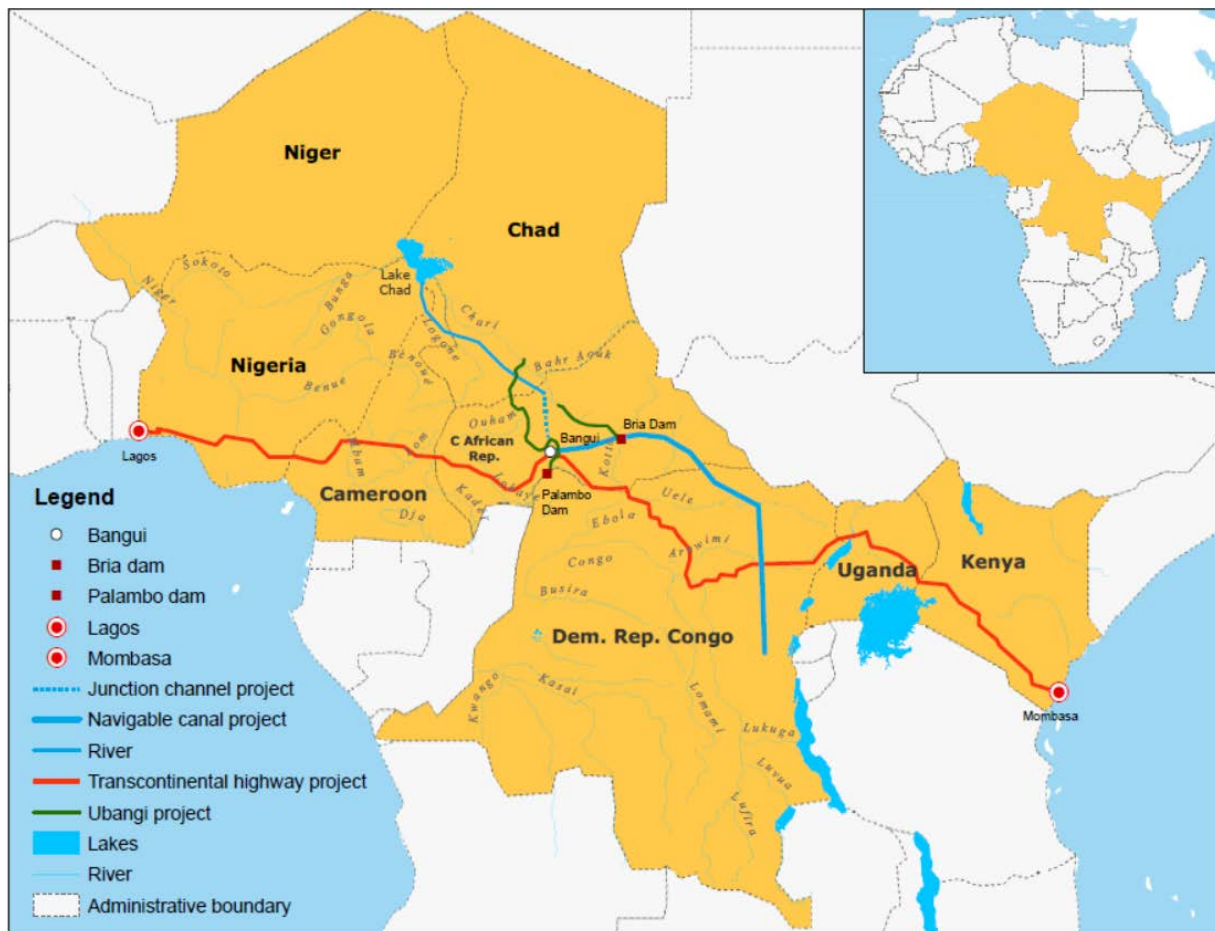
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<sup>1</sup> IRI was created in 1933 to nationalise Italian industry and increase state control over it (De Grand, 2004). IRI was instrumental in Italy's reconstruction following World War II and it increased the state's presence in its relatively less-developed south, particularly by financing big infrastructure projects. The full privatisation of the institution was concluded in 2002 (The Economist, 2000).

<sup>2</sup> See the Abuja Declaration and Road Map of the International Conference on Lake Chad (2018a; 2018b).

<sup>3</sup> The members of the Lake Chad Basin Commission are Chad, Nigeria, Cameroon, Niger, Algeria, Central African Republic, Libya and Sudan; observers are Egypt, the DRC and the Republic of Congo.

Figure 2. Map showing two IBWT project proposals to connect Lake Chad and the Congo River, presenting an (approximate) overview of the projects, along with the available information.



Source: CIMA International feasibility study (CIMA International, 2011); official proposals for the Transaqua Project; further adapted from Bonifica's website and from maps by Solidarité et Progrès (a political party associated with LaRouche Movement in France) promoting the project.

Both Bonifica and CIMA International's proposals were evaluated by the LCBC. In 2016, efforts to finalise an IBWT plan were concluded, and the LCBC signed a Memorandum of Understanding (MoU) with PowerChina, a state-owned company which plays an instrumental role in implementing China's international infrastructural investments. The MoU led to the signing of an agreement between PowerChina and Bonifica in 2017. In February 2018, the International Conference on Lake Chad was held in Abuja, Nigeria, under the auspices of UNESCO. In this conference, the LCBC heads of state approved a 'road map' which described the IBWT construction as "a necessity (...) not an option"; they explicitly endorsed the first IBWT proposal, the Transaqua Project, as their preferred means of revitalising the lake<sup>4</sup> (International Conference on Lake Chad, 2018a; The Italian Republic, 2018). It is anticipated that, upon completion, the Transaqua Project will physically connect two transboundary watercourses: Lake Chad and the Congo River. The project is expected to cause a great deal of socio-economic and environmental distress – particularly in the Congo Basin – given the contested nature of the politics of transboundary

<sup>4</sup> In this article, use of the acronym IBWT is used to generally refer to the IBWT issue; references specifically to the Transaqua Project will be noted as such. The Transaqua Project was officially endorsed in 2018; however, when construction actually starts there may be a possibility of integrating CIMA International's proposal into it (Bocchetto, 2017).

waters, the diversity of interests of the riparian actors in both basins, and the magnitude and costs of the construction process (Nzango, 2018). This article will explore the various diplomatic and technocratic processes, facilitated by multiple actors at multiple levels, that are aimed at promoting or blocking the proposed IBWT between the Lake Chad and Congo Basins.

The diplomatic and technocratic processes surrounding the IBWT (particularly the Transaqua Project) involve competing discourse coalitions which attempt to create a dominant narrative and discourse that justify the necessity for, or the need to block, an IBWT project (Hajer, 1993). These coalitions also demonstrate the nature of power relations between the relevant actors and the processes by which the IBWT idea has been promoted and challenged. These processes – by which each discourse coalition has pushed their own ostensibly convincing agenda – become an arena in which the actors exercise their use of 'soft' power.

This article primarily explores discourse coalitions that involve actors who have exercised soft power to promote or block the IBWT idea (particularly Transaqua); these actors are from the riparian states of the Lake Chad and Congo Basins, as well as scientists, international organisations such as the LCBC and the African Development Bank (AfDB), companies (Bonifica and PowerChina) and NGOs. We draw on a mixed methods approach of discourse, document and media analysis to examine diplomatic and technocratic processes involving multilevel tactics and strategies of soft power (Zeitoun et al., 2011; Thomas and Warner, 2015; Menga and Mirumachi, 2016; Gupta et al., 2016). In order to reveal the way discourse coalitions have emerged around the IBWT idea, we have primarily analysed publicly available documents, speeches, declarations, legal sources, and videos which can be found in media outlets. We have also examined the websites of various ministries and international organisations, a website devoted to the Transaqua Project,<sup>5</sup> and copies of project proposals, videos and presentations delivered by Bonifica. As Transaqua remains in the planning and feasibility study stage and the respective actors have endeavoured to build consensus towards achieving or blocking its fruition, this article attempts to assess the role of soft power in shaping transboundary water interactions.

With this approach in mind, by focusing on the relatively dynamic yet under-researched transboundary Lake Chad and Congo River Basins and the IBWT projects (particularly Transaqua), this article demonstrates the instrumental role of non-state actors in shaping the politics of transboundary waters. The following section introduces the relationship between soft power, discourse coalitions, and mega hydro constructions; it describes the tactics and strategies of soft power which shape transboundary water interactions. The subsequent three sections demonstrate how various actors constitute discourse coalitions in their promotion of, or opposition to, the IBWT idea; it examines how key actors, in order to promote or oppose the IBWT idea, adopt agenda setting, knowledge construction, securitisation, issue linkage, and – in the case of the DRC's position in the IBWT process – exclusion from negotiation processes. In the final section, we examine the main motivations of the actors to take part in specific discourse coalitions. This section also showcases how actors' perceptions of the IBWT idea support their broader social, economic and political agenda of increasing the efficacy of their soft power in the Sahel region and Congo Basin. The conclusion summarises the study while highlighting its contributions to the empirical and conceptual literature that addresses the politics of transboundary waters.

### **SOFT POWER, DISCOURSE COALITIONS, AND MEGA HYDRO CONSTRUCTIONS**

Power is key to explaining the relationship between riparian actors, their policies, and the characteristically unequal distribution of water share in transboundary contexts (Zeitoun et al., 2014). The relationship between water and power has been conceptualised by scholars working on the "Framework of Hydro Hegemony" (Zeitoun and Warner, 2006); they have explicitly revealed patterns of

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<sup>5</sup> See [www.transaquaproject.it](http://www.transaquaproject.it). This link is suspended in July 2020.

cooperation and conflict in transboundary basins by analysing the exercise of riparian actors' power to control water while investigating the power asymmetries between these actors (Warner et al., 2017). This literature describes three forms of power – material, bargaining and ideational – and helps explain the role of power and power asymmetries in shaping transboundary water interactions (Table 1).

As Zeitoun and Allan (2008) highlight, material power can be loosely considered to be 'hard' power; this is described as the "use of coercion and payment" to get to the desired outcome (Nye, 2008: 160). Daoudy (2009: 365) argues that "riparian [states' geographic] positions and the control exercised over military, economic resources, and water" are all involved in shaping actions over transboundary waters. Earlier academic works on environmental security are based on such material perceptions of power, including that by Homer-Dixon (1999) which probes the relationship between violent conflicts and environmental degradation. By examining historical conflicts and political instabilities between states with regard to water resources, this literature deems water (and its scarcity) to be a source of conflict – or 'water wars' – particularly in the context of transboundary rivers. The literature makes an oversimplified assumption that in order to compete more successfully for scarce water, states would not hesitate to use their geographic, military and economic power to get the maximum benefit from transboundary basins.

As pointed out by Menga (2016: 404), studies on transboundary water politics are shifting the focus of analysis "from 'hard' to 'soft' power, the first being visible and concrete, and the latter being hidden and more sophisticated". A combination of 'bargaining' and 'ideational' power is loosely described as soft power in revealing asymmetrical power relations within transboundary basins (Zeitoun and Allan, 2008; Table 1). Soft power tools and strategies are essential in analysing transboundary water interactions, as:

the ways in which (...) interests, ideologies and power interact are often through non-coercive mechanisms (...) [and] in situations [where] there is de facto power asymmetry between [actors], there are a range of discursive and ideational strategies and tactics to maintain [or gain] control of water resources (Menga and Mirumachi, 2016: 375).

Table 1. Definitions and classifications of the types of power, as described in the literature on the politics of transboundary waters.

Dimension	Definition	Classification	Tactics and strategies (selected)
Material power	"The riparian's position, its size, military might, economic strength and structural capacities" (Menga, 2016: 411)	Hard power	Military force, economic sanctions and covert action
Bargaining power	"The capability of actors to control the rules of the game and set agendas" (Cascão and Zeitoun, 2013: 32)	Soft power	Agenda setting, demonstration of leadership, issue linkage, and exclusion from a negotiation process
Ideational power	"The capability of a riparian to impose and legitimize particular ideas and narratives" (Cascão and Zeitoun, 2013: 32)	Soft power	Knowledge construction and securitisation

Source: Based on Zeitoun and Warner (2006) and Thomas and Warner (2015).

