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## **Power in the Blue Nile Basin: The Grand Ethiopian Renaissance Dam and Ethiopian Counter-hegemony against Egypt**

Umans, Eli

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## Power in the Blue Nile Basin

The Grand Ethiopian Renaissance Dam and Ethiopian Counter-hegemony against Egypt



Eli Umans (s2719231)

[e.umans@umail.leidenuniv.nl](mailto:e.umans@umail.leidenuniv.nl)

Leiden University

MA International Relations: Global Conflict in the Modern Era

Supervisor: Dr. Walter Gam Nkwi

Second reader: Dr. Isabelle Duijvesteijn

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### **Abstract**

This thesis sheds light on hydro-hegemonic configurations and the effectiveness of counter-hegemonic strategies in hydropolitical relations. In 2011, Ethiopia announced its plan to construct the Grand Ethiopian Renaissance Dam (GERD) on the Blue Nile River, which would become the largest hydroelectric dam in Africa. While Ethiopia emphasized the potential of the GERD to bring economic development to the region, Egypt strongly opposed the construction of the GERD as Egypt feared that it would threaten its water security. However, Ethiopia has constructed the GERD despite Egyptian opposition. This thesis uses the Framework of Hydro-Hegemony (Zeitoun & Warner, 2006) to analyze how Ethiopia has managed to construct the GERD despite Egypt's hydro-hegemony in the Blue Nile Basin. The research argues that the answer to this question is twofold. Firstly, the balance of power in the Blue Nile Basin has changed over the past two decades. Ethiopia gained structural, bargaining, and ideational power while Egypt's hegemonic position weakened. As the power gap between Egypt and Ethiopia had decreased, Egypt's attempts to pressure Ethiopia to halt the construction of the GERD were less effective. Secondly, Ethiopia used several counter-hegemonic strategies during the construction of, and the negotiations on the GERD to contest Egypt's hydro-hegemony. These strategies include surprising Egypt with its announcement of the GERD to give Egypt limited opportunity to react, forming an alliance with Sudan during the negotiations on the GERD, and undermining the discourse with which Egypt legitimizes its hegemonic position in the Blue Nile Basin.

*Keywords:* hydropolitics, hydro-hegemony, counter-hegemony, Grand Ethiopian Renaissance Dam, Blue Nile Basin

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**List of Abbreviations**

AU	–	African Union
bcm	–	Billion cubic meters
CFA	–	Cooperative Framework Agreement
DoP	–	Declaration of Principles
GERD	–	Grand Ethiopian Renaissance Dam
ICBC	–	Industrial and Commercial Bank of China
IPoE	–	International Panel of Experts
NBI	–	Nile Basin Initiative
NISRG	–	National Independent Scientific Research Group
NRBC	–	Nile River Basin Commission
TNC	–	Tripartite National Committee
TWINS	–	Transboundary Waters Interaction NexuS
UN	–	United Nations
UNSC	–	United Nations Security Council

## Power in the Blue Nile Basin: The Grand Ethiopian Renaissance Dam and Ethiopian Counter-hegemony against Egypt

### Introduction

In April 2011, the Ethiopian Prime Minister Meles Zenawi announced that Ethiopia would build a large hydropower dam on its tributary of the Blue Nile. The electricity generated from this Grand Ethiopian Renaissance Dam (GERD) would be “opening a new chapter” for Ethiopia by accelerating economic growth and eradicating poverty (Zenawi, 2011). As the dam would reduce evaporation and the risk of flooding downstream, Ethiopia argued that the benefits of the GERD would “clearly extend to all neighboring states, and particularly to the downstream Nile basin countries, to Sudan and Egypt” and would turn over “a new page of cooperation and solidarity” among the countries that share the Nile Basin (Zenawi, 2011). However, Ethiopia did not manage to convince Egypt to see the GERD in a similar light. Instead, Egypt regarded the construction of an upstream dam as a development that would threaten its water supply and its national security (Nasr & Neef, 2016; Noriyoshi, 2020). Therefore, Egypt publicly considered all options to prevent the GERD from being built, including threatening Ethiopia with the use of military force (Pemunta et al., 2021; Tawfik, 2016). Ethiopia responded in kind with similar threats (AlJazeera, 2019). Up to this point, there has been no military engagement between Egypt and Ethiopia over the GERD. However, the project has certainly not brought about the cooperative relationship between the riparians of the Blue Nile that Ethiopia envisioned when it announced the GERD. Despite Egypt’s opposition to the GERD, Ethiopia has continued the construction of the dam. In the summer of 2020, Ethiopia started filling the GERD and it is expected to start generating hydropower within the coming years (Pichon, 2021).



This thesis researches the hydropolitics of the Grand Ethiopian Renaissance Dam, focusing on the relationship between Egypt and Ethiopia. To analyze these relations, it will use the Framework of Hydro-Hegemony, as designed by Zeitoun and Warner (2006). The main research question is: how did Ethiopia manage to construct the Grand Ethiopian Renaissance Dam despite the Egyptian hydro-hegemony in the Blue Nile Basin? Several sub-questions are used to answer the main research question. Firstly, what is the hydro-hegemonic configuration of the Blue Nile Basin, and how has this evolved historically? Secondly, why has Egypt opposed the GERD? And thirdly, how has Egypt sought to prevent Ethiopia from constructing the GERD?

The main relevance of this thesis lies with contributing to the academic literature on counter-hegemony, an aspect that has received relatively little attention within the literature on hydro-hegemony. Moreover, connecting the GERD to the concept of counter-hegemony will help to elucidate the power dynamics behind the construction of one of the largest pieces of hydraulic infrastructure in the world. Furthermore, the change in relative power distribution in Northeastern Africa as described in this thesis does not only impact the hydropolitics of the region but has implications for the regional dynamics in other fields, such as economics and security, as well.

As the thesis focuses on one case study, this thesis follows a within-case research design. The specific methodology chosen for the research is process tracing, which researchers use to test theories by providing historical explanations and “make causal inferences about a single case or a small number of cases” (Mahoney, 2015, p. 200). The method of process tracing fits the aims of the thesis because it can be used to assess the theory on hydro-hegemony through an analysis of the case of the GERD.

The thesis uses literary sources, both primary and secondary, for its analysis. Primary sources used for this research include legal agreements between the countries in the Nile

Basin, documents from the Nile Basin Initiative, and speeches from political leaders of Egypt and Ethiopia. Other types of primary sources, such as research reports by international organizations, think tanks, and research institutes have been used as well. Secondary literature studied for this research includes academic research articles, theses, and books which were collected through the (online) libraries of Leiden University and the University of Amsterdam. Moreover, as this thesis discusses a developing, current affair, articles from newspapers and renowned online news websites were used.

The first of four chapters will provide a theoretical framework on hydropolitics, the Framework of Hydro-Hegemony, and counter-hegemony. Chapter 2 applies these theoretical concepts to the Blue Nile and discusses hydro-hegemony in the Blue Nile Basin. The third chapter gives an overview of the history of the GERD and will outline how the negotiations over the GERD have progressed over the past decade. Chapter 4 will address the main research question of the thesis by analyzing how Ethiopia has managed to construct the GERD despite pressure from Egypt, the hydro-hegemon of the Blue Nile Basin. The conclusion then summarizes the findings of the thesis and the implications thereof.

## **Chapter 1: Theoretical Framework**

To understand the interactions between Ethiopia and Egypt over the Blue Nile River, this theoretical framework will touch upon the literature on hydropolitics and will explain its progression over time. It will elaborate specifically on the Framework of Hydro-Hegemony, which will be used as the core theoretical concept to answer the central research question later in this thesis. This chapter concludes that interactions over a transboundary river are usually shaped by the hydro-hegemon of the river basin. However, the non-hegemons can use counter-hegemonic strategies to contest and challenge the power of the hydro-hegemon.

### **Hydropolitics, Conflict, and Cooperation**

Water is one of the most essential resources for human life. Therefore, countries seek to reach a satisfactory level of water security, defined by the United Nations as “the capacity of a population to safeguard sustainable access to adequate quantities of acceptable quality water” (UN Water, 2013, p. 1). However, in situations where a body of water extends over more than one country, the water security of one state depends on the actions of other states (Klimes et al., 2019). These interdependencies create the potential for both conflict and cooperation over the shared water resource (Dinar, 2011).

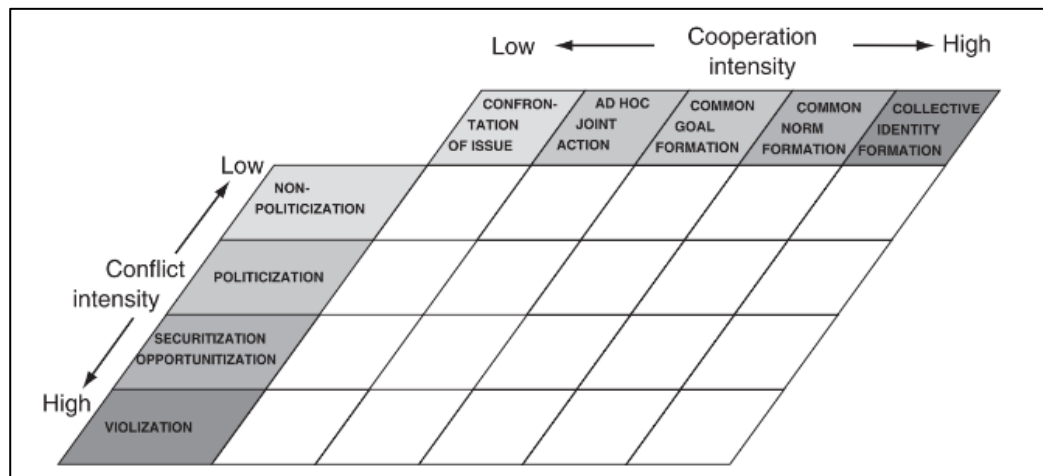
The early literature on hydropolitics in the 1990s tended to focus on the potential for conflict between states over transboundary water resources. As a scarce but vital natural resource, countries were expected to see water as a matter of national security for which they would be willing to use force (Elhance, 1997; Frey, 1993; Gleick, 1993; Klare, 2001). The concept of *water wars*, violent conflicts over contested water resources, as termed by Joyce Starr (1991) thus became a central notion in the literature.

