

The Utilization of Nile Water among the Riparian States: Tensions and Controversies on the Filling and Annual Operation of the GERD

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Abstract

Despite the fear entertained by the downstream countries of the Nile basin, little attention was paid to the right of Ethiopia to utilize the Blue Nile waters. The purpose of this study is to explain the tension between upper riparian Ethiopia and downstream Sudan and Egypt on the Grand Ethiopian Renaissance Dam (GERD) filling and controversies on its annual operation. A descriptive qualitative research method was employed to describe the tension concerning the filling and controversies on the annual operation of the GERD. The investigation relied on secondary sources of data obtained from YouTube videos of international broadcast media such as CGTN, Aljazeera, and TRT World. In addition, national broadcast media of Ethiopia (Ethiopian Broadcasting Corporation and Ahadu Television), Sudan (Sudan Tribune), and Egypt (Daily News Egypt) accessed to make data balance. Moreover, letters from these countries sent to the UNSC have been reviewed. Besides, published and unpublished secondary sources on the Nile basin hydro-politics and the GERD were reviewed. The finding of the study reveals that the filling of the dam does not constitute significant harm as it can be seen from the first phase filling given the hydrological condition in the Eastern Nile Basin. The controversy regarding the annual operation of the GERD arises from the fear that their historical and current water use will be threatened. They wanted to conclude the binding agreement in their favor at the expense of Ethiopia's future utilization of Blue Nile water. Their fear is Ethiopia would not remain faithful to its promises that the dam and its filling do not affect their water security. Rather than basing their claim on invalid colonial treaties, Egypt and Sudan should acknowledge Ethiopia's right to utilize the Blue Nile water resource and fill the dam without causing significant harm. It is suggested to clear distrust and discuss issues of common concern by tolerating short-term risk for the long-term collective prosperity.

Keywords: *Annual Operation, GERD, Hegemony, Nile Basin Tensions, Reasonable Utilization*

Introduction

Transboundary water resources have been causes of cooperation or/and conflict among nations sharing them. There are 261 international river basins (some argue 263) (Ribeiro and Sant'Anna, 2014) where 63 are located in Africa (Wirkus and Böge, 2006), and the Nile River is one of them. It is a blend of tributaries of the Blue Nile and White Nile. The White Nile passes through Equatorial Lakes and joins with the Blue Nile at Khartoum and a great deal of water reaches Egypt. The maximum water share (86%) of the Nile comes from Ethiopia (Swain, 2011).

The quest for utilization of Nile water has been either unilateral or associated with colonial powers' interest (Merrill, 2008). The Anglo-Egyptian Nile Basin Treaty was signed in 1929

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between Great Britain and Egypt to utilize the Nile water (Zewdineh & Ian, 2004; Wolde, E. A., & Habte, A. D., 2020). It allocated 48 billion cubic meters (bcm³) water to Egypt and 4 bcm³ to Sudan. The 1929 treaty did not include upper stream countries. With Sudan's increased water demand, the 1929 agreement was revised in 1959. This treaty allocated 55.5 bcm³ to Egypt and 18.5 bcm³ of water to Sudan. Yet, it did not include Ethiopia and other upper riparians (Cascão, 2009).

The hydro-politics of the Nile basin is characterized by the contradiction of hegemony and counter-hegemony. Several institutional and legal frameworks have been developed to address the tensions between upper and downstream states in the basin. Of all, the recent agreement's Cooperative Framework Agreement (CFA) was signed by six upper riparians (Ethiopia, Kenya, Burundi, Rwanda, Tanzania, and Uganda) at Entebbe in 2010. Egypt and Sudan refused to sign this agreement. Article 4(1) of CFA discusses that riparian states have a right to utilize the Nile water resources equitably and reasonably in their territory. Similarly, article 5(1) addresses that states should adhere to principles of no significant harm in the utilization of the water resources in their territories (CFA, 2010). On the other hand, Ethiopia, Egypt, and Sudan signed the Declaration of Principles (DoP) on the GERD on 23 March 2015 in Khartoum. It incorporated provisions of equitable and reasonable utilization of Nile Water and the principle of causing no significant harm. The filling and operation of the GERD will take place on the recommendations of the International Panel of Experts (IPoE) and the finding of the Technical National Committee (TNC) (DoP, 2015).