Riparian actors employ tactics which include agenda setting, knowledge construction, securitisation, and issue linkage, as well as exclusions from, postponements of, or blocking of, negotiation processes. Actors also use the tactic of demonstrating leadership in order to legitimise and promote unilateral actions that are designed to increase control over water or "persuade (...) [others] to adopt and internalize its values and norms intended to impose one solution over others" (Zeitoun and Warner, 2006: 438; Table 1). Brisbois and de Loë (2016: 204) claim that at any one time several actors are bidding to have "control over political agendas" by strategically framing problems in water management; they do this primarily by applying strategies aimed at "constructing myth/beliefs and perception over an issue/discourses as [a] tool to legitimize (...) actions" (Thomas and Warner, 2015: 596). Buzan et al. (1998: 23-24), on the other hand, define securitisation as a discursive mediation process, "meaning the issue is presented as an existential threat, requiring emergency measures and justifying actions outside the normal bounds of political procedures". Issue linkage refers to "the simultaneous discussion of two or more issues for joint settlement", which is frequently applied by riparian actors when addressing water issues at transboundary basins (Ert et al., 2019: 134). Aside from the above-stated strategies, actors may attempt to stall negotiations or limit the access of others to the negotiation process and may "try to demonstrate leadership in order to achieve hydraulic development" (Menga and Mirumachi, 2016: 376).

Critical hydropolitics, as pioneered by Sneddon and Fox (2006), provides an enriched understanding of the politics of transboundary waters by underlining the role of soft power in shaping riparian relations in that context. These authors (ibid: 182) draw attention to "the multi-scalar, multi-actor character of water politics"; they argue convincingly that discourses and narratives that are constituted by multiple actors at multiple scales (that is to say, the ways that water is framed in transboundary water contexts) help explain the patterns of riparian relations. Accordingly, actors can (re)create discourses and narratives when forming their policies over transboundary waters (Mirumachi, 2015). Discourses and narratives reconfigure power relations in transboundary basins; they reflect the needs and interests of powerful actors and set the basis for transboundary water interactions (Williams, 2018; Hussein, 2019).

A number of the scholars of critical hydropolitics who are cited here prioritise discourse analysis and identification of discourse coalitions to explain the processes, the interests, and the policies shaping transboundary water interactions, as well as the power asymmetries that lead to unequal water share in transboundary settings. These works benefit from Hajer's (1993) elaboration on discourses and discourse coalitions in environmental politics.

Hajer and Versteeg (2005: 175) define discourse as "an ensemble of ideas, concepts and categories through which meaning is given to social and physical phenomena, and which is produced and reproduced through an identifiable set of practices". Hajer defines a discourse coalition as "the ensemble of a set of story lines, the actors that utter these story lines, all organized around a discourse" (Hajer, 1993: 47). He argues that different actors discursively ally by combining scientific, economic, engineering and political considerations, competing with other coalitions that promote alternative framings in environmental politics. As part of this process, each coalition aims to convince the others through debate, persuasion, manipulation or the exercise of power, in an attempt to mainstream and justify their own preferred framings, policies and solutions over the alternatives (Hajer, 1993).

Discourse coalitions that promote mega hydro projects are frequently cited in the critical hydropolitics literature. As highlighted by Crow-Miller et al. (2017: 196), mega hydro constructions in the form of "inter-basin water transfers and massive dams (...) desalination plants, sea walls, and tidal barriers" have been globally revived as optimal solutions in addressing water problems. As part of this revival, discourse coalitions play an instrumental role in promoting certain narratives that justify the construction of mega projects (Crow-Miller, 2015). Boelens et al. (2019: 2) illustrate the relationship between mega hydro projects, (soft) power and discourse coalitions:

[Mega hydro projects are] socially produced and politically constructed (...). [T]he ways in which they are designed are not neutral, objective or 'optimal' but [are] a biased and contextual response to particular

problems that are framed and invented by a particular and dominant water culture (...). [These projects] form the core of crucial power and knowledge encounters because they represent 'universalized' solutions that sideline many alternative arrangements (...). [T]he design and planning of all mega hydro-technological systems involves conflicts between social groups and dispute among different knowledge regimes.

Williams (2018) shows that transboundary water interactions between the riparian states of the Indus, Ganges-Brahmaputra and Mekong Basins are shaped by national discourse coalitions forged via a balance of technocratic, economic and political considerations. She argues that these coalitions give national priority to hydropower constructions and legitimise them as part of riparian states' security agendas on an international scale. Harris and Alatout (2010), furthermore, highlight national discourse coalitions in their case study of the way in which Israel and Turkey formed metadiscourses regarding, respectively, the Jordan and the Euphrates – Tigris Basins. They contend that Israel and Turkey have increased their control over these rivers and further consolidated their power over them with the help of metanarratives, such as the fixation of water solely as a 'technical' issue which necessitates the promotion of mega hydropower constructions as part of their broader nation and state-building agendas (ibid). Hussein's (2017) discourse analysis of historical plans and policies aiming to connect the Dead Sea with the Mediterranean or Red Sea finds a merging of discourses that encompasses Israel's narrative of the Zionist dream, Jordan's water scarcity, and Palestine's environmental concerns to justify the replenishment of the Dead Sea. Above all, these studies argue that discourse coalitions (re)create narratives aimed at the control of water by riparian states in transboundary basins mainly by prioritising mega hydropower constructions at national and international levels; they at the same time reflect the asymmetrical power dynamics between riparian actors.

In line with these arguments, this study will unpack the diplomatic and technocratic processes that produce the discourse coalitions which promote, and object to, the IBWT proposals for the Lake Chad and Congo Basins. The research will show how these coalitions use soft power strategies to reinforce their positions. As highlighted in the introduction, this article also aims to identify how multiple actors endeavour to create metadiscourses and metanarratives that reflect greater power struggles, in order to justify the construction of large-scale IBWT projects. We will explicitly examine how the riparian states of the Lake Chad Basin, international organisations, external states (Italy and China), companies, and NGOs employ agenda setting, knowledge construction, securitisation, and issue linkage to promote the IBWT project. We will also reveal how the DRC and French scientists have formed alternative coalitions by applying similar soft power strategies, as well as the exclusion (of the DRC) from the negotiation process.

### **AGENDA SETTING, KNOWLEDGE CONSTRUCTION, AND THE IBWT PROJECT**

Agenda setting and knowledge construction are two heavily intertwined soft power strategies (Schatz, 2009). Agenda setting refers to the processes by which actors discursively keep certain matters on or off the table and "shape others' preferences by affecting their expectations of what's legitimate or feasible" (Nye, 2011: 14). Through selective use of agenda setting, discourse coalitions attempt to construct knowledge about a given problem and possible solutions to it; they do this by pushing forward specific narratives and ideas "through which actors try to impose their view of reality on others, suggest certain social positions and practices, and criticize alternative social arrangements" (Hajer, 1993: 47). In the case of Lake Chad, the IBWT idea, and the Transaqua Project, a powerful discourse coalition has emerged which frames the discourse around water scarcity and environmental degradation; it includes Bonifica,<sup>6</sup> the riparian states of the Lake Chad Basin, and international organisations such as the LCBC and AfDB. These actors put forward repetitive alarmist narratives on the lake's shrinkage and unanimously highlight

<sup>6</sup> Neither PowerChina nor the Chinese State has explicit declarations and documentations about the IBWT issue. Due to this reason, the following two sections will not cover the speech acts performed by PowerChina and China, which is a limitation for this study. However, PowerChina's and China's roles in mainstreaming the IBWT idea will be elaborated on in the final section.



the urgent need to save the lake; they present the IBWT ideas, particularly the Transaqua Project, as being the 'only' solution.

Bonifica has systematically used an alarmist discourse; it has cited water scarcity and environmental degradation as the reason to promote the Transaqua Project as the means to "save the Lake" before it is too late (Vichi, 1992: 62). The original Transaqua proposal, for instance, is entitled "The Sahel Belt: An Impending Tragedy"; it is presented from the outset in similarly gloomy terms:

In the last fifteen years [between 1967 and 1982] the Sahel belt of countries has witnessed, impotently, a gradual process of desertification, caused by climatic upsets that have broken centuries-long ecological balance represented by the scanty, precarious natural resources, by widespread subsistence agriculture and by pastoral nomadism. The fragile nature of the ecosystem has yielded before a sequence of years of drought and near-drought, and today its recovery appears very dubious (Bonifica, 1982: 1).

In 1988, Bonifica produced a short video to promote the Transaqua Project, which was broadcast that year on Italy's national RAI TV station (Bonifica, 2011). The video focuses on the issues of water scarcity and environmental degradation around Lake Chad; the narrative aims to raise public alarm over the situation, beginning with footage showing desertified areas, sandstorms, and people digging up sand and arid soil in search of water. The video's voice over describes the drought facing the Sahel region, and its impacts on the environment, human security and development. This is immediately followed by another scene showing the flowing rivers, abundant rainfall and lush rainforests of the Congo River; the voice over at this point points out how abundantly this water flows into the Atlantic while "arid sandy stretches of the Sahel" remain barren. It then introduces the project. Bonifica's representatives use similar reasoning in their presentations and publications; for example, Franco Persio Bocchetto, Foreign Director of Bonifica, depicts Lake Chad as a drought-hit region and introduces the Congo River Basin as "an immense, scarcely populated basin, which discharges [water] into the Atlantic Ocean [at] an average [rate] of 40,000 m<sup>3</sup>/s"; he then proposes that the Transaqua Project is an opportunity to save "the thirsty Chad region" (Bocchetto, 2017).

While Bonifica has used such alarmist narratives to set the agenda in its promotion of the Transaqua Project, terms such as 'crisis' and 'catastrophe' have naturally arisen from a climate change discourse. This was reinforced by Coe and Foley (2001) in a published study that was endorsed by NASA. Their article provided an overview of the changes that had occurred to Lake Chad's size from 1973 to 2001; it was backed by satellite images illustrating the decline in no uncertain terms. Their paper posited that the water 'crisis' in the Sahel region was mainly due to agricultural water use and climatic extremes (Coe and Foley, 2001; Chandler, 2001). This study and its accompanying satellite images have been used frequently by international organisations to highlight the issues facing Lake Chad, characterising the situation as a climate crisis in need of an urgent international response; for example, the UN Refugee Agency (UNHCR, 2009) and the Food and Agricultural Organization (FAO, 2009) have both underlined the decline of the lake's water level since the 1960s, from "25,000 km<sup>2</sup> to 3000 km<sup>2</sup>" while using this discourse to help in their portrayal of the case as a "humanitarian crisis". The AfDB (2018) highlights that "[t]he lake has shrunk to nine tenths of its size due to climate change, population growth and irrigation". The then executive secretary of the LCBC, Sanusi Imran Abdullahi – while seeking international support to save the lake (AfDB, 2012) – confirmed that the lake has shrunk "due to persistent climate change problems and persistent high temperature in the region, high evaporation (...) [and, it] means disaster".

Bonifica, the LCBC and the riparian states of the Lake Chad Basin alike have promoted pessimistic narratives and have put forward the IBWT as the only solution to the lake's continuing decline. As explored earlier, Bonifica's 1988 video on Transaqua starts with a comparison between the drought-hit Sahel region and the water-rich Congo Basin. Immediately after this comparison, and while images appear comparing a starving child in the Sahel region with the relatively well-fed residents of the Congo Basin, the voice over can be heard to state that the transfer of "even just 5% of the water that the River

Zaire [DRC's former name] sends unused into the Atlantic would change [the entire scenario]" (Bonifica, 2011).