In response to the literature on water wars, a growing group of academics argued that water scarcity would lead to cooperation instead of conflict (Dinar, 2011; Julien, 2012;

Phillips et al., 2006). This shift was set in motion by quantitative research by Wolf (1998) and Yoffe et al. (2003), which showed that no war has ever been fought over water and that most interactions over shared water resources tend to be cooperative. Cooperation can be necessary as countries that share a water resource may have shared interests which they cannot always achieve through unilateral actions (Dinar, 2011). Sadoff & Grey (2002) identified four types of shared benefits that cooperation can provide. First of all, cooperation can provide benefits *to* the river, as it can enable better management of the ecosystem of the river itself. Moreover, effective management of the river can increase benefits *from* the river, for example in the form of increased food production. Moreover, cooperation over the river will likely improve the wider relationship between the riparians, reducing costs that arose *because of* the river. Lastly, cooperation over the river will spill over to cooperation between the countries on other domains, which will lead to benefits *beyond* the river (Sadoff & Grey, 2002).

However, several authors argued that perceiving conflict and cooperation as two opposites on a spectrum brings “the risk of over-simplifying complex situations” as conflict and cooperation often co-exist (Cascão & Zeitoun, 2010b; Mirumachi, 2015; Zeitoun & Mirumachi, 2008, p. 302). Interactions over shared water resources are thus better visualized as a matrix where conflict and cooperation intersect (Mirumachi, 2015). Based on this theory, Mirumachi (2015) designed the Transboundary Waters Interaction NexuS (TWINS) framework. *Figure 1* shows the different forms that interactions over transboundary water resources can take according to the TWINS framework.

Figure 1 - TWINS Matrix (Mirumachi, 2015, p. 41)

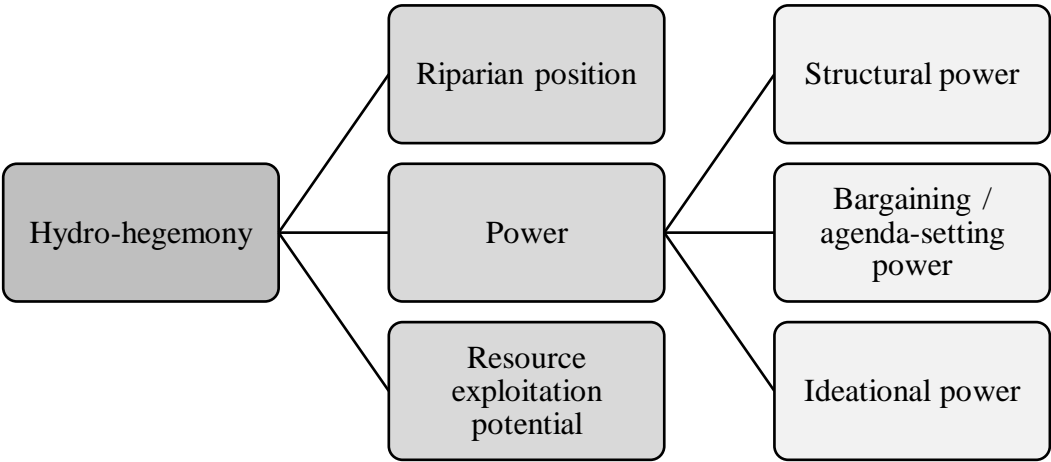


## Hydro-Hegemony

According to Mirumachi (2015), the type of interaction that prevails over a shared water resource is determined by the power relations between the riparians. In a transboundary river basin, these power relations are inherently asymmetrical (Mirumachi, 2015). To analyze these power asymmetries, Zeitoun and Warner (2006) developed the *Framework of Hydro-Hegemony*. They define hydro-hegemony as “hegemony at the river basin level, achieved through water resource control strategies ... that are enabled by the exploitation of existing power asymmetries” (Zeitoun & Warner, 2006, p. 435). The hydro-hegemon, the most powerful actor in a river basin, can thus leverage its surplus of power vis-à-vis the other countries to shape the transboundary water interactions over the shared river. Because the hydro-hegemon shapes the interactions over the transboundary water resource, these will favor the interests of that hydro-hegemon (Julien, 2012; Mirumachi, 2015; Zeitoun & Warner, 2006).

According to Zeitoun and Warner (2006), hydro-hegemony consists of three elements: a country’s riparian position, its power, and its resource exploitation potential (see *Figure 2*).

Figure 2 - The three pillars of hydro-hegemony (adapted from Zeitoun & Warner, 2006)



Riparian position refers to the location of a country along the river. Since water always flows downstream, the upstream riparian(s) have a geographic advantage to determine how the downstream riparians receive the water (Daoudy, 2009). The downstream riparians have virtually no influence over contamination, overuse, and diversion of the river carried out by the upstream riparian (Cascão & Zeitoun, 2010b; Frey, 1993; Zeitoun & Warner, 2006). The second element of hydro-hegemony is the potential for resource exploitation that a country possesses. To successfully exploit the river’s resources, a country must have “the ability to plan, construct and operate large infrastructure projects” (Zeitoun & Warner, 2006, p. 445). Nonetheless, the riparian position and exploitation potential only have a small influence on the hegemonic configuration of a river basin (Zeitoun & Warner, 2006). The most important factor, as mentioned earlier, is the power asymmetry between the riparian states.

Zeitoun and Warner (2006) discern three dimensions of power, inspired by Lukes’ (2005) three faces of power. The first dimension of power, also referred to as structural or ‘hard’ power, consists of a country’s military, economic, and political resources. Factors such

as military might, economic strength, and size of the territory all contribute to a country's structural power (Cascão & Zeitoun, 2010b; Daoudy, 2009; Kehl, 2011; Zeitoun & Warner, 2006). In contrast to the first dimension, the second and third dimensions of power are categorized as 'soft' power. The second dimension of power refers to the power to set the agenda and to 'control the rules of the game' (Daoudy, 2009; Zeitoun & Warner, 2006). This agenda-setting power "decides what kind of decisions will be taken, and which ones will never even reach the agenda" (Zeitoun & Allan, 2008, p. 7). As this type of power serves to influence the structure and outcome of negotiations, some authors refer to it as 'bargaining power' (Cascão & Zeitoun, 2010b; Islam, 2017; Mirumachi, 2015). Ideational power is the third and final form of power. It represents the power to diffuse one's ideas and to force one's ideology and perceptions onto others (Zeitoun & Warner, 2006). The hydro-hegemon can choose to represent the world in a certain way and impose this view on the less powerful actors in the river basin. This interpretation is likely to be accepted and reproduced, even without conscious approval by those not in power (Zeitoun et al., 2011; Zeitoun & Allan, 2008). It is important to note here that the three dimensions of power are interrelated. A high degree of power in one dimension usually translates into more power in another (Cascão & Zeitoun, 2010b).

### **Compliance-producing mechanisms**

As a result of their surplus of power, their favorable riparian position, and their potential to exploit the river's resources, hydro-hegemons are able to shape the interactions over the shared river according to their needs and wishes. Zeitoun and Warner (2006) argue that hydro-hegemons shape these interactions by pressuring the other states to comply with their demands. Zeitoun and Warner (2006) discern four types of mechanisms through which

hydro-hegemony produce compliance. *Figure 3* provides an overview of the different types of compliance-producing mechanisms and several examples.

*Figure 3 - Types of compliance-producing mechanisms and examples*

Coercive	<ul style="list-style-type: none"> <li>• Military force</li> <li>• Economic force</li> <li>• Diplomatic force</li> </ul>
Utilitarian	<ul style="list-style-type: none"> <li>• Military protection</li> <li>• Trade incentives</li> <li>• Diplomatic recognitions</li> <li>• Projects with shared benefits</li> </ul>
Normative	<ul style="list-style-type: none"> <li>• Treaties</li> </ul>
Hegemonic	<ul style="list-style-type: none"> <li>• Securitization</li> <li>• Knowledge construction</li> <li>• Sanctioning discourse</li> </ul>

The first category is that of *coercive* compliance-producing mechanisms. Mechanisms based on coercion revolve around the use of force (Zeitoun & Warner, 2006). The use of military force is very rare in transboundary water interactions, but economic and diplomatic sanctions can also be considered as coercive compliance-producing mechanisms. Merely the threat of military, economic, or diplomatic actions falls under this category as well. On the other side, there are *utilitarian* compliance-producing mechanisms. Instead of threats, these focus on political or financial rewards such as “trade incentives, diplomatic recognitions, military protection, and so on” (Zeitoun & Warner, 2006, p. 447). The creation of river projects with shared interests for multiple actors is an example of a utilitarian compliance-



producing mechanism. Another way for a hydro-hegemon to elicit compliance from the other riparians is through *normative* compliance producing-mechanisms that “rely on instilling the belief that compliance with the order is right or a duty, even an obligation” (Zeitoun et al., 2017, p. 275). A key normative mechanism is the signing of a treaty that institutionalizes the relations between riparians. Treaties may be used by hydro-hegemons to cement previously informal power imbalances into a legal framework (Zeitoun & Warner, 2006). *Hegemonic* compliance-producing mechanisms go even further than normative mechanisms. Whereas normative mechanisms promote the idea that complying is the ‘right’ thing to do, hegemonic mechanisms create the belief that it is the ‘only’ thing to do (Zeitoun et al., 2017). One way to do so is by securitizing the issue and making it a matter of national security. Another is to construct and spread (scientific) knowledge that favors the interests of the hydro-hegemon. Finally, a country can sanction discourse that goes against its hegemonic ideology, silencing internal and external dissent. (Zeitoun & Warner, 2006). Through a combination of coercive, utilitarian, normative, and hegemonic compliance-producing mechanisms, hydro-hegemons pressure non-hegemons to accept their preferred form of interaction within the river basin.

### **Counter-Hegemony**

The Framework of Hydro-Hegemony argues that the hydro-hegemon has the ability to shape the interactions in a shared river basin. However, the influence of non-hegemonic states should not be ignored. After all, those with less power are not powerless. Even though non-hegemons have less power than the hegemons, they use the power that is available to them to contest and challenge the status quo (Cascão & Zeitoun, 2010b; Dinar, 2009; Kehl, 2011; Mirumachi, 2018; Phillips et al., 2006; Zeitoun et al., 2017). This process is referred to in the literature as ‘counter-hegemony’. Zeitoun et al. (2017) discern three types of strategies for

counter-hegemony: coercive strategies, leverage strategies, and transformative strategies.

Figure 4 shows the various kinds of counter-hegemonic strategies and examples thereof.