Several pieces of researches were conducted on the impacts of the GERD and its filling on the downstream countries (Wheeler *et al*, 2016; Liersch *et al*, 2017; Abdulrahman, 2019; Elsayed *et al*, 2020). Abdelhady *et al* (2015) analyzed a new hydro-political map in the Nile basin using nationalism and hydro solidarity. Other studies identified how to address water allocation deadlock (Onencan & Walle, 2018), water security and reservoir operation (Wheeler *et al*, 2020), and the post-GERD water flow to Gezira Scheme and Lake Nasser (Zhang *et al*, 2015). Obengo (2016) investigated the solution to the diplomatic challenges between Ethiopia and Egypt. Others studied downstream states' hegemony over the Nile water and counter-hegemony (Ibrahim, 2011; Endalcachew, 2016; Endaylalu, 2019; Wendmu, 2019). Furthermore, the environmental, human rights, public health, and water treatment for community usage of the Nile water utilization (Udobong, 2016) and riparian states' perception of cooperation beyond the river have

been explored (Tawfik, 2019). Recently, Wolde & Habte worked on the title ‘trilateral talks on the filling and annual operation of the GERD: competing demands and the need for revisiting the status quo towards a negotiated settlement’ which specifically focused on the trilateral negotiation processes between Ethiopia, Sudan, and Egypt and intervening roles played by USA and WB (Wolde & Habte , 2020). Despite their invaluable efforts, little attention has been given to tensions and controversies on the filling and annual operation of the GERD. Hence, this paper examines the tensions and controversies on the filling and annual operation of the GERD between Ethiopia, Sudan, and Egypt to pinpoint possible angles of cooperation beyond the controversy.

Theoretical Frameworks of the Utilization of Shared Water Resources

Theory of Absolute Territorial Sovereignty

This theory is known as the Hermon doctrine, following the USA Attorney General Harmon who applied the idea to dispute with Mexico on the Rio Grande River (Lazerwitz, 1993). The theory argues that states have absolute sovereignty to utilize water resources within their territory regardless of the right and situations of downstream riparians (Goad, 2020). It favors upstream countries with the absolute right to divert and use the river in their interest (Qureshi, 2017). Upper Nile basin riparians have been claiming over water resources within their territory. However, it contradicts with the contemporary legal and moral frameworks adopted to utilize transboundary water resources (Yeshihareg, 2014).

Theory of Absolute Territorial Integrity

This principle advocates that downstream countries have veto power over development decisions of upstream states in the transboundary river basins. They have an absolute right to an uninterrupted flow of water from the territory of upstream countries (Lazerwitz, 1993). The upstream states are forbidden not to utilize excessive water for agricultural or hydropower purposes to the level it causes scarcity in the downstream states (Qureshi, 2017). This principle has been widely used by Egypt and Sudan to maintain the status quo and current use (Yeshihareg, 2014). Although it allows the upstream nations to utilize the water resources within their territory, it highly emphasizes water security and maintaining the natural flow of the water to downstream states. Historical and current water allocation should not be undermined

(Eckstein, 1995). However, it contradicts the principle of reasonable and equitable utilization of the Nile water resources, which is currently in use.

Theory of Reasonable and Equitable Utilization

This theory is also known as the theory of sovereign equality and territorial integrity (Rahaman, 2009). It was emerged out of Helsinki rules to maintain “equitable and reasonable utilization of transboundary water resources among the riparian states” (Lazerwitz, 1993). It recognizes that riparian states have the right to reasonable and equitable utilization of shared water without causing significant harm (Eckstein, 1995). It works for the cooperative utilization of the water resources to maintain their interests and developmental goals than selfish claims denying the right and interest of the other riparians (Qureshi, 2017). The upper stream countries of the Nile basin have agreed to implement the principle of “reasonable and equitable utilization of the Nile water resources” (Yeshihareg, 2014). This principle is also incorporated in CFA and DoP.

The Nile Basin: The Hub of Tensions

The Nile River is the world's longest river with 6,825 kilometers draining 2.9 million km². More than 250 million people are dependent on it for their livelihood (Brunnée and Toope, 2003). It is shared by 11 countries (Ethiopia, Kenya, Eritrea, Uganda, Burundi, DRC, Tanzania, Rwanda, South Sudan, Sudan, and Egypt). A great deal of water comes from the Blue Nile, which originates from Lake Tana in Ethiopia while White Nile originates from Burundi and passes through the Equatorial Lakes region. It joins the Blue Nile at Khartoum and flows to Egypt. Ethiopia is a source of Blue Nile (Abbay), Tekezze (Atbara), and Sobat (Baro), and all contribute 86% to the Nile water.