This video was also used in a TV programme broadcast by Italy's RAI; in it, the Transaqua Project was presented by the Bonifica representative and by the then president of the LCBC, Bukar Shaib. In this programme, Shaib explains that, "we [the LCBC members] came to conclusion that we must transfer water from Zaire Basin" in order not to be faced with an environmental crisis like that experienced by Ethiopia in 1984 (Shaib, 1988; Progetto Transaqua, 2009). Immediately after describing the advantages of the project for African nations, he goes on to say that "[w]e, the leaders of that area cannot cross our arms and sit down". In the broadcast, he also underlines that Transaqua may be the main initiative to stop "the spread of the desert (...) cross[ing] the Sahel Zone into Central Africa" (ibid). In 2015, when the project gained further momentum, the Minister of Water Resources of Nigeria Suleiman Adamu Kazaure highlighted the necessity of water transfer by referring to it as "much-needed infrastructure", which was required to "ensure the success of the Lake Chad revival project" (AfDB, 2015). Vichi (2016), furthermore, referred to the Transaqua Project as "the best means" to save the lake. Following the 2018 International Conference on Lake Chad, the high profile political figures of the LCBC singled out Transaqua by correlating alarmist projections to a "there is no alternative" discourse; for example, Sanusi Abdullahi, the executive secretary of the LCBC, declared that:

There is no solution to the shrinking Lake Chad that does not involve recharging the lake with water from outside the basin. Therefore, inter-basin water transfer is not an option; but a necessity. Otherwise we are faced with the possibility of Lake Chad disappearing and that would be catastrophic for the entire Africa continent (Abdullahi, 2018).

Similarly, Mahamadou Issoufou, the President of Niger, has declared that "[t]he irreversible degradation of the lake leaves us with no option but to implement decisions taken at this conference [referring to Transaqua] which others consider too ambitious, but are indispensable for the survival of the lake" (The African Business, 2018).

This section thus shows that a discourse coalition formed by Bonifica, the LCBC, international organisations, and the riparian states of the Lake Chad Basin has framed the Lake Chad problem as an environmental concern that needs an urgent response. These actors repeatedly use water scarcity, environmental degradation, and climate change discourse to underline the crisis facing the basin, while simultaneously promoting the IBWT idea, particularly Transaqua, as the only solution.

### **SECURITISATION, ISSUE LINKAGE, AND THE IBWT PROJECT**

Securitisation is a discursive act through which water, or lack of water, is often deemed by riparian actors to be an existential threat; this helps them justify their unilateral policies with regard to transboundary basins (Conker and Hussein, 2019). Such discursive acts may also be used to foster cooperation over transboundary waters, helping to establish new institutional frameworks and agreements for addressing environmental/water crises (Mirumachi, 2013). This can be observed in the commitments by LCBC countries to promote the IBWT idea. Issue linkage is also a discursive act; using it, riparian actors integrate broader economic, security or social development issues with the water agenda in order to simultaneously address a myriad of issues (Dombrowsky, 2010). As Mostert (1998: 209) contends, "the focus is not on solving an individual conflict [or disagreement over water] in a specific case, but on developing an integrated, constructive solution to all issues at stake". Securitisation and issue linkage may be adopted together when actors set the political agendas and frame problems and solutions over transboundary basins (Daoudy, 2009). In the case of Lake Chad, a discourse coalition (Bonifica, international organisations such as the AfDB and the LCBC, international campaigners supporting the Transaqua Project, riparian states of the Lake Chad Basin, and non-basin countries like Italy) securitise the Lake Chad's declining water levels and the IBWT project, while also linking them to the broader

agendas of development, security (particularly in terms of the resurgence of Boko Haram), migration, and Pan-Africanism.

In its early promotion, Bonifica frequently linked the project with its potential contribution to poverty alleviation and economic development in the Sahel region and to Africa more broadly. In the original project proposal, the company views the project as an opportunity "to offset hunger and thirst" and to create long-term development in the region (Bonifica, 1982: 3). Moreover, Vichi (1992: 63) conceives the project as "a decisively propulsive element for the realization of the post-colonial African dream of an international economic and productive integration of the continent", while also describing it as "indispensable not only for obvious reasons of general development, but also, in particular, for marketing of African products and their export to foreign markets" (Vichi, 2011: 36).

Peace, political instability, and security are widely linked to the declining water levels of Lake Chad by the LCBC, the AfDB, the riparian states of the Lake Chad Basin, and UN diplomats, with the IBWT idea being singled out as the most feasible way to achieve these broader aims. The President of the AfDB, Akinwumi Adesina, for example, has acknowledged Nigeria's efforts to realise the IBWT project to revive Lake Chad; referring to the IBWT's implied role in bringing peace and stability to the region, he says that,

The President [Buhari of Nigeria] has charged me to help to lead an effort to raise \$50 billion and I salute with all pleasure and I think the President is doing the right thing because without peace and stability, we can't have any investment. We can't have anything (Daily Trust, 2019).

More specifically, these actors commonly relate Lake Chad's declining water level to the resurgence of Boko Haram in the region. They promote the IBWT project as a means to potentially halt Boko Haram's activities; a representative of the LCBC, Mana Boukary, for example, reports that "[y]ouths in the Lake Chad basin are joining the Boko Haram terrorist groups because of lack of jobs and difficult economic conditions resulting from the drying up of the lake and extinction of its resources" (DW, 2015). A staunch supporter of the IBWT project, Nigeria's President Muhammadu Buhari has further highlighted the need for the implementation of developmental and infrastructural projects to address security problems in the region:

The Lake Chad region has suffered decades of neglect and poor infrastructural development, the Boko Haram crisis in the last eight years [from 2010 onwards] (...) has worsened its already bad situations (...). We must put an end to the crisis in the sub-region to enable meaningful development for its people (LCBC, 2018).

Similar reasoning has been followed in the high level political meetings of non-Lake Chad Basin countries. Carl Skau, a Swedish diplomat who was part of the Security Council Mission to the Lake Chad Basin Region at the UN, explains that,

[t]he roots of the conflict run deeper than the Boko Haram insurgency. They include abject poverty, climate change and underdevelopment (...). In Niamey, President Issoufou cited the shrinking of Lake Chad as a direct and major reason for the rise of Boko Haram (...)[.] [We] must see a coordinated – and better linked – humanitarian, reconstruction and development response [in the Lake Chad Basin] (Skau, 2017).

Deputy Permanent Representative of the Republic of Angola to the UN, Helder Lucas, endorses the IBWT project as a measure to halt the Boko Haram insurgency:

Being an ambitious project [referring to the inter-basin water transfer project], it has the potential to change radically the current situation in the Basin and the lives of its populations. The countries of the region should consider extending tangible support to the project, since the current situation if not rapidly reversed has the potential to become yet another hotbed of crisis and conflict, and a real threat to regional and international peace and security (Lucas, 2016).

The IBWT project has also been linked to the broader theme of migration; this is particularly evident in recent statements by the Bonifica representatives and by high level political figures who are promoting

the project. Bonifica argues that their plan would provide for better socio-economic and environmental conditions, and that these improved conditions would stop the migration flow from the Sahel region to Europe. Vichi (2010: 31) is of the view that "[t]he enormous African population growth, and the related population pressure on Europe" are among the main reasons for the revival of the idea of the IBWT project at political agendas; he adds that, "[i]n many countries of sub-Saharan Africa, endemic hunger (...) has turned into starvation and despair, especially for the youth, leading them to risk their lives in order to reach Europe, where there is water and food". Vichi (ibid) claims that the project would address this tragedy by providing food and water to the Lake Chad Basin. In another speech, he claimed that the project would "transform" the area "from land of hunger and famine (...) [to] a series of large work sites and of wealth" (Vichi, 2016). In the same speech, he elaborated further that,

Nowadays (...) many European politicians have discovered a new approach: 'LET'S HELP THEM AT THEIR HOME'. Better late than never! The 'megalomania' of which Transaqua has always been accused, today could be simply considered the right approach to deal with the enormous problems of the African continent (and of the consequences that result and even more will result (...) at 'OUR HOME!') (Directly extracted from the speech transcript; capitalisation and quotation marks are as per the original).

As Bonifica was a state-owned company by the time it first developed Transaqua in the 1970s, it can be inferred that Italy has also been backing the project since its initial stages. Italy's recent support for this project has been more obviously related to its current defence policy; it has suggested that the political instability and the insecurity in the Sahel region should be addressed at their source as they ultimately increase the flow of migration from the Sahel to Italy (Italy, Ministry of Defence, 2015). Regarding the Transaqua Project, for example, Italian Prime Minister Giuseppe Conte (News Ghana, 2019) highlights that Europe

cannot remain insensible to the drying up of Lake Chad. If it goes on, there will be increased misery and thus increased emigration and terrorist threat (...). [P]ossibly the oldest project [Transaqua] to tackle the drying out of Lake Chad has been made by Italian experts (...). This [Transaqua Project] means laying the basis for the development of those territories and therefore better controlling migration flows.

Franco Bocchetto of Bonifica uses a similar narrative; he suggests that Lake Chad's declining water level is connected to the tragic drownings of illegal immigrants as they attempt to cross the Mediterranean Sea to take refuge in Europe. He highlights that the Transaqua Project may stop this tragedy and that the main reason the Italian government should support the IBWT project is "[t]he vision of [stopping] hundreds of people dying in the Mediterranean Sea" (France 24, 2018). This reasoning is also used by Nigerian politicians; special advisor to the President of Nigeria, Femi Adesina, for example, when advocating the project, indicates that a "redirection will help our people from getting into the Mediterranean Sea" (All Africa, 2019). Similarly, the President of Nigeria, Muhammadu Buhari, reflects on the relationship between Lake Chad, the IBWT, and internally displaced people:

[Lake Chad's] shrinking meant loss of livelihoods and they are now rendered poor and vulnerable to the activities of extremist and terrorist groups. The instability thus caused in the sub-region intensified internal displacements (...). That is why we continue to call for a rededicated international engagement to accelerate the recovery efforts in the Lake Chad Basin (Buhari, 2018).

The IBWT idea, particularly Transaqua, has also been promoted through a Pan-Africanist discourse; for example, the Abuja Declaration and the Road Map – both of which were agreed on by the LCBC at the 2018 International Conference on Lake Chad and both of which explicitly named the Transaqua Project as the preferred option for saving Lake Chad – call on the African Union to "endorse the (...) IBWT initiative as a Pan-African project" (International Conference on Lake Chad, 2018a; 2018b). In a published interview

that was accompanied by a photo of yellow flowers spelling out, "Love Africa Love Transaqua" on green grass, Lawrence Freeman<sup>7</sup> highlights how this project would transform entire Africa, saying that,

the news of the success of this conference (...) will create a wave of optimism across the continent (...). African leaders are thinking big with a vision for the future, having taken it upon themselves to discuss and support such a transformative infrastructure project (African Agenda, 2018).

In the same interview, he also associates Transaqua with the vision of Kwame Nkrumah, former president of Ghana and the pioneer of Pan-Africanism:

Nkrumah learned the importance of infrastructure as the foundation for economic growth (...). He knew that, if Africa's vast potential of natural wealth was properly managed, its future was bright. He like the other leaders was acutely aware of the huge potential of the Congo River as a resource for the Africa continent. And (...) perceived the imminent possibility of 'blooming' the Sahara Desert. Today, Transaqua represents the type of Pan-African project that can drive economic progress across the continent (ibid).

Despite not mentioning the IBWT idea, in 2016 the AfDB's President Adesina explicitly refers to the Lake Chad case and lends the Bank's potential support to the idea – later substantiated in his other speeches, cited above (Daily Trust, 2019) – by taking a Pan-Africanist stance:

We must accelerate Africa's development (...). Africa cannot have low aspirations (...). With climate change shrinking the size of Lake Chad Basin, decimating livelihoods and undermining regional security, (...) Africa cannot afford to have low ambitions (...). The African Development Bank is here to support Africa's great aspirations (AfDB, 2016).