Figure 4 - Types of counter-hegemonic strategies and examples

Coercive	<ul style="list-style-type: none"> <li>• Destruction or construction of hydraulic infrastructure</li> <li>• Non-cooperation</li> <li>• Delaying negotiations</li> <li>• Strategic timing</li> </ul>
Leverage	<ul style="list-style-type: none"> <li>• Formation of alliances</li> <li>• Alternative sources of funding</li> </ul>
Transformative	<ul style="list-style-type: none"> <li>• Alternative discourses</li> <li>• Constructing alternative knowledge</li> <li>• Questioning existing legal frameworks</li> </ul>

*Coercive* strategies “rely on compelling one actor involuntarily by the use or threat of force” (Zeitoun et al., 2017, p. 274). ‘Force’ can have different meanings in this regard. It can refer to the use of outright violence, for example through the destruction of hydraulic infrastructure such as dams. Similarly, the unilateral construction of hydraulic infrastructure can also be seen as a display of force. Another way to use force is by sabotaging the hydro-hegemon through non-cooperation (Zeitoun et al., 2017). Non-cooperation usually manifests during negotiations. A common bargaining tactic is to delay the negotiations, by which non-hegemons buy valuable time in which they can attempt to improve their position vis-à-vis the hydro-hegemon (Cascão & Zeitoun, 2010b; Zeitoun & Warner, 2006). Non-hegemons may likewise use time in their favor by timing their actions strategically in order to surprise or overwhelm the hydro-hegemon.

*Leverage* strategies serve to increase the bargaining power and political leverage of the non-hegemonic riparians (Haile, 2018; Zeitoun et al., 2017). One such strategy is the formation of alliances, through which weaker states can pool their resources and power to make the negotiations more even (Cascão & Zeitoun, 2010b; Frey, 1993). One way to do so is by creating a river basin organization through which the negotiations over water-related issues are institutionalized. Not only can non-hegemons form coalitions amongst themselves, but they may also get third parties involved. Kehl (2011) argues that non-hegemonic countries can seek support from external actors, such as donor countries and international organizations, to counter the power of the hydro-hegemon. These external actors have the resources to balance the power relations between the riparians. In other words, “if the weak riparians gain the support of external actors to provide incentives and impose constraints, the strong states may not be able to “win” unless they participate in a cooperative negotiation process” (Kehl, 2011, p. 222). The involvement of third parties may furthermore contribute to another leverage strategy, namely the mobilization of alternative sources of funding. Non-hegemons can use alternative sources of funding for infrastructure projects if the hydro-hegemon blocks the conventional sources of funding (Zeitoun et al., 2017).

The third type of counter-hegemonic strategy is the *transformative* strategy, which is based on the “direct or indirect undermining of the hydro-hegemon’s ideological supremacy within a basin” (Haile, 2018, p. 149). Transformative strategies challenge the predominant ideas that have manifested themselves as ‘common sense’ as a result of the ideological power of the hydro-hegemon. Non-hegemons can dispute these ideas by reframing issues and promoting alternative discourses (Zeitoun et al., 2017). Examples of alternative discourses include the desecuritization of an issue, and the proposal of win-win outcomes instead of zero-sum approaches (Cascão & Zeitoun, 2010b). Moreover, non-hegemons can provide alternatives to the knowledge disseminated by the hydro-hegemon, for example by investing

in technical expertise within the public and private sector (Zeitoun et al., 2017). Lastly, the ideological supremacy of the hydro-hegemon can be challenged by the non-hegemon by calling into question existing legal frameworks on the basis of principles of international law (Zeitoun et al., 2017).

## **Conclusion**

This theoretical framework has discussed the literature on transboundary water resources and hydropolitics. It established that transboundary waters do not lead to conflict or cooperation per se, but to a combination of the two, understood as interactions. It then proceeded to argue that those interactions are shaped by the most powerful actor in a river basin, the hydro-hegemon, which uses its surplus of power to coerce the other riparians into compliance. However, the overview of counter-hegemonic tactics shows that the hegemonic order in a river basin should not be treated as a given. It is less static as it may appear at first, as there are several options available to the non-hegemon to influence and challenge the power of the hydro-hegemon (Zeitoun et al., 2017). To apply these concepts to the Blue Nile Basin, the next chapter will analyze how hydro-hegemony has developed throughout the history of that basin.

## **Chapter 2: Hydro-Hegemony in the Blue Nile Basin**

Building on the concepts from the Framework of Hydro-Hegemony, this chapter analyzes the hydro-hegemonic configuration of the Blue Nile Basin. Firstly, the chapter discusses the geography of the Blue Nile Basin and the history of conflict and cooperation between its riparians. Then, it argues that Egypt is the hydro-hegemon of the basin and explains how Egypt has used compliance-producing mechanisms to shape the interactions in the Blue Nile Basin. This chapter concludes that Egypt has successfully deterred upstream countries from constructing hydraulic infrastructure on the Blue Nile.

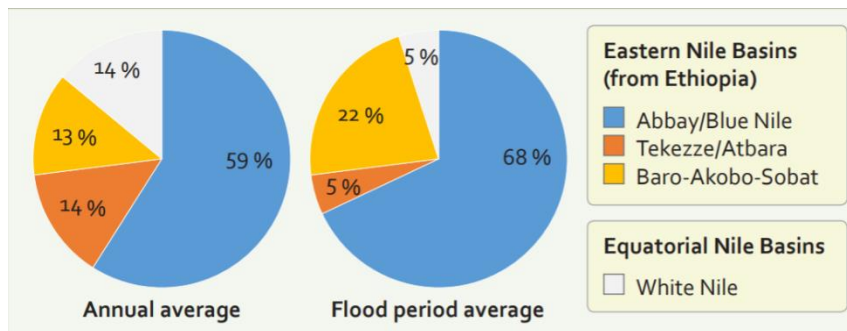
### **Geography of the Blue Nile Basin**

With its 6,650 kilometers, the Nile is the longest river in the world. There are two main tributaries to the Nile, namely the White Nile and the Blue Nile, which join in Khartoum (see *Figure 5*). As the Grand Ethiopian Renaissance Dam (GERD) is located on the Blue Nile River, this thesis focuses mainly on that tributary of the Nile, which flows from Ethiopia through Sudan to Egypt. While the White Nile only contributes 14% to the annual flow of the Nile, the Blue Nile contributes 59% percent (Cascão, 2019). There are several smaller streams, including the Atbara River and the Sobat River, both of which originate in Ethiopia as well. In total, 86% of the Nile waters thus originates in Ethiopia (see *Figure 6*).

Figure 5 - Map of the Nile Basin (Nasr & Neef, 2016, p. 970)



Figure 6 - Contribution of tributaries to the Nile flow (Casção, 2019, p. 118)



While Ethiopia is the main contributor to the Nile river, Egypt is the main user of the Nile waters (Tafesse, 2001). In 2015, Egypt used 55.9 billion cubic meters (bcm) of water for irrigation and hydropower purposes, while Sudan and Ethiopia only used 17.5 bcm and 3.8 bcm respectively (Nigatu & Dinar, 2015). The Nile is basically the only source of water for

Egypt, providing 96.5 percent of the country's annual water needs (Tayie, 2019; Waterbury, 2002). Egypt is thus extremely dependent on the water of the Nile for agriculture, irrigation, industry, and electricity production, to name just a few (Cascão, 2019; Noriyoshi, 2020; Pemunta et al., 2021; Tayie, 2019; Waterbury, 2002). To secure their profits from the Nile, Egypt has constructed hydraulic works such as dams, canals, and power turbines for decades (Tafesse, 2001). As 97% of the Nile waters originate outside of Egypt, Egypt is dependent on the degree to which upstream riparians use the waters of the Nile (Cascão & Zeitoun, 2010b; Gleick, 1993). Given this strong dependency, Egypt has always been wary of other countries constructing similar infrastructure on their tributaries of the river (Klare, 2001; Sadoff & Grey, 2002; Tafesse, 2001). However, because of a growing population and economy, the interest of upstream states in harnessing the waters of the Nile has increased (Aljefri et al., 2019; Cascão, 2019; Waterbury, 2002).

### **Historical Relations in the Blue Nile Basin**

The scarcity of water and the needs of the various riparians have led to competition between the countries over the allocation of the river's flow. Due to this competition, the relations in the basin have been characterized by conflict, mistrust, and tension amongst the riparians (Phillips et al., 2006; Sadoff & Grey, 2002; Tafesse, 2001). An important cause of this conflict is the fact that there is no comprehensive framework that regulates the allocation of water between the riparians of the Nile (Phillips et al., 2006; Starr, 1991; Tafesse, 2001; Tawfik, 2016).

The first bilateral agreement over the Nile was signed in 1929 between Egypt and the United Kingdom (representing present-day Sudan, South Sudan, Uganda, Kenya, and Tanzania). The 1929 agreement stated that no hydraulic works could be constructed upstream of Egypt without Egyptian consent (Exchange of notes in regard to the Use of the Waters of

the River Nile, 1929). After Sudan had gained independence from the United Kingdom in 1956, Egypt and Sudan replaced the 1929 agreement with a new agreement in 1959. In this agreement, Egypt and Sudan agreed that Egypt could use 55.5 bcm, while Sudan was allocated 18.5 bcm (Agreement for the full utilization of the Nile waters, 1959). Moreover, Egypt and Sudan agreed that if negotiations would take place with other Nile riparians, they would take a “unified view” during those negotiations. Historically, Egypt and Sudan have thus been strong allies with regards to the Nile. However, the other countries in the Nile Basin are excluded from the 1959 agreement, and their needs and access to the Nile waters are structurally denied and ignored (Mahlakeng, 2018; Zeitoun & Warner, 2006). As a result, the upstream riparians refuse to recognize the agreements as a fundament for inter-basin relations and argue that they are not legally bound by them (Salman, 2018b; Tafesse, 2001). Thus, the agreements do not create a framework for the equitable distribution of the Nile waters (Aljefri et al., 2019; Phillips et al., 2006).

### **Increased Cooperation in the 21<sup>st</sup> Century**

Nonetheless, significant progress has been made towards cooperation amongst the Nile riparians since the beginning of the 21<sup>st</sup> century. The main reason for this emerging cooperation is that the Nile riparians began to regard cooperation as a valuable tool for achieving their shared interests and realizing mutual gains. Shared benefits *from* the river, such as the coordination of hydropower and enhancing agricultural production, were the main drivers behind this approach (Dinar, 2009; Sadoff & Grey, 2002). However, benefits *beyond* the river were also considered, such as promoting regional integration and decreasing regional tensions (Sadoff & Grey, 2002). Still, Egypt, cautious about protecting its share of the Nile waters, only participated in these cooperative schemes as long as they focused on enlarging



the water supply instead of redistributing the existing shares (Cascão & Zeitoun, 2010b; Rahman, 2013; Waterbury, 2002).