Historically, Egypt has been a hegemon over the Nile and concluded treaties with colonial powers like Great Britain in 1929 and Sudan in 1959 (Madani *et al*, 2011). At various stages and media, Egypt debated that it has exclusive rights over the Nile waters regardless of upstream states' claim. It attempted several times to halt upper riparians developing projects on the Nile River tributaries. In different times, Egypt used destabilization strategies in upstream countries to disturb their concentrated efforts to work on water resources in their territories (Paul, 2002). Its destabilization scheme was supporting ethnic conflicts and rebel groups to deteriorate

government attention from building projects. It employed this strategy mainly in Ethiopia by supporting liberation fronts, secessionist forces, and ethnic nationalism (Gebreluel, 2014).

The downstream states' share of water excluding upper riparian development interest and right agitated the quest for equitable utilization of the Nile water. The historic and natural right thesis ascribed to Egypt and Sudan was stumbled by equitable and reasonable utilization of shared water resources advocated by upper riparians. This has tightened the Nile basin hydro-politics. The old narrative excludes the upstream countries from the utilization of the Nile water, whereas the new paradigm discredits the historical hegemony over the Nile River.

The Nile and Colonial Treaties

The Nile is associated with Egypt by Greek writer Herodotus, as "Egypt is the gift of Nile" (Oloo, 2007). Egypt claims that the Nile is a gift from God, which no one could take from it. This was mainly ascribed to maintain hegemony over the river. Besides, the arrival of colonial powers shifted the geopolitics of the Nile basin. East Africa, mainly the Horn of Africa fell to the grip of Great Britain, France, and Italy (Adejumobi, 2007). Egypt and Sudan were among the British colonies in Africa.

In 1891, Great Britain signed the Anglo-Ethiopian treaty. Great Britain wanted Italy to assure it would not construct any facility on the Atbara River, which in turn sustains the Nile water's catchment. They signed it to demarcate their sphere of influence in the East and the Horn of Africa (Swain, 2008). This was not effective and sustainable because Italy was defeated by Ethiopia at Adwa in 1896. Great Britain with Egypt tried to make sure of their control over the White Nile. The Mahdist rebellion in Sudan was also another hub of a challenge for Britain to control the Nile.

In 1902, Great Britain and Ethiopia signed an agreement on the Nile. Ethiopia did not ratify this due to the different meanings it had in Amharic and English versions (Gebreluel, 2014). The English version of article III reads "His Majesty the Emperor Menelik II, King of Kings of Ethiopia, engages himself towards the Government of His Britannic Majesty not to construct or allow to be constructed any work across the Blue Nile, Lake Tana, or the Sobat, which would arrest the flow of their waters except in agreement with His Britannic Majesty's Government and the Government of Sudan" (Talwar *et al*, 2013). However, it was not ratified as some say it was

signed under duress. The Vienna Convention of the Law of the Treaty of 1969 article 52 states the treaty is void or invalid if the state is forced or threatened to sign it.

The 1929 Treaty over the Nile

The 1929 treaty was signed between Egypt and Great Britain. This treaty aimed to allocate water between Egypt and Sudan and to ensure their natural historic right over the Nile River (Cascão, 2009). The treaty allocated 48 bcm³ of water to Egypt and 4 bcm³ of water to Sudan. However, it did not include upper riparians mainly Ethiopia which contributes huge water to the Nile (Swain, 2011). The agreement espouses that Egypt would be vulnerable to water scarcity and Britain agreed to maintain its fear. In turn, the British retained its interest to navigate through the Suez Canal, which helps British Empire to have access to the Indian Ocean (Nunzio, 2013).

The 1929 agreement was biased, unrepresentative of all riparian countries. It was masterminded by the colonial powers, which by no means represent the upstream countries. According to the Vienna Convention on the Law of a Treaty of 1969 article 34-38, third-party states are “strange to the contract and can neither be beneficiary of any rights conferred thereunder nor be [bound by] any obligations imposed thereunder” (Lumumba, 2007). The only way the state may be bound by the treaty it does not sign is only if that particular treaty became part of customary international law (Shaw, 2003). Accordingly, the effectiveness of the 1929 treaty between Egypt and Great Britain would be elusive as per the International Law of Treaty concerning the succession of the states to treaties. Accordingly, Egypt inherited a “*clean slate*” from Great Britain (Lumumba, 2007). The Vienna Convention on Succession to Treaties under article 16 stipulates:

Newly independent states were not bound to maintain in force or to become a party to any treaty by reason only of the fact that the treaty had been in force regarding the territory in question at the date of succession (Shaw, 2003, p. 882).