In summary, this section shows that Lake Chad's declining water levels and the IBWT idea are systematically securitised through a discourse coalition involving Bonifica, international organisations like the LCBC and the AfDB, riparian states of the Lake Chad Basin, countries and diplomats outside the Lake Chad Basin, and international campaigners. This coalition simultaneously links these two issues to the broader regional and international agendas of development, security, migration and Pan-Africanism.

## **COUNTER-DISDISCOURSE COALITIONS: QUESTIONING THE LAKE CHAD 'CRISIS' AND OPPOSITION TO THE IBWT IDEA**

The narratives of the pro-IBWT discourse coalition are challenged by another discourse coalition involving French scientists and analysts, scientists and politicians from the DRC, who apply similar soft power tools. French scientists attempt to frame Lake Chad's shrinkage as a 'myth' while criticising the IBWT idea (particularly Transaqua); this alternate discourse can be considered a process of counter-agenda setting and counter-knowledge construction (Magrin, 2016). On the other hand, analysts, scientists and high level politicians from the DRC mount a strong opposition to the IBWT idea by applying soft power tools and strategies. Most importantly, Congolese actors emphasise their "exclusion from negotiation processes", claiming that the pro-IBWT discourse coalition has practised this exclusion as a soft power tool to prevent their participation in the political and scientific processes related to the IBWT project.

French scientists, through an analysis of the lake's historical and seasonal variability, explain the declining water levels of Lake Chad as a natural phenomenon; they actively promote this view by publishing peer-reviewed articles, policy papers and reports, and by giving interviews (Lemoalle and Magrin, 2014; Magrin et al., 2015). This strand of research scientifically challenges influential works such as that by Coe and Foley (2001), which served as the baseline for a pessimistic view of the lake's

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<sup>7</sup> Lawrence Freeman is a political-economic analyst who extensively campaigns for the Transaqua Project. He has taken part in negotiations on the IBWT over the years, and is closely associated with the Schiller Institute, a think tank founded and funded by the LaRouche Movement, which has been a staunch supporter of the Transaqua Project since its inception. See, for example, the Institute's periodical *Executive Intelligence Review*.

shrinkage. Lemoalle and Magrin (2014), Magrin (2016), and Magrin and Perouse de Montclos (2018) underline that the lake's water level is historically and seasonally variable and that the main reason for the dramatic fluctuations in the lake's water level in recent years is due to its shallowness. These scholars also stress that the lake's water level stabilised at about 8000 to 10,000 km<sup>2</sup> over the course of the 2010s, reaching as high as 13,000 to 14,000 km<sup>2</sup> in 2013; they argue against the assertion that the lake has shrunk by 90%, a figure which has frequently been put forward by the pro-IBWT discourse coalition (Magrin, 2016). Furthermore, these scholars (as well as Gao et al., 2011) methodologically refute Coe and Foley's (2001) article and the validity of conclusions drawn from NASA's satellite images. Gao et al. (2011: 4), for example, suggest that Coe and Foley had "relied on simple approximations of irrigation water use from limited observations" and blamed the lake's shrinkage on excessive irrigation water use and persistent droughts, which cannot fully explain why the northern part of the lake dried up in the 1980s. Magrin (2016: 211), on the other hand, criticises satellite images and the reference dates used by NASA; he emphasises that "choosing different dates could have shown the opposite". Magrin (ibid) also underlines that the NASA images do not acknowledge the swamp and aquatic life under the vegetative areas that have emerged since the lake's shrinkage, and claim that this shows that the lake is still alive.

In media interviews, French scientists raise similar points on Lake Chad's declining water levels and the IBWT idea; Seignobos, Emeritus Professor at the French National Research Institute for Development (IRD), for example, states that "the surface area of this lake is constantly changing because it is very shallow and extremely dependent on precipitation and inflows from the Chari [River]. (...) It is an impossible place to map" (*Jeune Afrique*, 2018). French scientists further argue that the lake currently provides livelihoods for communities that have managed to adapt themselves to the small size of the lake, and that the IBWT is therefore not needed for the region. Seignobos explains that "the decrease in water and the transition to a configuration in small lake freed fertile land, (...) allowed the development of agricultural activities for people who have learned [how] to exploit this area" (*Jeune Afrique*, 2018). Magrin (RFI, 2015) similarly points out that "this level of small Lake Chad is rather favourable from the point [of] human activities in terms of agricultural production and livestock production"; he explains that the basin is considered by locals to be a "rather rich (...), rather productive space". Both Seignobos and Magrin oppose the IBWT idea based on these claims; they underline that the IBWT would be 'disastrous' for these communities. Roland Pourtier, the President of the Association of French Geographers, in his opposition to the IBWT idea, focuses on the Boko Haram issue (*Jeune Afrique*, 2018); he contends that "there is no reason why the filling of Lake Chad would repel this [Boko Haram] threat", adding that "the interest in this project is probably financial" (ibid). French scientists thus perceive the IBWT project as an ambitious goal that needs to be carefully considered and that this consideration needs to include the socio-environmental and geopolitical uncertainties that are associated with the Lake Chad Basin (Magrin and Perouse de Montclos, 2018).

Scientists, analysts and politicians from the DRC have developed an environmental discourse as justification for their opposition to the IBWT idea and the Transaqua Project. Tshibwabwa, a biologist who frequently provides socio-environmental analyses that oppose the Transaqua Project, asserts that any IBWT project on the Congo River would lead to a loss of biodiversity and would damage rainforests, national parks and existing UNESCO World Heritage zones; he insists, further, that it would displace human populations and would destabilise the Congo River's flow thereby causing siltation, disturbance of aquatic ecosystems, and the spread of invasive species between Lake Chad and the Congo Basin (Desc-Wondo, 2017).<sup>8</sup> Congolese politicians have built on such environmental concerns; they have underlined that most of the construction work on the Transaqua Project would take place in the Congo Basin, which would disproportionately impact the DRC. Modeste Mutinga, a politician from the DRC, opposes the Transaqua Project on the grounds that it may disrupt "the flow of the Congo River with consequences for

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<sup>8</sup> These points are also systematically raised by the CIMA International's pre-feasibility study (CIMA International, 2011) and by Nzango (2018).

ecosystems in the DRC" (La Presse, 2018); he states that "we should not try to solve a problem in a corner, and create it here in DR Congo". This echoes the stance of the former Minister of the Environment, Bavon N'sa Mputu Elima, that "we must resolve the problems at the level of the Lake Chad Basin" (La Presse, 2018). Felix Tshisekedi, the current president of the DRC, also opposes the Transaqua Project on the basis of an explicit environmental discourse:

There is a way to capture this river water and send it via pipelines to countries who need it rather than go to what was proposed at a given moment in Chad, that is to say, to divert the Ubangi River which can have consequences (...) [on] peatlands [and rainforests] that serve (...) [the world by] absorb[ing] carbon. We believe there are other solutions (Tshisekedi, 2019).

In addition to such discursive attempts to impose a counter-agenda on the Lake Chad crisis and the IBWT idea through the construction of counter-knowledge, Congolese politicians, analysts and experts have also securitised the IBWT issue by linking it to broader issues such as the DRC's national security, colonial legacies, and the DRC's socio-economic development. Felix Tshisekedi, when he occupied the position of leader of the opposition (before being voted into the presidential office), described the IBWT project as a "risk for the stability of the country" (The South World, 2018). Another Congolese parliamentarian, Patrick Kakwata, perceived the project as "a threat to the Republic" (ibid). Tshibwabwa, moreover, perceives the Transaqua Project as part of an "international plot to plunder DR Congo's natural resources", stating that the project fundamentally aims to give lands to "the aggressor countries of DR Congo" which are, for him, Rwanda, Uganda and Burundi (Desc-Wondo, 2017). He views the Transaqua Project as a colonial arrangement by which "the West draws up projects in its branches and [imposes] them on the Africans even if these projects are of no interest of them as in the present case [of the Transaqua Project]" (ibid). Political analyst Boniface Musavili associates the International Conference on Lake Chad with the 1885 Berlin Conference where Africa was partitioned among the colonial empires; Musavili claims that "Congo was on the menu in Abuja [Conference], as in Berlin in 1885" (Agoravox, 2018). Congolese politicians and analysts also object to the Transaqua Project based on its potential impact on the DRC's socio-economic development. Ami Ambatobe (Sciences et Avenir, 2018), former Minister of Environment and Sustainable Development of the DRC, claims that any IBWT project originating from the Congo River would "have consequences on the realisation of [the] (...) great Inga Project", the DRC's long-standing dream of constructing a series of power stations on the Congo River that would produce 44,000 MW of electricity (Green et al., 2015), a point also raised by Tshibwabwa (Desc-Wondo, 2017).

The main objection of opponents of the IBWT idea and Transaqua Project, particularly actors from the DRC, is the perceived exclusionary nature of the diplomatic and technocratic processes related to such ideas and projects. The DRC has only observer status at the LCBC, which is the main actor facilitating the processes on the IBWT issue; this implies that the DRC does not have an influential role in project-related decision-making at the LCBC, where the majority of planning occurs. Simon Sakibede, the current Secretary General of the International Congo-Ubangui-Sangha Commission, or CICOS (the Congo River equivalent of the LCBC) and a national of the CAR, refers to this point by citing the Dublin Statement on participatory water governance; when CICOS officials met with their LCBC counterparts to discuss the IBWT issue, he pointed out that "no state can decide alone on transboundary waters without the consent of other states sharing the same resource" (CICOS, 2015). Congolese actors are particularly uncomfortable with their exclusion from the negotiation processes around the Transaqua Project. Musavili, for example, heavily criticises the diplomatic processes promoting the Transaqua Project, as these processes "pretend [that] Congolese people do not exist (...) [and that] they do not need water of their country" (Agoravox, 2018). In their general statements on water policies at the Congo Basin, Ami Ambatobe, and Jose Makila Sumanda who was at that point Minister of Transport and Communications of the DRC, underlined that the DRC should play a vital role and should be fully involved in discussions concerning the Congo River's water (ADIAC, 2018). Ami Ambatobe went on to say that,

[t]he expectations of the DRC are such that we must play an important and vital role, since when we harness water resources in the Congo Basin, the DRC alone has more than 40% [of the Basin]. So we are in first place and so in terms of challenges and needs, we must first take into account the DRC (ADIAC, 2018).

This section underscores how the discourse coalition involving French scientists and analysts and politicians from the DRC attempts to challenge the mainstream depiction of the Lake Chad crisis and the IBWT ideas. These actors also use soft power tools such as agenda setting, knowledge construction, securitisation and issue linkage to make their narratives on Lake Chad and the IBWT issues more mainstream.

### **ACTORS, (BROADER) AGENDAS, AND THE IBWT**

This analysis so far has shown that several actors have grouped around specific narratives to discursively frame the Lake Chad issue and push their agendas regarding the IBWT project. Recent political developments have seen the formal launch of the Transaqua Project; it is a collaboration between the LCBC, Bonifica, PowerChina, Italy, and China, and is supported by NGOs, particularly those associated with the LaRouche Movement.<sup>9</sup> These developments clearly suggest that the pro-IBWT discourse coalition exercises soft power tools and strategies more effectively than the counter coalition, which has so far failed to form a metadiscourse. The success of the pro-IBWT discourse coalition may be attributable to the better fit of the IBWT idea to the broader agendas of the actors constituting the pro-IBWT discourse coalition; this is explored below. The roles of additional actors such as CICOS, UNESCO, the World Bank, and International Rivers – whose names frequently feature (or, as in the case of International Rivers, are expected to be featured) in the IBWT debates – will also be examined in detail to show the ambiguity of their stance on the IBWT issue and the way that their actions and narratives swing between the two discourse coalitions.