To cooperate on increasing the shared benefits of the Nile, the Nile riparians set up the Nile Basin Initiative (NBI) in 1999 (Aljefri et al., 2019; Berndtsson et al., 2017; Phillips et al., 2006; Salman, 2018b). The NBI was a breakthrough as it was the first project in which all riparians of the Nile were represented (Dinar, 2009; Tawfik, 2016). The NBI was set up as a deliberately temporary organization, which was to be replaced by the Nile River Basin Commission (NRBC), a permanent institution with international legal personality (Salman, 2018b; Tawfik, 2016). The members of the NBI would negotiate a Cooperative Framework Agreement, which would establish the key legal principles and procedures of the NRBC (Cascão & Nicol, 2018; Tawfik, 2016). However, despite more than a decade of negotiations, the countries failed to reach an agreement (Tayie, 2019). The essence of the dispute lies in the conflict between two principles in international water law as stipulated in the UN Convention on the Law of the Non-navigational Uses of International Watercourses (1997): the right to equitable utilization of a water resource, and the obligation to not cause appreciable harm to other states.

In the end, the impasse came down to Article 14b of the CFA, which referred to the obligation to not cause appreciable harm (Cascão & Nicol, 2018; Nicol & Cascão, 2011; Tawfik, 2016). The upstream countries proposed the following article: “The Nile Basin States agree not to significantly affect the water security of any other Nile Basin States”. Egypt and Sudan, however, proposed to change the article to read: “The Nile Basin States agree not to *adversely* affect the water security *and current uses and rights* of any other Nile Basin State” [emphasis added] (Agreement on the Nile River Basin Cooperative Framework, 2010). By including a reference to their historical uses and rights as established in the 1959 agreement, Egypt and Sudan tried to make sure that no appreciable harm was done to them by upstream

states (Aljefri et al., 2019; Nasr & Neef, 2016; Zeitoun et al., 2011). Article 14b proved to be so divisive that no agreement could be reached on the CFA between the upstream countries and Egypt and Sudan (Aljefri et al., 2019). After a period of deadlock, the upstream countries decided to take matters into their own hands and sign the CFA anyways, without agreement with Egypt and Sudan (Cascão & Nicol, 2018; Tawfik, 2016; Tayie, 2019). So far, the CFA has been signed by six countries and ratified by four (Ethiopia, Rwanda, Tanzania, and Uganda). The CFA will enter into force when it is ratified by six countries, but only the countries that have ratified it will be bound to it. In response to the signing, Egypt and Sudan temporarily suspended all their activities within the NBI (Cascão & Nicol, 2018; Tawfik, 2016; Turhan, 2021).

The establishment of the Nile Basin Initiative has certainly been a major step in promoting cooperation over the Nile, bringing together all riparians for the first time in a relatively successful manner. However, the dispute over the CFA illustrates the hurdles that the countries of the Nile Basin still have to overcome if they would like to reach prosperous cooperation. The issues regarding the allocation of water, the legal standing of the 1959 Agreement, and the temporary status of the NBI remain unresolved sources of conflict in the basin (Noriyoshi, 2020; Salman, 2018b; Turhan, 2021).

### **Hydro-Hegemony in the Blue Nile Basin**

Even with the Nile Basin Initiative established, old rivalries prevail and thwart the implementation of a truly comprehensive agreement for cooperation. Thus, the status quo persists in the Blue Nile Basin: Egypt is the main user of the Nile waters, while the large majority of its waters originate in Ethiopia. Ethiopia has not exploited the Nile to a significant degree, which secures Egypt's water supply. Egypt is thus the great beneficiary of the status quo. According to the Framework of Hydro-Hegemony, the interactions in a shared river

basin are shaped by the most powerful riparian in that basin, the hydro-hegemon, in a way that would suit its interests (Zeitoun & Warner, 2006). This section argues that Egypt is the hydro-hegemon in the Blue Nile Basin which uses its power surplus to protect the status quo and defend its interests. In support of this argument, this section will review the three pillars of hydro-hegemony in relation to the three countries in the Blue Nile Basin: Egypt, Ethiopia, and Sudan.

With regards to the riparian position of the countries in the Blue Nile Basin, Egypt is in the weakest position. As the downstream riparian of the Nile, Egypt is dependent on the upstream counties for its water supply. Since 86% of the Nile waters originate in Ethiopia, including all of the Blue Nile waters, Ethiopia clearly has the upper hand in this aspect (Dinar, 2009). However, Zeitoun and Warner (2006) note that riparian position is much less influential for determining hydro-hegemony than the relative power distribution is.

The second element, the exploitation potential, is described by Zeitoun and Warner (2006, p. 445) as “the ability to plan, construct and operate large infrastructure projects”. As outlined above, Egypt has been involved in the construction of hydraulic infrastructure such as dams and canals to regulate and control the Nile for a long time (Tafesse, 2001). The peak of this strategy is the Aswan High Dam, with a storage capacity of 169 bcm (Berndtsson et al., 2017; Cascão, 2009; Haile, 2018). Sudan has also constructed a number of smaller dams on the Nile, but always with the consent of Egypt (Cascão, 2009). Ethiopia’s physical geography would suit the exploitation of the Nile, as the large drops in elevation create great opportunities for hydropower, and the milder climate limits evaporation (Dinar, 2009; Elhance, 1999). However, Ethiopia was not able to exploit this potential, due to a lack of financial and technical resources (Elhance, 1999; Klare, 2001; Tafesse, 2001). Thus, the potential for Ethiopia is certainly there, but it has not materialized.

When considering power, the third factor of hydro-hegemony, we begin to discern the dominant position of Egypt. The first dimension of power is that of structural (or hard) power, which consists of military, political, and economic resources (Zeitoun & Warner, 2006). Militarily, Egypt's strength far outweighs that of Sudan and Ethiopia (Cascão, 2009). For instance, Egypt's defense budget in 2020 was 4.11 billion USD, while that of Ethiopia was only 472 million USD (IISS, 2021). Moreover, Ethiopia's military has been occupied with crises such as civil wars and the war with Eritrea (Arsano & Tamrat, 2005; Chesire, 2010; Klare, 2001). Egypt has considerable political resources as well. As a result of its strategic location near the Suez Canal and its valuable role in the conflict between Israel and Palestine, Egypt is an important ally of the West, especially of the United States (Beyene et al., 2018; Cascão, 2009). Moreover, Egypt has close relations with Arab countries across the Middle East and with international organizations such as the World Bank and the IMF (Cascão, 2008; Chesire, 2010; Tafesse, 2001; Von Gienanth, 2020). As a partner of Egypt on Nile issues, Sudan reaps the benefits of these alliances as well (Waterbury, 2002). Ethiopia does not have the same level of political resources as Egypt, as it does not have similar strong alliances (Arsano & Tamrat, 2005). Furthermore, Ethiopia and Sudan have been plagued by political instability due to several armed insurgencies (Aljefri et al., 2019; Klare, 2001; Waterbury, 2002). Lastly, Egypt's economic power is much larger than that of Sudan and Ethiopia (Allan & Mirumachi, 2010). According to data from the World Bank, Egypt's GDP per capita in 2019 was 3,019 USD. In comparison, the GDP per capita in Ethiopia was 855 USD and that of Sudan was only 441 USD (World Bank, n.d.). Egypt's economic position is further strengthened by the large amounts of financial aid it receives from its international allies such as the United States (Cascão, 2009; Zeitoun & Warner, 2006). In contrast, international donors have been reluctant to fund Ethiopian infrastructure projects out of fear of upsetting Egypt (Arsano & Tamrat, 2005; Pohl & Swain, 2017).

The second face of power in the Framework of Hydro-Hegemony is agenda-setting, or bargaining power. Cascão (2009) argues that Egypt has taken a tough position in negotiations over the Nile by focusing on adherence to the 1959 Agreement. Egypt will not participate in any negotiations that do not take the 1959 Agreement as a starting point (Cascão & Zeitoun, 2010a). The agenda-setting power of Sudan is derived from its partnership with Egypt, and their agreement to take a unified stance during negotiations (Zeitoun & Mirumachi, 2008). Ethiopia has not enjoyed a powerful position during negotiations. According to Cascão and Zeitoun, this is due to “a lack of internal capacity to establish coherent water policies, discourses and agendas, as well as an absence of coherent negotiations strategy” (2010a, p. 190).

The third dimension of power is ideational power, the power to diffuse one’s ideas and to force one’s ideology and perceptions onto other actors (Zeitoun & Warner, 2006). Zeitoun et al. (2011) argue that the ideational power of Egypt is related to its political resources. As mentioned before, Egypt has a strong international standing and a favorable position within international organizations. Therefore, the claims that Egypt makes with regards to the distribution of the Nile waters receive more attention and are taken more seriously than those made by the less powerful Sudan and Ethiopia (Cascão, 2009; Zeitoun et al., 2011). According to Waterbury (2002, p. 6), “[Ethiopia] was in no position to assert credible claims to Nile water”. This has “enabled [Egypt] to influence and construct the Nile discourse” (Mahlakeng, 2018, p. 74).

After reviewing the three factors of hydro-hegemony, we can conclude that Egypt is the clear hydro-hegemon of the Blue Nile Basin. Egypt’s exploitation potential and power, in all of its dimensions, certainly make up for its position as a downstream riparian. The Framework of Hydro-Hegemony predicts that Egypt, as the hydro-hegemon, would shape the interactions over the Blue Nile in its favor (Zeitoun & Warner, 2006).

### **Egypt's Hydro-Hegemony in the Blue Nile Basin**

This section will explain how Egypt has attempted to shape the interactions in the Blue Nile basin over the past decades by using coercive, utilitarian, normative, and hegemonic compliance-producing mechanisms. The use of coercive compliance-producing mechanisms by Egypt includes threats of military action against upstream states. These have been abundant throughout history in response to Ethiopian and Sudanese plans for upstream development of the Nile (Elhance, 2000; Haile, 2018; Kehl, 2011; Phillips et al., 2006; Zeitoun et al., 2020). For example, when Ethiopia proposed the construction of a number of dams on the Blue Nile in 1978, the Egyptian President Anwar Sadat stated that “we are not going to wait to die of thirst in Egypt. We’ll go to Ethiopia and die there” (Sadat, as cited in Walsh & Sengupta, 2020). In 1979, Sadat (as cited in Starr, 1991, p. 19) warned that “the only matter that could take Egypt to war again is water”. Some years later, the then Egyptian Minister of Foreign Affairs Boutros Boutros-Ghali (as cited in Gleick, 1993, p. 86) said that “the next war in our region will be over water, not politics”. Moreover, at the end of the 1990s, Egyptian President Hosni Mubarak threatened to bomb Ethiopia if it was to pursue its plans of building dams in the Blue Nile (Phillips et al., 2006). Although Egypt never actually used military force, the threats alone were generally enough for Sudan and Ethiopia to suspend their plans (Klare, 2001; Phillips et al., 2006). Furthermore, Egypt employed economic and diplomatic coercion to prevent Ethiopia and Sudan from acquiring the necessary funds for the development of the Nile (Beyene et al., 2018). Through its influence on the international stage, it could block loans from the African Development Bank and sway its allies such as the United States to not finance any upstream development plans (Chesire, 2010; Mahlakeng, 2018; Pohl & Swain, 2017).