Bonifica's initial motivation to develop Transaqua may have been the historical belief of Italy's IRI group (see Footnote 1) in the role of big infrastructure projects as a way to address developmental challenges. As a state-owned company in the 1970s and 1980s, Bonifica's second motivation to plan and promote the Transaqua Project could be part of its agenda to substantiate Italy's national interests and expansionist dreams regarding the Sahel region through this large-scale infrastructure project. Antonsich (2009) argues that Italy has had expansionist intentions regarding Africa until as recently as the 1960s. Accordingly, Hess (1963) points to several maps that display Italy's secret colonial ambitions, which include the aim of expand Libya towards the Lake Chad Basin during the First World War. More interestingly, Antonsich (2009) cites a map dating back to 1943 which proposes a trans-African railway to establish Italy's presence in Africa; the railway was to connect Tripoli, Libya, to Cape Town and West and East Africa. The routes of this railway proposal and the regions named in the documentation of Italy's secret colonial ambitions coincide with the Transaqua proposal; more specifically, Transaqua's aim to locate the canal as part of Africa's wider transport system aligns with Italy's former expansionist dreams for the Sahel region. In the initial stages of the Transaqua Project in the 1970s and 1980s, this mega hydro-construction by the state-owned Bonifica may well have reflected the broader national interests of the Italian state.

Recent declarations from Bonifica representatives and Italian politicians have framed Transaqua as a means to contribute to the Sahel's socio-economic development and regional security; a potential benefit of this is control over the migration flow from the Sahel to Italy. Although Bonifica is no longer a state-owned company, its narratives overlap with Italy's recent security agenda with regard to the Mediterranean and the Sahel region (Italy, Ministry of Defence, 2015; Italy, Ministry of Foreign Affairs

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<sup>9</sup> Most of the sources cited in this article to show Bonifica's role in promoting the Transaqua Project were released by NGOs such as the Schiller Institute, and by the *Executive Intelligence Review (EIR)*, its associated periodical. Both of these were founded, and are funded, by the LaRouche Movement; this relationship will be detailed in this section.



and International Cooperation, 2017). Italy has traditionally prioritised Mediterranean security; in the 1920s while shaping its pre-World War II expansionist policies, it even declared the sea *mare nostrum*, or 'our lake' (Brighi and Petito, 2011: 823). *Mare nostrum* is the name recently given by the Italian Navy to the military operations undertaken in the Mediterranean Sea to rescue migrants and fight against human trafficking (Pinelli, 2017). In its recent strategy discourse, Italy has shifted its perception of the Mediterranean such that stretches as far south as the Sahel (Italy, Ministry of Defence, 2015; Italy, Ministry of Foreign Affairs and International Cooperation, 2017). These strategies highlight terrorism and migration as the biggest threats to Italy's security; more specifically, the reports explicitly cite a lack of internal security in the Sahel countries as being the main reason for the large migration flow to Italy. They conclude that Italy should therefore increase its presence in the region, collaborate with the Sahel countries, and actively take part in humanitarian missions in the region in order to support its socio-economic development and enhance regional security, which would in turn cease the migration flow from the Sahel to Italy (Italy, Ministry of Defence, 2015; Italy, Ministry of Foreign Affairs and International Cooperation, 2017). Transaqua thus represents an opportunity for Italy to meet its security targets and operationalise its Mediterranean strategy; this may indeed be the main reason for Italy's increasing support for the project. Bonifica, on the other hand, may be adopting rhetoric that emphasises the development, security and migration implications of the Transaqua Project primarily in order to demonstrate its commitment to the Italian state's agenda.

Since the mid-2010s, PowerChina has become another of the key actors promoting the IBWT issue. By examining the company's profile and China's national policies – namely its "Going Out Strategy" and its "Belt and Road Initiative" (BRI) – it is possible to garner PowerChina's and the Chinese state's motivations to get involved in the IBWT issue in the Lake Chad Basin. China launched its "Going Out Strategy" in 1999, with a vision of increasing its overseas investments in order to expand its national economic development space and promote common development at the global level (China, General Office of the State Council, 2006). Since the launch of this strategy, China has expanded its investments across the world, particularly in Asia and Africa; it has invested in specific sectors such as infrastructure, energy and natural resources since the 2000s (OECD, 2018). In 2013, President Xi Jinping rebranded China's Going Out Strategy and proposed to "build a Silk Road Economic Belt", known as the BRI, by enhancing cooperation and connectivity across Central Asia, West Asia, Russia, the Eurasian countries, the Indian subcontinent and Indochina through the construction and development of infrastructure projects (China, Ministry of Foreign Affairs, 2013; OECD, 2018). China has extended the BRI's application to Africa; this is evident in the bilateral agreements regarding this initiative between China and 37 African countries plus the African Union (China, Ministry of Foreign Affairs, 2018). Both strategies aim to establish China as a global leader.

As a state-owned company, PowerChina operates with a vision to power the manifestation of the BRI (PowerChina, 2019). Yan Zhiyang, the chairperson of PowerChina, explicitly states that "[t]he launch of the 'Belt and Road' will undoubtedly provide more advantageous conditions and opportunities for POWER-CHINA to execute the strategy of 'going global' and jointly build the 'Belt and Road'" (PowerChina, 2016: 1). With this vision, PowerChina has become an instrumental actor for the operationalisation of China's national strategies; it is therefore not surprising to see China's involvement in the IBWT discussions in the Lake Chad Basin, as this project represents another opportunity for it to fulfil its broader national agendas.

In terms of international organisations, the LCBC has had a pivotal role in promoting the IBWT idea. Given that Lake Chad is the main freshwater source for a number of countries, including Nigeria, Niger, Chad and Cameroon, it is understandable that the LCBC is desperately campaigning for the implementation of the IBWT and thus an increase in the lake's water volume. It is also logical for LCBC members to promote the IBWT project as they will not experience the direct socio-economic and environmental impacts of the project's construction (as it will be undertaken in the Congo Basin) and as they will be able to increase their presence in the Congo Basin through the proposed IBWT schemes.

The LCBC's motivation in promoting the IBWT project can also be explained through its institutional structure and Nigeria's broader agenda to establish itself as a regional power. The LCBC member countries are relatively less developed and are regularly faced with serious socio-economic and political issues, lowering the LCBC's effectiveness as an institution (Asah, 2015); it has, for example, failed to create mechanisms to prevent an excessive amount of agricultural water discharge from the lake, which has ultimately contributed to the lake's current shrinkage (ibid). In addition, the LCBC is an institution that experiences constant financial problems as its members are unable to provide it stable funding; this is one of the main reasons behind the years-long stalling of the IBWT (ibid). More recently, the LCBC has transformed into a platform in which Nigeria, as its richest state, has become dominant; this is part of Nigeria's attempt to establish itself as a regional power (The Conversation, 2017). It has been providing more than half of the Commission's budget and it is expected to receive the lion's share of transferred water if any IBWT projects are ever completed, which will further increase Nigeria's power in the region (Asah, 2015). Perhaps given such prospects, Nigerian politicians and technocrats have been more active in promoting the IBWT idea through the LCBC by hosting conferences, negotiating with international organisations (particularly the AfDB), and seeking funds to carry out the Transaqua Project.

The AfDB has recently emerged as another international organisation that has started to provide more explicit support for the IBWT project. As examined earlier, AfDB President Adesina has been developing an affirmative position in favour of the Transaqua Project; he has been charged by Nigeria's President Buhari with leading the fundraising activities for the project (Daily Trust, 2019). The AfDB's involvement in the IBWT debates is not surprising, as the IBWT idea enables the Bank to increase its investment in the region; it also overlaps with the AfDB's operational priorities to develop infrastructure and enhance regional economic cooperation, and conforms to the Bank's specific areas of interest including ensuring agriculture and food security and supporting fragile states through socio-economic development within Africa (AfDB, 2020). Transaqua's scope, as adopted by the pro-IBWT coalition, is infused with Pan-African and developmental narratives; it provides a window of opportunity for the AfDB to fulfil its strategic priorities, which may be the Bank's main motivation for supporting the project.

The Schiller Institute, and its periodical the Executive Intelligence Review (EIR), both of which are founded and funded by the LaRouche Movement,<sup>10</sup> have been explicitly supporting the Transaqua Project since its first proposal, and the Movement can be regarded as the standout NGO involved in political processes related to Transaqua. Since the 1990s, the Schiller Institute and *EIR* have continuously provided a platform for the experts and for Bonifica's representatives to promote Transaqua. Individuals associated with the LaRouche Movement have been actively participating in the diplomatic processes related to the project; it has also hosted several events in different countries attended by representatives from Bonifica and the LCBC. The LaRouche Movement's website indicates the main reasons it has been campaigning in favour of Transaqua; there, they directly point to the project as fitting with the Movement's economic goal of connecting all continents through massive infrastructure projects which are to be grouped under the umbrella of the "World Land Bridge" (LaRouche PAC, 2020). This vision, drafted and proposed in the 1990s, aims to foster "economic development of the entire planet" by creating "an integrated system of the most crucial projects in transportation, water management, power generation, resource development, agricultural production, and city building" (ibid). In parallel with this vision, the Movement has been lobbying for Transaqua (and recently for the BRI), as it perceives the project complementary to their World Land Bridge vision.

There are also international NGOs such as International Rivers, and international organisations such as CICOS, UNESCO and the World Bank, whose names appear frequently in processes related to the

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<sup>10</sup> The LaRouche Movement is a political initiative led by the late Lyndon LaRouche, who ran for the US presidency eight times between 1976 and 2004. The Movement's ideology occupies a large political spectrum ranging from far left to far right (Feldman, 2015). The Movement is regarded as controversial due to its commitment to conspiracy theories and anti-Semitism and because it has established substantial intelligence gathering networks through its members and researchers (Feldman, 2015).

region's IBWT proposal. All these actors could be expected to have an instrumental role in the formation of discourse coalitions over the project, yet they have remained relatively inactive; International Rivers and other large environmental NGOs, surprisingly, have no in-depth coverage on the Transaqua Project.<sup>11</sup> CICOS, UNESCO and the World Bank have taken a cautious approach to the IBWT issue.

CICOS does not take an explicit stance over the IBWT issue; former Secretary General of CICOS Benjamin Ndala, for example, in a very rare statement coming from CICOS about the IBWT idea, underlines that "the LCBC experts (...) had no instrument to know whether the Ubangi still has enough water to be able to supply [water to] Lake Chad" (Jeune Afrique, 2009). In another statement (cited in the previous section), the current Secretary General of CICOS highlights that CICOS countries should be included in the processes that are relevant to the IBWT (CICOS, 2015); on the other hand, however, Tshibwabwa (Desc-Wondo, 2017) blames "some CICOS executives" for supporting Transaqua. Based on such comments, it can be observed that CICOS has so far not taken an explicit stance in support of, or against, IBWT ideas; this is surprising, considering the instrumental role played by the LCBC – its Lake Chad counterpart – in the project's promotion.

UNESCO has also not endorsed any of these plans, despite the fact that its name comes up frequently in IBWT debates, and given that it sponsored the International Lake Chad Conference in 2018 in which LCBC countries endorsed Transaqua as their preferred option for water transfer. UNESCO, in fact, launched the BIOSphere and Heritage of Lake Chad (BIOPALT) project during that conference (UNESCO, 2020).<sup>12</sup> Professor Horace Campbell, a staunch supporter of Transaqua and a participant at the conference, blames UNESCO for not being active in the Transaqua discussions and adopting French scientists' observations on Lake Chad (Pambazuka News, 2018). UNESCO's Chief Executive Officer Abou Amani, who has a background in hydrology, explains the uncertainties surrounding the Lake Chad case thus: "the variation in water levels depend on rains and no one knows how this will evolve (...). Climate models [on Lake Chad] contradict each other and we sail by sight" (Le Monde, 2018). Campbell, further pointing out the cautious stance of UNESCO in the IBWT debates, claims that it "missed the opportunity to mobilise scientists to fully study the implications of (...) [a] water transfer scheme" (Pambazuka News, 2018).