Secondly, Egypt has used utilitarian compliance-producing mechanisms. By investing political and economic capital in improving its relations with Sudan, for example, Egypt has solidified the alliance between the two countries (Zeitoun et al., 2020). This has prevented an alliance between Sudan and Ethiopia which could threaten Egypt's interests in the basin (Waterbury, 2002). Egypt has also tried to influence Ethiopia through promising "investment, increased trade and technical assistance" in return for Ethiopian assurances to not construct hydraulic infrastructure (Haile, 2018, p. 127).

Thirdly, Egypt has used normative compliance-producing mechanisms to instill in Sudan and Ethiopia "the belief that compliance with the order is right or a duty, even an obligation" (Zeitoun et al., 2017, p. 275). For example, Egypt continues to insist that adhering to the 1959 Agreement is the right thing to do (Zeitoun et al., 2020). Sudan is most susceptible to this pressure, as it is a party to the 1959 Agreement (Beyene et al., 2018). However, Ethiopia can also not ignore the existence of the treaty, as "it has crystallised over time as the current status quo determining water allocations" (Cascão, 2008, p. 19).

In the category of hegemonic compliance-producing mechanisms, securitization has been one of the tactics most used by Egypt. By highlighting its absolute dependency on the Nile waters, Egypt elevates the Nile to a matter of national security (Cascão, 2009; Haile, 2018). Therefore, Egypt presents any upstream development of the Nile that would threaten Egypt's position as being impossible (Cascão, 2009; Haile, 2018). Moreover, Egypt is able to promote its discourse and drown out opposing views because of its favorable international standing (Zeitoun et al., 2011; Zeitoun & Warner, 2006). Finally, through being involved in the Nile Basin Initiative, Egypt aims to control new knowledge that is being produced over the Nile and tries to prevent the spreading of any information that would endanger the status quo (Zeitoun et al., 2020).

**Conclusion**

The history of the Blue Nile Basin has been characterized by limited cooperation between states. While most of the water from the Nile originates in Ethiopia, Egypt uses the large majority of these waters. As the hydro-hegemon in the Blue Nile Basin, Egypt has successfully used compliance-producing mechanisms to protect this status quo and deter upstream states from constructing large hydraulic infrastructure which could threaten Egypt's water supply. The next chapter will apply these findings to the case of the Grand Ethiopian Renaissance Dam.



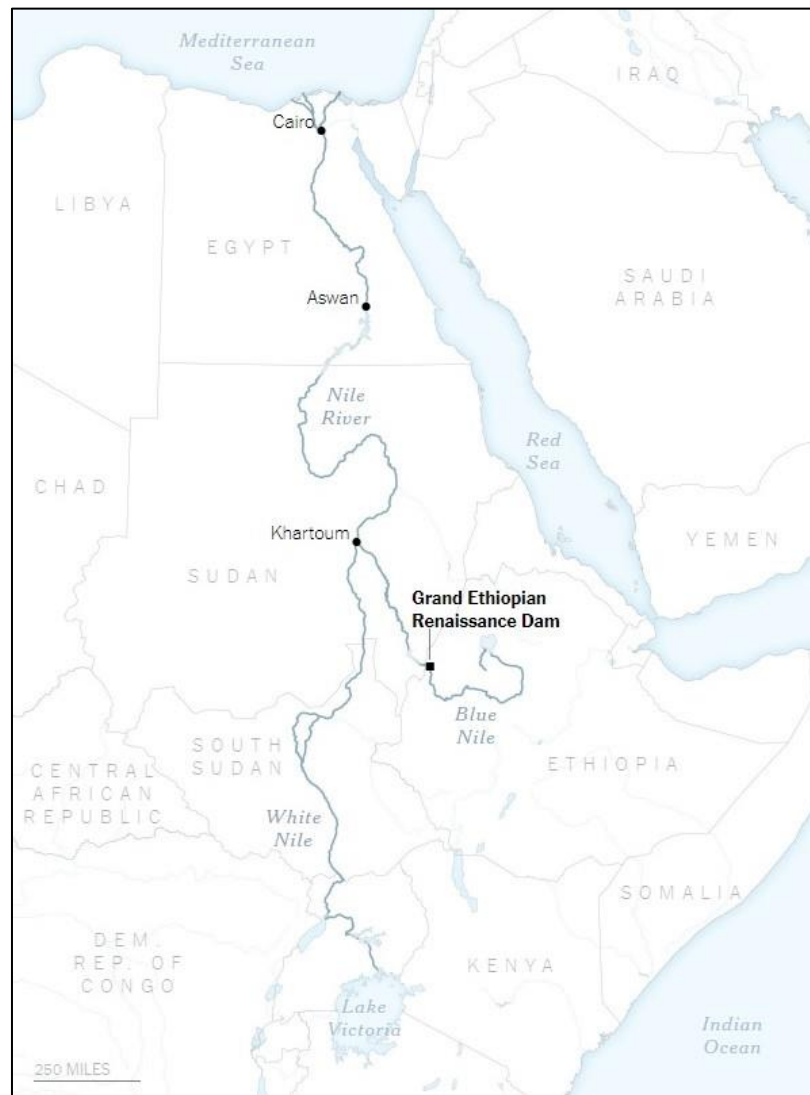
### **Chapter 3: The Grand Ethiopian Renaissance Dam**

The previous chapter discussed how Egypt has successfully used its hegemonic position in the Blue Nile Basin to deter upstream countries from exploiting the Nile. This chapter will focus on a recent initiative by Ethiopia to develop the Nile nevertheless. This project concerns the construction of the Grand Ethiopian Renaissance Dam (GERD) on the Ethiopian part of the Blue Nile. This chapter starts by outlining the history of the GERD. Ethiopia's reasons to construct the dam will be explained, as well as the Egyptian and Sudanese response to the plan. Then, the chapter analyzes the negotiations that have taken place between Ethiopia, Egypt, and Sudan on the construction and the operation of the GERD. The chapter concludes that contrary to the pattern established in the previous chapter, Egypt has not been able to deter Ethiopia from constructing the GERD.

#### **The History of the Grand Ethiopian Renaissance Dam**

In March 2011, the Ethiopian government announced an ambitious plan to build a dam on its tributary of the Blue Nile. The dam will be 1780 meters long, 145 meters high, and will be able to store 74 bcm of water and generate 6,450 MW of electricity (Pemunta et al., 2021; Turhan, 2021). When completed, it will be the largest hydroelectric dam in Africa, and the tenth-largest in the world (Pemunta et al., 2021). This Grand Ethiopian Renaissance Dam is located in the Benishangul-Gumuz region, near the border with Sudan (see *Figure 7*).

Figure 7 - Location of the GERD in the Blue Nile Basin (Walsh & Sengupta, 2020)



The projected costs of building the GERD are \$4.8 billion USD (Tawfik, 2016). The Industrial and Commercial Bank of China (ICBC) provided a loan of \$1 billion USD to finance the project (Pemunta et al., 2021). However, for reasons discussed later in this chapter, other international donors were reluctant to contribute to the GERD (Von Gienanth, 2020). Therefore, Ethiopia needed to secure the rest of the money internally. To do so, the government sold bonds in the project to its citizens, civil servants were persuaded to contribute one month's salary to the dam, and a special lottery was organized (Abteu &

Dessu, 2019). Along with regular taxes, this sufficed to finance the construction of the GERD (Quinn & Akyol, 2021).

### **Ethiopian Rationale for Constructing the Grand Ethiopian Renaissance Dam**

Ethiopia had several incentives to build the GERD, which can be classified according to Sadoff and Grey's (2002) categorization of shared benefits of a transboundary river. Firstly, the GERD will yield benefits *from* the river. The main objective of the dam is to generate hydropower (Aljefri et al., 2019; Berndtsson et al., 2017). If the maximum capacity of 6,450 MW is realized, this would double Ethiopia's national power supply (Beyene et al., 2018; Nasr & Neef, 2016; Tayie, 2019). This is vital for Ethiopia, as approximately two-thirds of Ethiopians do not yet have access to electricity (Bearak & Raghavan, 2020; Turhan, 2021; Von Lossow et al., 2020). Moreover, the generated electricity can be used to increase the industrial production capacity in Ethiopia (Quinn & Akyol, 2021). Furthermore, Ethiopia will sell a share of the electricity to neighboring countries such as Sudan, Egypt, Kenya, Uganda, Djibouti, and Eritrea (Bearak & Raghavan, 2020; Quinn & Akyol, 2021; Salman, 2018b). The revenues of this trade in electricity could amount to €1 billion per year (Pichon, 2021). Ethiopia thus hopes that the production and sale of electricity can contribute to reducing poverty and famine in the country (Tawfik, 2016). The GERD will also increase the amount of Nile water that can be used for other purposes than hydropower generation. This happens first of all because the dam is located in the Ethiopian highlands where the evaporation of water is limited when compared to that in lower-lying areas in Sudan and Egypt (Beyene et al., 2018; Quinn & Akyol, 2021). Besides, regulation of the river flow will lead to more efficient water use, which can be beneficial for irrigation and agriculture (Berndtsson et al., 2017). Finally, the GERD can provide benefits *beyond* the river. The government of Ethiopia portrays the project as a symbol of national pride, heralding a promising future of socio-

economic development (Berndtsson et al., 2017; Von Gienanth, 2020). By promising an “Ethiopian Renaissance”, the dam is part of a nation-building campaign aimed at bringing together a country characterized and often divided by ethnic differences (Quinn & Akyol, 2021). The fact that the dam is mostly funded by the Ethiopian citizens themselves further contributes to the nationalistic aspect of the project (Quinn & Akyol, 2021). International benefits *beyond* the river are also expected, as the trade in electricity within the region will likely stimulate trade in other fields, and could lead to further integration of the markets in Northeastern Africa (Pemunta et al., 2021).

### **Egyptian and Sudanese Responses to the GERD**

Ever since the project was first announced, Egypt in particular has been vocal in its opposition to the GERD as it feared that it would harm its water security. As soon as Ethiopia revealed its plans to build the GERD, Egypt made clear that it opposed the dam, and asked Ethiopia to share all its research reports about the dam. Egypt also requested Ethiopia to notify them of every step in the construction process (Salman, 2018b).

Egypt resorted to the same compliance-producing mechanisms as it has been using in the Blue Nile Basin throughout history. Egypt quickly securitized the issue by arguing that the Nile water is crucial to its national security and the very survival of the country, an example of a hegemonic compliance-producing mechanism. (Nasr & Neef, 2016; Noriyoshi, 2020). Moreover, the Egyptian government threatened with the use of force, a coercive compliance-producing mechanism, on multiple occasions. President Morsi stated that Egypt would prefer to solve the issue through dialogue, but he added that all options were on the table (Pemunta et al., 2021; Tawfik, 2016). Later, he stated that “if a single drop of the Nile is lost, our blood will be the alternative” (as cited in Turhan, 2021, p. 77). In a government meeting that was accidentally televised, Egyptian officials discussed the possibilities to support Ethiopian

opposition groups, to strike new arms deals to deter Ethiopia, and to sabotage the dam, possibly by military means (Salman, 2018a; Tawfik, 2016). After Morsi was replaced by President Sisi, the discourse became more moderate but retained a hostile undertone (Turhan, 2021). For example, Sisi stated that Egypt will “take all necessary measures to protect its rights in the water of the Nile” (as cited in Von Gienanth, 2020, p. 40). These words were also followed by concrete actions. For instance, Egypt held several joint military exercises with Sudan, of which the latest one was aptly called “Guardians of the Nile” (Abu Zaid, 2021). As an economic coercive compliance-producing mechanism, Egypt requested its international allies to not fund the GERD, which explains the reluctance of actors such as the USA and the World Bank to finance the GERD (Von Gienanth, 2020). Lastly, as a normative compliance-producing mechanism, Egypt made numerous references to the 1959 Agreement in an attempt to affirm its rights to the Nile water and to undermine Ethiopia’s legitimacy in constructing the GERD (Von Gienanth, 2020).

Egypt cited various reasons for its resistance to the GERD. First and foremost, it was afraid that the amount of Nile water flowing into Egypt would decrease (Noriyoshi, 2020; Pemunta et al., 2021). As its only source of freshwater, this would significantly impact its supply of water used for consumption and agriculture (Nasr & Neef, 2016; Tayie, 2019). Moreover, a decrease in water flow would negatively influence the potential for power generation at the Aswan High Dam (Salman, 2018a; Tawfik, 2016; Tayie, 2019). These problems would mainly arise during the years in which the GERD was to be filled (Pichon, 2021; Quinn & Akyol, 2021). Another concern of Egypt was the fact that it will be dependent on Ethiopia when it comes to the management of the dam, the safety of the construction, and the amount of information it receives about the construction and operation of the dam (Bearak & Raghavan, 2020; Berndtsson et al., 2017; Salman, 2018a). Lastly, Egypt is worried that letting Ethiopia construct the dam unilaterally would set a precedent and inspire upstream

countries on the White Nile, such as Uganda, to do the same (Quinn & Akyol, 2021; Von Gienanth, 2020).

Initially, Sudan shared many of Egypt's concerns about the GERD (Salman, 2018a). However, the Sudanese government soon realized that the GERD could bring benefits to Sudan as well. In March 2012, President of Sudan Omar Al-Bashir publicly announced Sudan's support for the dam (Aljefri et al., 2019; Salman, 2018a; Tawfik, 2016). Sudan was particularly interested in expanding its irrigation potential through the GERD, which could greatly improve its agricultural yields (Beyene et al., 2018; Cascão, 2019; Mekonnen, 2017). Moreover, the prospect of relatively cheap energy which can be bought from Ethiopia enticed Sudan (Cascão, 2019; Salman, 2018a). Nonetheless, Sudan still took a critical stance towards Ethiopia. It insisted on cooperation and the sharing of data regarding the dam and sought to limit the potential disadvantages of the GERD as much as possible (Pichon, 2021).

### **Negotiations over the GERD**

In order to reconcile their opposing interests with regard to the GERD, Egypt, Ethiopia, and Sudan have negotiated extensively over the past decade. These negotiations can be divided roughly into two phases: the first ranging from the announcement of the GERD in March 2011 until the signing of the Declaration of Principles in March 2015, and the second ranging from March 2015 until the fall of 2021, the moment of writing.

#### ***2011-2015: Construction and the Declaration of Principles***

During the early stages of the negotiations on the GERD, the main point of contestation between Egypt, Ethiopia, and Sudan was the impact that the GERD would have on the downstream riparians (Salman, 2018b). In May 2011, they therefore agreed to form the International Panel of Experts (IPoE), which would review Ethiopia's design of the GERD to

assess its potential downstream impact (Salman, 2018b). The IPoE consisted of ten experts, two from each negotiating country and four international experts (Aljefri et al., 2019; Tawfik, 2016). Two years later, the IPoE concluded that many of the Ethiopian documents were not specific enough and that additional research was needed to assess the impact of the GERD (Salman, 2018b). Further negotiations were thus deemed necessary by Egypt, Ethiopia, and Sudan.

These tripartite ministerial meetings took place on seven occasions from November 2013 to March 2015. During the first three meetings, Egypt tried to prevent that the GERD would be built. Therefore, it demanded that the construction of the GERD would be halted as long as additional studies were carried out (Salman, 2018a). However, Ethiopia refused to meet this request (Pemunta et al., 2021). During the fourth meeting, in August 2014, the two countries made a trade-off: Egypt dropped its earlier demand that construction should be suspended, as long as Ethiopia would allow for additional research by international experts, as had been advised by the IPoE (Salman, 2018a). This research was to be carried out by the newly established Tripartite National Committee (TNC), but this group never completed its studies (Berndtsson et al., 2017).

After a joint visit of the three countries to the construction site of the dam, a first agreement was signed regarding the GERD. This Declaration of Principles (DoP) was celebrated by some as it showed that progress was being made in the negotiations (Hussein & Grandi, 2017; Salman, 2018a). However, the DoP lacked clear, enforceable agreements that would resolve the dispute between the three countries. Instead, it was limited to generalized statements in which the countries endorsed principles such as the peaceful settlement of disputes and the prevention of significant harm (Agreement on Declaration of Principles on the GERD Project, 2015). Furthermore, they promised to agree on guidelines for the filling

and operation of the dam somewhere in the future, without a concrete agreement (Agreement on Declaration of Principles on the GERD Project, 2015).

### ***2015-2021: Filling and Third-party Mediation***

While the Declaration of Principles did not resolve the dispute between the three countries, it did prove to be a paradigm shift in the thinking about the GERD. Egypt could no longer deny its existence nor reasonably argue for the GERD to not be built (Abteu & Dessu, 2019). The GERD had become a *fait accompli* (Von Gienanth, 2020). Therefore, the focus of the debate between the countries shifted to how to operate the GERD once it had been completed. More specifically, the dispute concentrated on the pace with which the dam is filled (Pemunta et al., 2021). Ethiopia proposes to fill the dam quickly, within six years, so that it can generate hydropower as soon as possible (Abteu & Dessu, 2019; Von Lossow et al., 2020). Egypt, on the other hand, argues that the filling should take between ten and twenty years so that the impact on the annual discharge of the Nile is as limited as possible (Turhan, 2021). In May 2018, after a relatively quiet period in terms of negotiations, Ethiopia, Egypt, and Sudan decided to form the National Independent Scientific Research Group (NISRG) to assess the impacts of the filling of the dam (Von Gienanth, 2020). Once again, however, the NISRG failed to produce concrete results (Von Gienanth, 2020). Egypt presented its own proposal for the filling of the dam in September 2019, but this was rejected by Ethiopia. Similarly, Ethiopia's plan was rejected by Egypt one month later (Helal, 2020).

At this point, the route of third-party mediation was explored to find a way out of the impasse. In November 2019, a joint mediation effort by the United States and the World Bank was initiated, which comprised several meetings between representatives from Egypt, Ethiopia, and Sudan in Washington DC (Quinn & Akyol, 2021; Von Gienanth, 2020). However, Ethiopia refused to sign the agreement that was drafted after the meetings, as it



perceived the USA to be a partial mediator that favored Egypt's interests (Pemunta et al., 2021). Among other things, this was influenced by the decision of the Trump administration to withhold \$264 million USD in security and development assistance from Ethiopia to put pressure on Ethiopia in the GERD case (Bearak & Raghavan, 2020; Pemunta et al., 2021). When Ethiopia announced its plans to start filling the dam in the summer of 2020, Egypt asked the United Nations Security Council (UNSC) to become involved (Quinn & Akyol, 2021). The UNSC did not regard the conflict to be part of their mandate and delegated the responsibility to mediate to the African Union (AU). An AU-led mediation effort began in June 2020, but is, like earlier initiatives, yet to produce any results (Gebresenbet & Wondemagegnehu, 2021; Pichon, 2021; Turhan, 2021).

### **Current State of the GERD**

Although there has been little progress in the negotiations between Egypt, Ethiopia, and Sudan, the GERD project itself did make significant progress over the years. Even without formal agreements over the construction and operation of the dam, Ethiopia is continuing with the project unilaterally (Quinn & Akyol, 2021; Turhan, 2021). As the construction of the dam is nearly complete, Ethiopia has started to fill the GERD. During the first filling phase in the summer of 2020, Ethiopia filled 4.9 billion m<sup>3</sup> of the dam (Pichon, 2021). Ethiopia completed the second filling in July 2021 by filling another 13.5 billion m<sup>3</sup> (Africanews, 2021). Thus, it seems that Egypt's strategy of trying to deter Ethiopia has led nowhere, as "the dam is already built, the reservoir [is] being built" (Mosley, as cited in Bearak & Raghavan, 2020). The situation surrounding the Grand Ethiopian Renaissance Dam continues to develop. The negotiations are ongoing, as Foreign Minister of Algeria Ramtane Lamamra announced in the summer of 2021 that he is willing to start a new mediation attempt between the three countries (El-Gundy, 2021). At the same time, the internal conflict in the

Ethiopian province of Tigray since November 2020 has diverted attention and resources from the Ethiopian government away from the GERD (Pichon, 2021).

### **Conclusion**

As of the fall of 2021, the GERD is not yet generating hydropower, and there will likely be further negotiations between Egypt, Ethiopia, and Sudan in the near future. Nonetheless, Ethiopia has managed to construct the dam and has started to fill it, without the consent of the hydro-hegemon in the Blue Nile Basin, Egypt. This deviates from the pattern that has historically been observed in the Blue Nile Basin, where Egypt had been able to deter upstream countries from constructing hydraulic infrastructure. The next chapter will use the Framework of Hydro-Hegemony to analyze how Ethiopia has built the GERD despite strong opposition from Egypt.