The World Bank, for the moment, is taking a mixed stance with regard to IBWT ideas, having collaborated with the LCBC in the launch of its Lake Chad Development and Climate Resilience Action Plan; this plan aims to foster regional cooperation, improve trade and transport, ensure socio-economic development and better water management, and manage conflicts (Magrin et al., 2015). The World Bank report by Magrin, Lemoalle and Lajaunie uses cautious language with regard to the Lake Chad issue and IBWT debates; it does not, for example, use the word 'shrink(age)' to describe Lake Chad's situation (ibid). The Action Plan allocated €6 million to support the feasibility studies for the region's potential IBWT projects (ibid). As the objectives of the Action Plan and the World Bank's commitment to invest in infrastructure projects to alleviate poverty resonate with the language adopted to promote Transaqua, the World Bank may – depending on the results of the feasibility studies – align itself with the project.

It is thus arguable that ideas surrounding the IBWT venture (particularly the Transaqua Project) represent a window of opportunity for the pursuit by several actors of their broader socio-economic and political agendas in the Lake Chad and Congo Basins; it may be for this reason that they are motivated to promote the IBWT in line with political agendas. It is also noteworthy that some of the potentially influential actors, such as UNESCO, the World Bank and CICOS, who are expected to soon play an instrumental role in IBWT-related processes, have not finalised their stance over the issue; they can

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<sup>11</sup> The same search with keywords such as 'interbasin transfer', 'Lake Chad' and 'Congo Basin' demonstrates that International Rivers currently does not focus on this project or on the IBWT debates in the region.

<sup>12</sup> This project aims to "promote peace, safeguard and enhance natural and cultural resources (...) to improve local communities' sources of income and thus contribute to poverty reduction" and has no relation to the IBWT debates (UNESCO, 2020).

therefore not be comfortably classified within either of the two discourse coalitions examined in this research.

## CONCLUSIONS

This article shows how various actors have formed conclusive discourse coalitions in order to either promote or block the IBWT concept, whose aim is to restore Lake Chad's water levels by transferring water from the Congo River. These discourse coalitions adopt soft power tactics that entail agenda setting, knowledge construction, securitisation, issue linkage, and (in the case of the DRC's role in the IBWT debates) exclusion from negotiation processes. On one hand, the foremost discourse coalition has been formed by companies (Bonifica and PowerChina), scientists, international organisations (such as the LCBC) and development banks (for example the AfDB), riparian states of the Lake Chad Basin, non-riparian states like Italy, and NGOs such as those associated with the LaRouche Movement. This discourse coalition has set the political agenda by discursively framing Lake Chad's declining water levels as a crisis that needs to be urgently addressed by the international community. The IBWT idea has accordingly been proposed as the only solution to revive the lake. To justify their stance, these actors have securitised the Lake Chad case and the IBWT issue. They frequently highlight how the proposal could address developmental and security-related problems of the Lake Chad Basin and how it could thus decrease the migration flow from the Sahel to Europe by providing socio-economic development to the region; they also underline the way in which the project could foster cooperation among African states.

Interestingly, actors such as French scientists and analysts, and high level politicians from the DRC, use similar tactics to claim the reverse; French scientists, for example, have attempted to set the political counter-agenda, objecting to IBWT proposals by framing Lake Chad's shrinkage as a myth and basing their opinion on the historical variability of the lake's water levels. Congolese actors, furthermore, argue that the IBWT project would be socially, economically, environmentally, culturally, and politically detrimental for the Congo Basin, particularly for the DRC. They perceive it as a direct threat to the DRC's national security and blame the pro-IBWT coalition for excluding the DRC from the IBWT-related processes. The DRC has not been actively consulted about a project that intends to divert its waters and which could entail most of the construction work taking place within its borders.

These results also show that the aim of the actors involved in these discourse coalitions is essentially to increase their power and presence in the Lake Chad and Congo Basins; the soft power tools and strategies in use are instrumental in administering these aims. The project represents a window of opportunity for Bonifica, PowerChina, Italy, China, Nigeria, the LCBC, the AfDB and the LaRouche Movement to implement their broader socio-economic and political agendas and gain superiority in the region. The DRC, on the other hand, seeks to block the project because of its socio-economic, environmental, cultural and political implications, which would possibly weaken its geopolitical positioning. Given the recent political developments that have resulted in the endorsement of Transaqua as the preferred option by the LCBC, and the signing of MoUs by Bonifica, PowerChina, the LCBC and Italy, it seems that the pro-IBWT discourse coalition has exercised soft power tools and strategies more effectively, allowing them to gain political momentum in promoting and justifying the IBWT project.

As it stands with regard to the IBWT project, the counter-discourse coalition has so far failed to represent a consolidated stance that includes the Congo Basin and other riparian states, international organisations, and international NGOs; this has prevented the anti-IBWT coalition from effectively representing its political agenda. It is noteworthy that the Transaqua Project is still in its planning and feasibility stage; there are thus likely to be changes in the existing discourse coalitions and their narratives, with the possible active involvement of actors such as riparian states of the Congo Basin, CICOS, international environmental NGOs, and international organisations such as the World Bank; such shifts are likely to affect political processes and reconfigure power relations on this issue.

This article has made empirical and conceptual contributions to the literature on the politics of transboundary waters; it represents the first comprehensive social scientific research on the IBWT idea and the Transaqua Project, which aim to connect Lake Chad and the Congo River. Conceptually, the paper contributes to the relevant literature by highlighting the key roles of non-state actors, particularly companies, in shaping transboundary water interactions and the transnationalisation of transboundary waters. As demonstrated throughout this analysis, non-state actors such as Bonifica, PowerChina, LCBC, AfDB, and NGOs and individuals associated with the LaRouche Movement have been instrumental in promoting the IBWT idea and shaping transboundary water relations at multiple scales in both the Lake Chad and Congo Basins. Notably, companies have been playing crucial roles in this process; it was Bonifica who originally developed and promoted Transaqua, and PowerChina's involvement has intensified the diplomatic processes around the IBWT issue.

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## REFERENCES

- Abdullahi, S.I. 2018. Keynote Address: Saving the Lake Chad, prospects, challenges, and opportunities. Presented at the International Conference on Lake Chad, Abuja, Nigeria, 26-28 February 2018.
- ADIAAC (Agence D'Information D'Afrique Centrale). 2018. Bassin du Congo: la RDC refuse de signer le protocole instituant le fonds bleu [Congo Basin: DRC refuses to sign protocol establishing the Blue Fund]. <http://adiac.netisse.eu/content/bassin-du-congo-la-rdc-refuse-de-signer-le-protocole-instituant-le-fonds-bleu-82801> (accessed 13 November 2019).
- AfDB (African Development Bank Group). 2012. Interview with Engr. Sanusi Imram Abdullahi, Executive Secretary of the Lac Chad Basin Commission. [www.afdb.org/en/news-and-events/multimedia/video/interview-with-engr-sanusi-imram-abdullahi-executive-secretary-of-the-lac-chad-basin-commission-518](http://www.afdb.org/en/news-and-events/multimedia/video/interview-with-engr-sanusi-imram-abdullahi-executive-secretary-of-the-lac-chad-basin-commission-518) (accessed 15 May 2020).
- AfDB. 2015. Lake Chad, a living example of the devastation climate change is wreaking on Africa. [www.afdb.org/en/news-and-events/african-development-bank-reiterates-support-for-lake-chad-basin-heritage-project-18367](http://www.afdb.org/en/news-and-events/african-development-bank-reiterates-support-for-lake-chad-basin-heritage-project-18367) (accessed 12 November 2019).
- AfDB. 2016. Speech delivered by President Akinwumi Adesina at the opening session of the Annual Meetings of the African Development Bank Group, Lusaka, Zambia, May 24, 2016. [www.afdb.org/en/news-and-events/speech-delivered-by-president-akinwumi-adesina-at-the-opening-session-of-the-annual-meetings-of-the-african-development-bank-group-lusaka-zambia-may-24-2016-15717](http://www.afdb.org/en/news-and-events/speech-delivered-by-president-akinwumi-adesina-at-the-opening-session-of-the-annual-meetings-of-the-african-development-bank-group-lusaka-zambia-may-24-2016-15717) (accessed 15 May 2020)
- AfDB. 2018. African Development Bank reiterates support for Lake Chad Basin Heritage Project.; 25 July 2018. [www.afdb.org/en/news-and-events/african-development-bank-reiterates-support-for-lake-chad-basin-heritage-project-18367](http://www.afdb.org/en/news-and-events/african-development-bank-reiterates-support-for-lake-chad-basin-heritage-project-18367) (accessed 12 November 2019).
- AfDB. 2020. AfDB's Strategy for 2013-2022. [www.afdb.org/en/about-us/mission-strategy/afdb-strategy](http://www.afdb.org/en/about-us/mission-strategy/afdb-strategy) (accessed 15 May 2020)
- African Agenda. 2018. The time has come for Transaqua: Transaqua – interview with Mr. Lawrence Freeman, 11 June 2018. <http://africanagenda.net/the-time-has-come-for-transaqua/> (accessed 15 May 2020)

- Agoravox. 2018. RD Congo: Le projet Transaqua et la guerre de l'eau [DR Congo: The Transaqua project and the water war], [www.agoravox.fr/actualites/international/article/rd-congo-le-projet-transaqua-et-la-202001](http://www.agoravox.fr/actualites/international/article/rd-congo-le-projet-transaqua-et-la-202001) (accessed 15 May 2020)
- All Africa. 2019. Chad: 40 million victims of drying Lake Chad pose security risk-Buhari. <https://allafrica.com/stories/201901150069.html> (accessed 12 November 2019)
- Antonsich, M. 2009. Geopolitica: The 'geographical and imperial consciousness' of fascist Italy. *Geopolitics* 14 (2): 256-277, <https://doi.org/10.1080/14650040802578708>
- Asah, S.T. 2015. Transboundary hydro-politics and climate change rhetoric: An emerging hydro-security complex in the Lake Chad basin. *Wiley Interdisciplinary Reviews: Water* 2(1): 37-45. <https://doi:10.1002/wat2.1057>
- BBC (British Broadcasting Corporation). 2018. Lake Chad: Can the vanishing lake be saved. [www.bbc.com/news/world-africa-43500314](http://www.bbc.com/news/world-africa-43500314) (accessed 11 November 2019)
- Bocchetto, F.P. 2017. Italy-China alliance for Transaqua. Speech presented at Schiller Institute Conference, Bad Soden, Germany, 25-26 November 2017, <http://schillerinstitut.dk/si/2017/12/italy-china-alliance-transaqua-franco-persio-bocchetto-foreign-director-bonifica-s-p-a-italy-video-english-transcript/?print=print>
- Boelens, R.; Shah, E. and Bruins, B. 2019. Contested knowledges: Large dams and mega-hydraulic development. *Water* 11(416): 1-27, <https://doi.org/10.3390/w11030416>
- Bonifica. 1982. "Transaqua" An idea for the Sahel. Report No. 1. Rome: Bonifica S.p.A. and I.R.I. Italstat.
- Bonifica. 1984. "Transaqua" Zaire. Report No. 2. Rome: Bonifica S.p.A. and I.R.I. Italstat.
- Bonifica. 1985. "Transaqua" Central African. Report No. 3. Rome: Bonifica S.p.A. and I.R.I. Italstat.
- Bonifica. 2011. 'Transaqua – The solution for Africa'. Bonifica S.p.A. Rome. [www.youtube.com/watch?v=gMJrf-HgXLQ](http://www.youtube.com/watch?v=gMJrf-HgXLQ). (Accessed on 28 April 2020).
- Bonifica. 2020. Who we are. [www.renardet.com/who-we-are/](http://www.renardet.com/who-we-are/) (accessed on 15 May 2020)
- Brighi, E. and Petito, F. 2011. The renaissance of geopolitics in post-1989 Italy. *Geopolitics* 16 (4): 819-845, <https://doi.org/10.1080/14650045.2010.548425>
- Brisbois, M.C. and de Loë, R.C. 2016. State roles and motivations in collaborative approaches to water governance: A power theory-based analysis. *Geoforum*, 74: 202-212, <https://doi.org/10.1016/j.geoforum.2016.06.012>
- Buhari, M. 2018. Statement Presented by His Excellency, Muhammadu Buhari, President of Federal Republic of Nigeria at the General Debate of the 73rd Session of United Nations General Assembly. September 25. New York: United Nations.
- Buzan, B.; Waeber, O. and de Wilde, J. 1998. *Security: A new framework for analysis*. Boulder, Colorado: Lynne Rienner Publishers.
- Cascão, A.E. and Zeitoun, M. 2013. Power, hegemony and critical hydropolitics. In Earle, A.; Jagerskog, A. and Ojendal, J. (Eds), *Transboundary water management: Principles and practice*, pp. 27-42. London and Washington, DC: Earthscan.
- Chandler, L. 2001. Africa's Lake Chad shrinks by 20 times due to irrigation demands, climate change. Press Release No: 1-17. Goddard Space Flight Center. [http://geoalliance.asu.edu/sites/default/files/LessonFiles/Martin/Chad/GSFC\\_Press\\_Release\\_01\\_17.pdf](http://geoalliance.asu.edu/sites/default/files/LessonFiles/Martin/Chad/GSFC_Press_Release_01_17.pdf) (accessed 12 November 2019)
- China, General Office of the State Council. 2006. 更好地实施"走出去"战略 [Better implementation of the "go global" strategy]. Government of China: Central Government Portal. [www.gov.cn/node\\_11140/2006-03/15/content\\_227686.htm](http://www.gov.cn/node_11140/2006-03/15/content_227686.htm) (accessed on 15 May 2020)
- China, Ministry of Foreign Affairs. 2013. President Xi Jinping delivers important speech and proposes to build a Silk Road Economic Belt with Central Asian countries. [https://www.fmprc.gov.cn/mfa\\_eng/wjb\\_663304/zwjg\\_665342/zwbd\\_665378/t1616699.shtml](https://www.fmprc.gov.cn/mfa_eng/wjb_663304/zwjg_665342/zwbd_665378/t1616699.shtml) (accessed 15 May 2020).
- China, Ministry of Foreign Affairs. 2018. Jointly building the belt and road for win-win development – by H.E.Amb. Lin Songtian of China to South Africa. [https://www.fmprc.gov.cn/mfa\\_eng/wjb\\_663304/zwjg\\_665342/zwbd\\_665378/t1616699.shtml](https://www.fmprc.gov.cn/mfa_eng/wjb_663304/zwjg_665342/zwbd_665378/t1616699.shtml) (accessed 15 May 2020)

- CICOS. 2015. Visite des parlementaires de la CEMAC à la CICOS sur le projet du transfert des eaux de l'Obangui vers le Lac Tchad [Visit of CEMAC parliamentarians to CICOS on the project to transfer water from Ubangui to Lake Chad]. *CICOS Info* 13-14 (December 2016): 2-3.
- CIMA International, 2011. *Feasibility study of the water transfer project from the Ubangi to Lake Chad summary document: Main results of the feasibility study*. Report No.1. Laval, Quebec: CIMA International.
- Coe, M.T. and Foley, J.A. 2001. Human and natural impacts on the water resources of the Lake Chad basin. *Journal of Geophysical Research* 106(D4): 3349-3356.
- Conker, A. and Hussein, H. 2019. Hydraulic mission at home, hydraulic mission abroad? Examining Turkey's regional 'pax-aquarum' and its limits. *Sustainability* 11(1): 1-20.
- Crow-Miller, B. 2015. Discourses of deflection: The politics of framing China's South-North Water Transfer project. *Water Alternatives* 8 (2): 173-192.
- Crow-Miller, B.; Webber, M. and Molle, F. 2017. The (re)turn to infrastructure for water management? *Water Alternatives* 10(2): 195-207.
- Daily Trust*. 2019. AfDB President Adesina: How Buhari is sourcing for \$50bn to revive Lake Chad. <https://www.dailytrust.com.ng/afdb-president-adesina-how-buhari-is-sourcing-for-50bn-to-revive-lake-chad.html> (accessed 15 May 2020)
- Daoudy, M. 2009. Asymmetric power: Negotiating water in the Euphrates and Tigris. *International Negotiation* 14(2): 361-391, <https://doi.org/10.1163/157180609X432860>
- De Grand, A.J. 2004. *Fascist Italy and Nazi Germany: The 'fascist' style of rule second edition*. New York: Routledge.
- Desc-Wondo. 2017. After plundering minerals, soon the plundering of the Congo freshwater, the blue gold of this century. <http://desc-wondo.org/en/after-plundering-minerals-soon-the-plundering-of-the-congo-freshwater-the-blue-gold-of-this-century-sinaseli-tshibwabwa/> (accessed 15 May 2020)
- Dombrowsky, I. 2010. The role of intra-water sector issue linkage in the resolution of transboundary water conflicts. *Water International* 35 (2): 132-149, <https://doi.org/10.1080/02508061003664013>
- DW (Deutsche Welle). 2015. Lake Chad recedes to 'catastrophic' levels. <https://www.dw.com/en/lake-chad-recedes-to-catastrophic-levels/a-18879406> (accessed 12 November 2019)
- Ert, E.; Cohen-Amin, S. and Dinar, A. 2019. The effect of issue linkage on cooperation in bilateral conflicts: An experimental analysis. *Journal of Behavioral and Experimental Economics* 79: 134-142, <https://doi.org/10.1016/j.socec.2019.02.004>
- FAO (Food and Agriculture Organization). 2009. Lake Chad facing humanitarian disaster. [www.fao.org/news/story/en/item/36126/icode/](http://www.fao.org/news/story/en/item/36126/icode/) (accessed 12 November 2019)
- Feldman, M. 2015. Hate-baiting: The radical right and 'fifth column discourse' in European and American democracies today. *The Journal of Political Criminology* 1 (1): 7-19.
- France 24. 2018. Italy, China propose solution to Lake Chad's water problem. <https://www.france24.com/en/20180228-italy-china-propose-solution-lake-chads-water-problem> (accessed 12 November 2019)
- Gao, H.; Bohn, T.J.; Podest, E.; McDonald, K.C. and Lettenmaier, D.P. 2011. On the causes of the shrinking of Lake Chad. *Environmental Research Letters* 6: 1-7, <https://doi.org/10.1088/1748-9326/6/3/034021>
- Green, N.; Sovacool, B.K. and Hancock, K. 2015. Grand designs: Assessing the African energy security implications of the grand Inga Dam. *African Studies Review* 58(1): 133-158, <https://doi.org/10.1017/asr.2015.7>
- Gupta, J.; Dellapenna, J.W. and van den Heuvel, M. 2016. Water sovereignty and security, high politics and hard power: The dangers of borrowing discourses! In Pahl-Wostl C.; Bhudari A. and Gupta J. (Eds), *Handbook on water security*, pp. 120-137. Cheltenham, UK: Edward Elgar Publishing.
- Hajer, M. 1993. Discourse coalitions and the institutionalization of practice: The case of acid rain in Great Britain. In Fischer, F. and Forester J. (Eds), *The argumentative turn in policy analysis and planning*, pp. 43-77. London: UCL Press Limited.
- Hajer, M. and Versteeg, W. 2005. A decade of discourse analysis of environmental politics: Achievements, challenges, perspectives. *Journal of Environmental Policy & Planning* 7(3): 175-184, <https://doi.org/10.1080/15239080500339646>

- Harris, L.M. and Alatout, S. 2010. Negotiating hydro-scales, forging states: Comparison of the upper Tigris/Euphrates and Jordan River basins. *Political Geography* 29(3): 148-156, <https://doi.org/10.1016/j.polgeo.2010.02.012>
- Hess, R.L. 1963. Italy and Africa: Colonial ambitions in the First World War. *The Journal of African History* 4(1): 105-126.
- Homer-Dixon, T. 1999. *Environment, scarcity, and violence*. New Jersey: Princeton University Press.
- Hussein, H. 2017. Politics of the Dead Sea Canal: A historical review of the evolving discourses, interests, and plans. *Water International* 42(5): 527-542, <https://doi.org/10.1080/02508060.2017.1344817>
- Hussein, H. 2019. Yarmouk, Jordan, and Disi basins: Examining the impact of the discourse of water scarcity in Jordan on transboundary water governance. *Mediterranean Politics* 24(3): 269-289, <https://doi.org/10.1080/13629395.2017.1418941>
- International Conference on Lake Chad. 2018a. Abuja Declaration. Abuja, Nigeria, 26-28 February 2018. <https://waterresources.gov.ng/lake-chad-conf/>
- International Conference on Lake Chad. 2018b. Roadmap on saving the Lake Chad to revitalise the basin ecosystem for sustainable livelihood, security and development. Abuja, Nigeria, 26-28 February 2018. <https://waterresources.gov.ng/lake-chad-conf/>
- Italy, Ministry of Defence. 2015. *White paper for international security and defence*. Rome, Italy: Ministry of Defence.
- Italy, Ministry of Foreign Affairs and International Cooperation. 2017. *The Italian strategy in the Mediterranean: Stabilising the crises and building a positive agenda for the region*. Rome, Italy: Ministry of Foreign Affairs and International Cooperation.
- Jeune Afrique. 2009. Le Lac Tchad, un projet qui prend l'eau [Lake Chad, a project that takes on water]. [www.jeuneafrique.com/201073/archives-thematique/le-lac-tchad-un-projet-qui-prend-l-eau/](http://www.jeuneafrique.com/201073/archives-thematique/le-lac-tchad-un-projet-qui-prend-l-eau/) (accessed on 15 May 2020).
- Jeune Afrique. 2018. Assechement du lac Tchad: le retour du projet Transaqua fait polemique [Drying up of Lake Chad: the return of the Transaqua project is controversial]. [www.jeuneafrique.com/537309/societe/assechement-du-lac-tchad-le-retour-du-projet-transaqua-fait-polemique/](http://www.jeuneafrique.com/537309/societe/assechement-du-lac-tchad-le-retour-du-projet-transaqua-fait-polemique/) (accessed 11 December 2019)
- Kombe, M.D. 2009. The project for water transfer from Oubangi to Lake Chad. Paper presented at the World Water Week, Stockholm, Sweden, 16-22 August 2009.
- La Presse. 2018. Pour empêcher la disparition du lac Tchad, un vieux projet controversé exhumé [To prevent the disappearance of Lake Chad, a controversial old project unearthed]. [www.lapresse.ca/environnement/201802/28/01-5155600-pour-empêcher-la-disparition-du-lac-tchad-un-vieux-projet-controverse-exhume.php](http://www.lapresse.ca/environnement/201802/28/01-5155600-pour-empêcher-la-disparition-du-lac-tchad-un-vieux-projet-controverse-exhume.php) (accessed 15 May 2020)
- LaRouche PAC. 2020. The World-Land Bridge. <https://larouchepac.com/world-landbridge> (accessed 15 May 2020)
- LCBC (Lake Chad Basin Commission). 2018. LCBC heads of state and government poised to eradicate Boko Haram. [www.cbtl.org/fr/node/664](http://www.cbtl.org/fr/node/664) (accessed on 15 May 2020)
- Le Monde. 2018. Le projet de remplir le lac Tchad refait surface [Project to fill Lake Chad resurfaces]. [https://www.lemonde.fr/planete/article/2018/02/24/le-projet-de-remplir-le-lac-tchad-refait-surface\\_5261973\\_3244.html](https://www.lemonde.fr/planete/article/2018/02/24/le-projet-de-remplir-le-lac-tchad-refait-surface_5261973_3244.html) (accessed 15 May 2020)
- Leblanc, M.; Lemoalle, J.; Bader, J.-C.; Tweed, S. and Mofor, L. 2011. Thermal remote sensing of water under flooded vegetation: New observations of inundation patterns for the 'small' Lake Chad. *Journal of Hydrology* 404: 87-98. <https://doi.org/10.1016/j.jhydrol.2011.04.023>
- Lemoalle, J. and Magrin, G. (Eds). 2014. *Development of Lake Chad: Current situation and possible outcomes*. Marseille, France: IRD Editions.
- Lucas, H. 2016. Statement Presented by H. E. Ambassador Helder Lucas. United Nations Security Council Briefing on the Lake Chad Basin Region. July 27. New York: United Nations.
- Magrin, G. 2016. The disappearance of Lake Chad: History of a myth. *Journal of Political Ecology* 23: 204-222, <https://doi.org/10.2458/v23i1.20191>
- Magrin, G. and Perouse de Montclos, M.A. (Eds). 2018. *Crisis and development: The Lake Chad region and Boko Haram*. Paris: Agence Française de Développement (AFD).