## **Chapter 4 – Changing balance of power and Ethiopian counter-hegemony**

The theory on hydro-hegemony predicts that Egypt, as the hydro-hegemon in the Blue Nile Basin, would be able to deter the non-hegemon Ethiopia from constructing upstream hydraulic infrastructure. However, the analysis of the construction of the Grand Ethiopian Renaissance Dam shows that Ethiopia has managed to build the GERD despite Egyptian opposition. This chapter explains this apparent contradiction, by analyzing two developments. Firstly, the balance of power in the Blue Nile Basin has changed over the past two decades. Secondly, Ethiopia has successfully used several counter-hegemonic strategies to contest Egypt's hydro-hegemony during the construction of, and the negotiations on the GERD.

### **Change in the Balance of Power**

The first explanation as to why Ethiopia has been able to construct the GERD despite the opposition from the hydro-hegemon, Egypt, lies in the fact that the balance of power in the Nile River Basin has changed recently. Therefore, the power asymmetry between Egypt and Ethiopia has decreased. Coming back to the *Framework of Hydro-Hegemony* by Zeitoun and Warner (2006), changes can be observed in Ethiopia's structural, bargaining, and ideational power, as well as in its resource exploitation potential.

### ***Ethiopia's Structural Power***

Ethiopia's structural power consists of its military, political, and economic might. As explained in Chapter 2, Ethiopia has historically had less structural power than Egypt. However, the structural power of Ethiopia has increased considerably during the last ten to twenty years. This section will highlight how Ethiopia's political and economic power grew as a result of both domestic and international developments.

Ethiopia's political power had for a long time been undermined by its internal instability due to civil wars and the war of independence with Eritrea. However, during the administration of Melas Zenawi from 1995 to 2012, Ethiopia's political stability increased significantly as internal unrest declined (Cascão, 2009; Cascão & Nicol, 2018; Mulugeta, 2014). Moreover, the functioning of its state institutions such as the police, the military, and the civil service has improved (Mulugeta, 2014). Despite the outbreak of the Tigray conflict in 2018, Ethiopia is politically a more stable state than it was twenty years ago (Aljefri et al., 2019). During the same period, Ethiopia's economy improved substantially as well. According to Cascão (2009, p. 254), "a move towards a market-oriented economic model, better relations with donors and a stabilisation of the economy" led to economic growth in Ethiopia. According to the World Bank (2021), Ethiopia is amongst the fastest growing economies of the past decade, with a GDP growth of more than 10% between 2013 and 2015. As such, Ethiopia has become "an icon for development in Sub-Saharan Africa" (Cascão & Nicol, 2018, p. 96).

In addition to domestic changes, external developments have affected Ethiopia's political and economic power as well. Firstly, the peace deal between Ethiopia and Eritrea has altered the regional political dynamics and has pushed Ethiopia forward as an influential player in the Horn of Africa (Cascão & Nicol, 2018; Mabera, 2020). Access to Eritrean ports also offers Ethiopia trade opportunities that were previously inaccessible (Mabera, 2020). Moreover, China has manifested itself as a new key player in the Nile Basin. China is heavily investing in diplomatic and trade relations with upstream riparians, including Ethiopia (Pemunta et al., 2021; Swain, 2011). China is financing water development projects such as dams and hydropower infrastructure in upstream countries (Cascão & Nicol, 2018; Mahlakeng, 2018). In contrast to Western countries, China sets fewer conditions for financial support. For example, it is less concerned with the level of democratization in the countries it

finances, or with the impact of the upstream developments on downstream riparians (Cascão, 2009; Mahlakeng, 2018). In conclusion, China's involvement offers Ethiopia an alternative to the Western governments and institutions that have traditionally backed Egypt, and thus balances the foreign influence in the Nile Basin (Pemunta et al., 2021). As a result of these political and economic developments, Ethiopia has more structural power in 2021 than it had at the beginning of the century.

### ***Ethiopia's Bargaining and Ideational Power***

Recently, Ethiopia has been able to increase its bargaining power as well, mainly by forming a united front with other upstream riparians in the Nile River Basin. Through the Nile Basin Initiative (NBI), the upstream countries have been able to formalize their cooperation and counter the hegemonic position of Egypt. By using the NBI as a forum for discussing issues related to the Nile, the upstream riparians are in a better position to influence the negotiation process. For example, they can affect which points will reach the agenda and whose voices will be represented. The negotiations on the Cooperative Framework Agreement (CFA) are an example of how the upstream riparians used their enlarged bargaining power to influence negotiations within the NBI. As explained in Chapter 2, there was a great difference of opinion between the upstream and the downstream countries over Article 14b of the CFA. By taking a unified stance, the upstream riparians gained a stronger position in the negotiations. Moreover, when an agreement on that particular article could not be reached, the upstream riparians decided to sign and ratify their version of the CFA anyways, without Egyptian and Sudanese consent. By cooperating with other upstream riparians through the NBI, Ethiopia has thus gained bargaining power in the Nile River Basin.

The cooperation with upstream countries in the NBI did not only allow Ethiopia to change the dynamics during negotiations. It also provided Ethiopia the opportunity to promote

a different discourse on the Nile River Basin (Cascão & Nicol, 2018). Under Egyptian and Sudanese influence, the discourse on the Nile had previously been focused on their ‘historical rights’. However, Ethiopia, along with other upstream riparians, now advanced different principles such as that of ‘equitable and reasonable use’ within the NBI (Zeitoun et al., 2017). The signing of the CFA helped to cement these principles in a legal agreement (Zeitoun et al., 2017). Thus, Ethiopia’s ideational power, the power to promote its ideas and discourse, also increased through the formation of the Nile Basin Initiative (Cascão & Nicol, 2018).

### ***Ethiopia’s Resource Exploitation Potential***

Chapter 2 mentioned that Ethiopia lacked “the ability to plan, construct and operate large infrastructure projects”, mainly because it did not have the financial and technical resources (Zeitoun & Warner, 2006, p. 445). However, as explained above, the financial resources of Ethiopia have increased considerably. Moreover, Ethiopia has invested in creating the technical resources necessary to carry out large hydraulic infrastructure projects. To do so, Ethiopia has trained “experts in technical, environmental and hydrological fields” to increase the “scientific and technical capacity of its water professionals” (Haile, 2018, p. 150). Because of this training, Ethiopia now has experts to plan and construct hydraulic infrastructure. In other words, the increase in financial and technical resources has improved Ethiopia’s resource exploitation potential as well.

### ***Egypt’s Power***

During the period in which Ethiopia’s power and resource exploitation potential increased, that of Egypt decreased. Traditionally the most stable state in the region, Egypt experienced a period of great political instability after the revolution that started in January 2011 (Aljefri et al., 2019; Cascão & Nicol, 2018). The internal struggles furthermore affected

the economic position of Egypt, as trade and tourism declined in the aftermath of the revolution (Pemunta et al., 2021). As Egypt concentrated on its domestic affairs, the issues over the Nile faded into the background (Aljefri et al., 2019).

### ***Effects on the Grand Ethiopian Renaissance Dam***

Over the past decade, Ethiopia has become more powerful, and Egypt's political and economic position has weakened. The smaller the power imbalance between the two countries, the less Egypt's hegemonic position is perceived as a threat by Ethiopia. The strengthening of Ethiopia's position relative to that of Egypt has reinvigorated the Ethiopian ambition to exploit the resources of the Nile (Casção & Nicol, 2018; Mahlakeng, 2018). The decision by Ethiopia to construct the GERD can thus be seen as a consequence of the changing power dynamics in the Nile River Basin.

### **Ethiopian Counter-Hegemonic Strategies**

Although the recent changes have certainly narrowed the gap between Egypt and Ethiopia, this does not mean that Ethiopia is more powerful than Egypt. The power discrepancy between the two countries was too large to be erased in such a relatively short time (Gebrehiwet, 2020). As such, Egypt is still the hydro-hegemon in the Nile River Basin. The literature on hydro-hegemony suggests that non-hegemons use counter-hegemonic strategies to contest the status quo established by the hydro-hegemon. Therefore, this section analyzes how Ethiopia used counter-hegemonic strategies during the construction of, and the negotiations on, the Grand Ethiopian Renaissance Dam to contest Egypt's hydro-hegemony.

### *Coercive Counter-Hegemonic Strategies*

Coercive counter-hegemonic strategies are based on the use or threat of force (Zeitoun et al., 2017). One example of a coercive strategy is the unilateral construction of hydraulic infrastructure. The GERD is a prime example of this strategy. Ethiopia did not notify Egypt or Sudan about its plans to construct the GERD beforehand (Tawfik, 2016). Ethiopia's intentions were only revealed when it started the construction in March 2011. Ethiopia timed its announcement strategically, at a moment where Egypt was internally unstable as a result of the revolution that started in January 2011 (Aljefri et al., 2019; Salman, 2018b). Therefore, Egypt was initially ill-prepared to react to Ethiopia's announcement of the GERD (Aljefri et al., 2019; Cascão & Nicol, 2018; Tawfik, 2016). This gave Ethiopia a head start with the construction of the GERD (Aljefri et al., 2019). As a result, when the negotiations between Egypt, Ethiopia, and Sudan eventually started, the reality was that the GERD was already being built. If Ethiopia had not developed the plans for the GERD unilaterally but had instead discussed its ideas with Egypt beforehand, Egypt would have had more options to oppose the construction of the GERD (Tawfik, 2016; Von Gienanth, 2020).

During the negotiations, Ethiopia used a second coercive strategy: non-cooperation through the delaying of the negotiations. The negotiations over the GERD have been remarkably unproductive since 2011, and Ethiopia has deliberately tried to stall these negotiations (Tawfik, 2015; Tayie, 2019). One stalling mechanism has been the creation of various research groups, such as the IPoE, the TNC, and the NISRG, which have taken years to carry out research into the GERD without producing many concrete results (Berndtsson et al., 2017; Von Gienanth, 2020). Moreover, Ethiopia has been reluctant to sign agreements such as the one drafted after the mediation effort by the USA and the World Bank, instead proposing further discussion mediated by different actors (Pemunta et al., 2021; Tayie, 2019). In the rare cases where Ethiopia did sign an agreement, such as the Declaration of Principles



(DoP) in 2015, the most controversial issues were excluded. The DoP did not include compromises on the filling and the operation of the dam, and this had to be arranged in further negotiations that would take even more time. All these stalling tactics bought Ethiopia time. Time that Ethiopia gladly used to continue the construction of the GERD. Ethiopia knew that the longer the negotiations would take, the harder it would be for Egypt to oppose the construction of a dam that was already being completed (Aljefri et al., 2019; Von Lossow et al., 2020; Walsh & Sengupta, 2020). During the negotiations, Ethiopia repeatedly refused Egypt's requests to temporarily halt the construction of the GERD and continued building (Tawfik, 2016; Von Gienanth, 2020). Egypt dropped its request after a while and decided to focus instead on the dynamics of the filling and operation of the dam (Pemunta et al., 2021). This demonstrates the success of Ethiopia's coercive counter-hegemonic strategy: by delaying the negotiations while unilaterally continuing with constructing the GERD, Ethiopia succeeded in creating 'facts on the ground'. The Grand Ethiopian Renaissance Dam had become a reality that could no longer be rejected by Egypt.