- Magrin, G.; Lemoalle, J. and Lajaunie, M.-L. 2015. *The Lake Chad development and climate resilience action plan*. Washington, DC: The World Bank Group.
- Menga, F. 2016. Reconceptualizing hegemony: The circle of hydro-hegemony. *Water Policy* 18: 401-418, <https://doi.org/10.2166/wp.2015.063>
- Menga, F. and Mirumachi, N. 2016. Fostering Tajik hydraulic development: Examining the role of soft power in the case of the Rogun Dam. *Water Alternatives* 9(2): 373-388.
- Mirumachi, N. 2013. Securitising shared waters: An analysis of the hydropolitical context of the Tanakpur Barrage project between Nepal and India. *The Geographical Journal* 179 (4): 309-319, <https://doi.org/10.1111/geoj.12029>
- Mirumachi, N. 2015. *Transboundary water politics in the developing world*. London and New York: Routledge.
- Mostert, E. 1998. A framework for conflict resolution. *Water International* 23 (4): 206-215, <https://doi.org/10.1080/02508069808686774>
- Nagabhatla, N.; Pouramin, P.; Brahmabhatt, R.; Fioret, C.; Glickman, T.; Newbold, K.B. and Smakhtin, V. 2020. Water and migration: A global review. UNU-INWEH Report Series, Issue 10. Hamilton, Canada: United Nations University Institute for Water, Environment and Health.
- News Ghana. 2019. Saving the shrinking Lake Chad, Italy and Buhari discuss Transaqua. [www.newsghana.com.gh/saving-the-shrinking-lake-chad-italy-and-buhari-discuss-transaqua/](http://www.newsghana.com.gh/saving-the-shrinking-lake-chad-italy-and-buhari-discuss-transaqua/) (accessed 12 November 2019)
- Nye, J.S. 2008. Public diplomacy and soft power. *The Annals of the American Academy of Political and Social Science* 616: 94-109, <https://doi.org/10.1177/0002716207311699>
- Nye, J.S. 2011. Power and foreign policy. *Journal of Political Power* 4(1): 9-24, <https://doi.org/10.1080/2158379X.2011.555960>
- Nzango, C. 2018. Les barrages de l'Oubangui: de l'impact hydraulique actuel à la prospective environnementale [Ubangi Dams: from the current hydraulic impacts to environmental estimates]. PhD thesis. Université D'Orléans, Orléans, France.
- OECD (Organisation for Economic Co-operation and Development). 2018. *China's Belt and Road Initiative in the global trade, investment and finance landscape*. Paris, France: OECD.
- Okpara, U.T.; Stringer, L.C. and Dougill, A.J. 2016. Lake drying and livelihood dynamics in Lake Chad: Unravelling the mechanisms, contexts and responses. *Ambio* 45: 781-795, <https://doi.org/10.1007/s13280-016-0805-6>
- Pambazuka News. 2018. Saving Lake Chad: A pan-African project – Reflections on the international conference to save Lake Chad. [www.pambazuka.org/human-security/saving-lake-chad-pan-african-project](http://www.pambazuka.org/human-security/saving-lake-chad-pan-african-project) (accessed on 15 May 2020).
- Pham-Duc, B.; Sylvestre, F.; Papa, F.; Frappart, F.; Bouchez C. and Creteux, J.-F. 2020. The Lake Chad hydrology under current climate change. *Nature Scientific Reports* 10(5498): 1-10, <https://doi.org/10.1038/s41598-020-62417-w>
- Pinelli, B. 2017. Control and abandonment: The power of surveillance on refugees in Italy, during and after the Mare Nostrum Operation. *Antipode* 50(3): 725-747, <https://doi.org/10.1111/anti.12374>
- PowerChina. 2016. Indonesia sustainability report. Jakarta, Indonesia: PowerChina.
- PowerChina. 2019. Overview. [https://en.powerchina.cn/2019-03/13/content\\_36436636.htm](https://en.powerchina.cn/2019-03/13/content_36436636.htm) (accessed 15 May 2020)
- Progetto Transaqua. 2009. 'Progetto Transaqua (Parte 3)'. <https://www.youtube.com/watch?v=EPrJQGQbsG4> (accessed 21 July 2020)
- RFI (Radio France Internationale). 2015. "Le lac Tchad a souvent été utilisé par des groupes rebelles pour se réfugier" ["Lake Chad has often been used by rebel groups to take refuge"]. [www.rfi.fr/emission/20150716-geraud-magrin-le-lac-tchad-souvent-ete-utilise-groupes-rebelles-refugier](http://www.rfi.fr/emission/20150716-geraud-magrin-le-lac-tchad-souvent-ete-utilise-groupes-rebelles-refugier) (accessed 13 November 2019)
- Schatz, E. 2009. The Soft Authoritarian Tool Kit: Agenda-Setting Power in Kazakhstan and Kyrgyzstan. *Comparative Politics* 41(2): 203-222, <https://doi.org/10.5129/001041509X12911362972034>
- Sciences et Avenir. 2018. Transaqua et Inga: le Congo à la croisée des eaux et des projets [Transaqua and Inga: Congo at the crossroads of projects]. [www.sciencesetavenir.fr/nature-environnement/transaqua-et-inga-le-congo-a-la-croisee-des-eaux-et-des-projets\\_123546](http://www.sciencesetavenir.fr/nature-environnement/transaqua-et-inga-le-congo-a-la-croisee-des-eaux-et-des-projets_123546) (accessed 15 May 2020)

- Shaib, B. 1988. Alla ricerca dell'arca: Searching the ark. Interviewed by M. Damanto. Video No. 3. <https://www.youtube.com/watch?v=EPrJQGQbsG4> (accessed 12 November 2019)
- Skau, C. 2017. National Statement by the Swedish Ambassador Carl Skau. United Nations Security Council Briefing on the Lake Chad Basin Region. New York: United Nations.
- Sneddon, C. and Fox, C. 2006. Rethinking transboundary waters: A critical hydropolitics of the Mekong basin. *Political Geography* 25(2): 181-202, <https://doi.org/10.1016/j.polgeo.2005.11.002>
- The African Business. 2018. Saving Lake Chad. <https://africanbusinessmagazine.com/sectors/development/saving-lake-chad/> (accessed 12 November 2019).
- The Conversation. 2017. The attempt to replenish Lake Chad's water may fail again. Here's why , K. 5 October 2017. <https://theconversation.com/the-attempt-to-replenish-lake-chads-water-may-fail-again-heres-why-84653> (accessed 15 May 2020).
- The Economist. 2000. End of an IRI. [www.economist.com/business/2000/06/22/end-of-an-iri](http://www.economist.com/business/2000/06/22/end-of-an-iri) (accessed 15 May 2020).
- The Italian Republic. 2018. Memorandum of understanding on cooperation in the field of climate change, vulnerability, risk assessment, adaptation and mitigation between the Ministry for the Environment, Land and Sea of the Italian Republic (IMELS) and the Lake Chad Basin Commission (LCBC). 2018. Rome, Italy: The Italian Republic.
- The South World. 2018. Kinshasa vetoes water transfer project to replenish Lake Chad. [www.southworld.net/kinshasa-vetoes-water-transfer-project-to-replenish-lake-chad/](http://www.southworld.net/kinshasa-vetoes-water-transfer-project-to-replenish-lake-chad/) (accessed 21 July 2020)
- Thomas, V. and Warner, J. 2015. Hydropolitics in the Harirud/Tejen River basin: Afghanistan as hydro-hegemon? *Water International* 40(4): 593-613, <https://doi.org/10.1080/02508060.2015.1059164>
- Tshisekedi, F. 2019. CEO Forum Closing Panel (Video), March 26. [www.youtube.com/watch?v=1pKAsR0qhtQ](http://www.youtube.com/watch?v=1pKAsR0qhtQ) (accessed 13 November 2019)
- UNESCO. 2020. BIOSphere and Heritage of Lake Chad (BIOPALT) project. <https://en.unesco.org/biopalt> (accessed 15 May 2020)
- UNHCR. 2009. Tackling climate change in eastern Chad. [www.unhcr.org/news/latest/2009/12/4b27b7039/tackling-climate-change-in-eastern-chad.html](http://www.unhcr.org/news/latest/2009/12/4b27b7039/tackling-climate-change-in-eastern-chad.html) (accessed 15 November 2019)
- Vichi, M. 1992. Un progetto italiano per salvare il Sahel-An Italian project to save the Sahel. *I'M (Iritecna Magazine)* 6: 58-63.
- Vichi, M. 2010. The Congo-Chad water transfer: The main features of a feasibility study. *Executive Intelligence Review* 37 (39): 30-34.
- Vichi, M. 2011. Transferring water from the Congo to Lake Chad: The Transaqua project. *Executive Intelligence Review* 38(28): 31-36.
- Vichi, M. 2016. Transaqua: From dream to reality? Speech presented at the Solving the Economic and Refugee Crises with the New Silk Road Meeting, Frankfurt, Germany, 23 March 2016.
- Warner, J.; Mirumachi, N.; Farnum, R.L.; Grandi, M.; Menga, F. and Zeitoun, M. 2017. Transboundary 'hydro-hegemony': 10 years later. *WIREs Water* 4: 1-13, <https://doi.org/10.1002/wat2.1242>
- Williams, J.M. 2018. Stagnant rivers: Transboundary water security in south and southeast Asia. *Water* 10(1819): 1-23, <https://doi.org/10.3390/w10121819>
- Zeitoun, M. and Allan, J.A. 2008. Applying hegemony and power theory to transboundary water analysis. *Water Policy* 10(S2): 3-12, <https://doi.org/10.2166/wp.2008.203>
- Zeitoun, M. and Warner, J. 2006. Hydro-hegemony – A framework for analysis of trans-boundary water conflicts. *Water Policy* 8: 435-460, <https://doi.org/10.2166/wp.2006.054>
- Zeitoun, M.; Mirumachi, N. and Warner, J. 2011. Transboundary water interaction II: The influence of 'soft' power. *International Environmental Agreements: Politics, Law and Economics* 11(2): 159-178, <https://doi.org/10.1007/s10784-010-9134-6>
- Zeitoun, M.; Warner, J.; Mirumachi, N.; Matthews, N.; McLaughlin, K.; Woodhouse, M.; Cascão, A. and Allan, J.A. 2014. Transboundary water justice: A combined reading of literature on critical transboundary water interaction and 'justice', for analysis and diplomacy. *Water Policy* 16: 174-193, <https://doi.org/10.2166/wp.2014.111>

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