### ***Leverage Counter-Hegemonic Strategies***

Leverage counter-hegemonic strategies are used by non-hegemons to increase their bargaining power. This could, for instance, be achieved through forming alliances. In the negotiations about the Grand Ethiopian Renaissance Dam, Ethiopia has put much effort into creating such an alliance with Sudan. Historically, Egypt and Sudan had formed a powerful downstream block that rejected upstream development of the Nile. However, Ethiopia understood that if it could get Sudan to support the construction of the GERD, its position vis-à-vis Egypt would improve (Von Gienanth, 2020). Therefore, from the start of the project, Ethiopia emphasized the favorable effects that the GERD would have on Sudan, such as the generation of cheap hydropower and the increased potential for agriculture in Sudan (Hussein

& Grandi, 2017; Mabera, 2020). This diplomatic effort by Ethiopia caused Sudan to reconsider its partnership with Egypt and gradually shift towards the Ethiopian side of the dispute (Beyene et al., 2018; Turhan, 2021; Walsh & Sengupta, 2020). Ultimately, this led to Sudan publicly announcing its support for the GERD project (Turhan, 2021). The support of Sudan for the GERD “has led to more strain in the Egyptian-Sudanese relations”, and thus altered the negotiation dynamics in favor of Ethiopia (Salman, 2018a; Tawfik, 2016; Tayie, 2019, p. 287).

In addition to its newly formed alliance with Sudan, Ethiopia used its developing relationship with China to carry out a second leverage strategy: the mobilization of alternative sources of funding. As mentioned in Chapter 3, Ethiopia could not rely on conventional sources of funding, such as the World Bank, to realize the construction of the GERD, as these sources were blocked by Egypt. Instead, Ethiopia sought alternative sources that bypassed the routes obstructed by Egypt (Nasr & Neef, 2016). One such alternative source of funding was the \$1 billion USD loan that Ethiopia acquired for the Industrial and Commercial Bank of China (ICBC), which financed a significant part of the GERD project (Nasr & Neef, 2016). Moreover, Ethiopia used other innovative approaches to collect the money needed to build the GERD. Through the selling of bonds in the project to its citizens, urging civil servants to contribute one month’s salary to the dam, and setting up a lottery specifically to finance the dam, Ethiopia secured most of the money for the GERD domestically (Beyene et al., 2018; Haile, 2018; Tawfik, 2016).

### ***Transformative Counter-Hegemonic Strategies***

Through the use of transformative counter-hegemonic strategies, non-hegemons can undermine the ideological power of the hydro-hegemon. Transformative strategies include reframing issues by promoting alternative discourses, providing alternative knowledge, and

making references to international law. In reference to the GERD, Ethiopia has used a combination of these strategies.

In order to legitimize the construction of the GERD, Ethiopia has “effectively deployed discourse alternatives which challenge the prevailing Egyptian narratives on hydraulic development upstream” (Haile, 2018, p. 171). One of those prevailing Egyptian narratives is to frame the upstream exploitation of the Nile as a matter of national security. Ethiopia has attempted to desecuritize the GERD, by emphasizing its right to development and framing the GERD as a purely developmental project which would not cause any harm to downstream countries (Haile, 2018; Nasr & Neef, 2016; Tawfik, 2016). The GERD is presented as a project that would greatly reduce poverty in Ethiopia (Tawfik, 2015; Von Gienanth, 2020). At the start of the construction of the GERD, for instance, Ethiopia Prime Minister Meles Zenawi stated that “this project will play a major and decisive role in realizing ... the eradication of poverty [in Ethiopia]” (Zenawi, 2011).

According to Ethiopia, the benefits of the GERD will not be limited to Ethiopia alone. The second part of its strategy to provide discourse alternatives is to frame the GERD project as a win-win situation for all countries in the Nile basin. Meles Zenawi argued, for example, that the profits of the GERD would “clearly extend to all neighboring states, and particularly to the downstream Nile basin countries, to Sudan and Egypt” (Zenawi, 2011). These benefits included aspects such as trade in the hydropower produced by the GERD, the regulation of water flows, and the reduction of flood risks (Haile, 2018; Tawfik, 2015; Von Gienanth, 2020). As mentioned in the previous section, this discourse of a win-win situation helped to mobilize international support for the GERD, including in Sudan (Tawfik, 2015; Von Gienanth, 2020).

Finally, Ethiopia has also used references to principles of international law to legitimize the Grand Ethiopian Renaissance Dam. Egypt has continuously emphasized the

1959 Agreement between Egypt and Sudan and the obligation of upstream states to not infringe upon the shares of the Nile water allocated to these two countries in this agreement. However, when constructing the GERD, Ethiopia has promoted a different principle of international water law, namely the right to equitable and reasonable use of transboundary water resources (Von Gienanth, 2020). This principle is outlined in the 1997 UN Convention on the Law of the Non-navigational Use of International Watercourses and in the CFA signed and ratified by most of the upstream countries in the Nile River Basin. By focusing on this principle, Ethiopia has attempted to reject Egyptian criticism about the construction of the GERD (Von Gienanth, 2020). Moreover, when Egypt, Ethiopia, and Sudan had signed the DoP in 2015, Ethiopia argued that further agreements on the construction and use of the GERD should be based on this document instead of on the bilateral 1959 Agreement that Egypt still sees as the prime legal document for hydro-political relations in the Nile basin (Haile, 2018; Tawfik, 2015; Von Gienanth, 2020). By its insistence on the principle of 'equitable and reasonable use' during the construction of the GERD, and by signing the DoP, Ethiopia has thus managed to undercut the importance of the legal principles on which Egypt bases part of its hegemonic position in the Nile Basin (Haile, 2018; Salman, 2016, 2018a).

## Conclusion

### Findings

This thesis analyzed the construction of the Grand Ethiopian Renaissance Dam through the theoretical lens of the Framework of Hydro-Hegemony by Zeitoun and Warner (2006). More specifically, this research aimed to explain how Ethiopia managed to construct the GERD despite the hydro-hegemony of Egypt in the Blue Nile Basin. Firstly, the thesis researched the hydro-hegemonic configuration in the Blue Nile Basin and concluded that Egypt is the hydro-hegemon as it possesses more structural, bargaining, and ideational power, as well as more potential for resource exploitation than Ethiopia and Sudan. Egypt has exploited this hegemonic position by using various compliance-producing mechanisms to shape the interactions in the Blue Nile Basin in its favor. By doing so, Egypt has been successful in preventing upstream states from constructing hydraulic infrastructure on the (Blue) Nile. The next chapter then introduced the GERD and Egypt's reaction to the project. Similar to when countries announced other upstream hydraulic projects, Egypt strongly opposed the GERD from the outset and used the same compliance-producing mechanisms to deter Ethiopia from constructing the GERD. However, this time Egypt's strategy was not successful, as Ethiopia carried on with the construction of the GERD despite Egyptian opposition.

The last chapter brought forward two explanations for this deviation from the conventional hydropolitical relations, both drawing on the theory of hydro-hegemony and counter-hegemony. Firstly, this thesis has shown that the balance of power between Ethiopia and Egypt has changed considerably over the past two decades. Ethiopia gained structural, bargaining, and ideational power, and developed its potential for resource exploitation. At the same time, Egypt's political instability since the revolution in 2011 negatively affected its

powerful position. The first explanation for the research puzzle is thus that Egypt's compliance-producing mechanisms became less effective because the power imbalance between Egypt and Ethiopia has decreased. Secondly, this thesis concluded that Ethiopia has used several counter-hegemonic strategies to contest Egypt's hegemonic power in the Blue Nile Basin while constructing the GERD. For example, it has used coercive strategies such as surprising Egypt with its announcement of the GERD to establish 'facts on the ground' and make the dam a reality while limiting Egypt's opportunities to react. Moreover, Ethiopia employed leverage strategies such as forming an alliance with Sudan to strengthen its position in the negotiations on the GERD. Finally, Ethiopia used transformative strategies to undermine the discourse that Egypt uses to consolidate its hegemonic position.

### **Significance**

The findings of the thesis show that analyzing the construction of the Grand Ethiopian Renaissance Dam through the Framework of Hydro-Hegemony can adequately explain how Ethiopia has managed to construct the GERD despite opposition from Egypt. Even though the theory on hydro-hegemony predicts that Egypt would be able to deter Ethiopia from building the dam, this analysis highlights that the hydro-hegemonic configuration has changed and that Ethiopia has used counter-hegemonic strategies to contest Egypt's power. The fact that Ethiopia has been able to contest Egypt's pressure through the use of counter-hegemonic strategies furthermore accentuates the importance of considering the potential of non-hegemons in research on hydro-hegemony.

### **Limitations and Future Research**

There are several limitations to this research. Firstly, due to the limited scope of a thesis, this research exclusively used literary sources for its analysis. The research could have

benefited from more data triangulation, for example by interviewing Ethiopian and Egyptian officials close to the GERD project and the associated negotiations. However, the time constraints and the lack of possibilities to travel during the COVID-19 pandemic made this type of research unfeasible. Moreover, analyzing the Grand Ethiopian Renaissance Dam sometimes proved difficult because of the ongoing nature of the conflict. The negotiations on the filling and the operation of the dam between Egypt and Ethiopia continue to develop. Therefore, the analysis in this thesis was limited to the construction and the first fillings of the GERD.

For now, the construction of the Grand Ethiopian Renaissance Dam has shown that the power dynamics in the Blue Nile Basin are changing and that Ethiopia is actively seeking to contest the hegemonic position of Egypt within the region. How the power dynamics in the Basin develop in the future remains to be seen. Future research should therefore continue to follow the developments surrounding the Grand Ethiopian Renaissance Dam and its impact on the regional balance of power. Moreover, this thesis has briefly touched upon the role of Sudan as a middle power between Egypt and Ethiopia, and its shift away from its historical alliance with Egypt. The scope of this thesis did not permit a more elaborate deliberation on the consequences of this development, but further research could explore its significance. Finally, the implications of the changing regional power dynamics on other issues than hydropolitics could be examined in future research. Potentially, the GERD will prove to be the beginning of a true *renaissance* of Ethiopian power in the sub-region.

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