Ethiopia’s stand on the utilization of Blue Nile (Abbay) water by no means is in question. Its refusal to the validity of the 1929 agreement assures its commitment to protect, preserve, and promote its national interest based on international law. Likewise, the progress of GERD for national development and poverty alleviation shows Ethiopia’s commitment to the improvement of its people’s life and contribution to regional integration and cooperation. It is more significant to work on issues of common concern by the Nile basin families than looking towards

insignificant external coaching. The lasting solution to Nile basin tension will not be realized by a belief in colonial treaties. Coming together and talking about their differences and ascertaining issues of collective concerns will provide a clue for cooperation.

The 1959 Agreement

The 1929 agreement was revised in 1959 owing to Sudan's claim for increased water demand (Lumumba, 2007). This treaty concluded upstream countries' water needs would be addressed based on Egypt and Sudan's goodwill (Samuel, 2008). Yet Ethiopia as a major contributor to the Nile water was neither consulted nor invited to participate (Arsano, 2007). The agreement increased Sudan's water share to 18.5 bcm³ and of Egypt to 55.5 bcm³ (Obengo, 2016). They agreed if water quantity increases and yields more, the allocation of water should be equally shared between them (Bah *et al*, 2018). Contrarily, the appropriation of water by both countries never thought of the variation of the annual discharge of Nile water, which sometimes drops less than 84 bcm³ (Howe, 2010). Due to seasonal factors, climate change, and evaporation, the water of the Nile may yield below the figures. Given the annual discharge of Nile water drop below 84bcm³, the allocated amount of water to each would also drop. Likewise, the agreement did not consider 10 bcm³ water disappears annually through evaporation at Aswan High Dam and Lake Nasser in Egypt (Bah *et al*, 2018).

Both 1929 and 1959 agreements in advance consolidated Egypt's monopoly over the Nile water. At some point, they should have thought that concern over the water of the Nile would rise from upper basin countries when their need and economic power allows. Egypt is more concerned about colonial treaties than recent ones while upper riparians including on behalf of whom the British signed the 1929 agreement rejected these agreements. Egypt's argument in favor of colonial treaties contradicts the Convention on the Law of the Non-Navigational Uses of International Watercourses of 1997. This convention sanctions "watercourse states shall in their respective territories utilize an international watercourse equitably and reasonably" (Shaw, 2008). Recent developments in Ethiopia and its claim for its natural right (Swain, 2002) over the Nile water corresponding to its huge water contribution have partly changed the hydro-politics and geopolitics of the Nile basin. In the end, it would be important to focus on growing development demands and basin-wide cooperation by developing wide legal and institutional frameworks.

Research Methodology

This research employed a descriptive qualitative method with critical reflection to examine the tension and controversies on the filling and the annual operation of the GERD. It relied on secondary data sources from books, articles, reports, official documents communicated by these states to United Nations Security Council and Nile basin agreements (CFA, DoP). Besides, interview videos regarding the Nile water tensions, GERD, and its filling were accessed from CGTN, Aljazeera, and TRT World. In addition, national media of each country such as Ethiopian Broadcasting Corporation (EBC) and Ahadu Television, Daily News Egypt and Ahram Online, and Sudan Tribune were used as sources of data to balance the concern of each side. These international media outlets were chosen because they interviewed representatives of each country and scholars who have sufficient information about the issues on the ground. Data obtained from these sources qualitatively analyzed using content analysis.

Result and Discussion

Ethiopia's Quest for Utilization of the Blue Nile Water

The Blue Nile (Abbay) River (Arsano, 2007) joins with the White Nile at Khartoum. Several pieces of literature label Abbay the Blue Nile (Swain, 2011), which is contrary to its connotation in Ethiopia. The word *Abbay* is probably equivalent to the word “power, hope, and faith” (Ethiopian Herald, 2020). However, the Blue Nile has something to do with the water texture that comes from the Ethiopian highland transporting fertile soil (Paul, 2015). Abbay (Blue Nile) river is “believed to be the father of all rivers and the symbol of the Ethiopian nation” (Arsano, 2007). Ethiopia, therefore, is striving to develop projects on its water that mainly originates from its land where no one has a claim.

Ethiopia claims for its right to utilize the water resource lies in its very heartland. Egypt by hook or crook has been attempting to stop Ethiopia from developing any project from the time of antiquity (Swain, 2008). This argument is raised because any development in Ethiopia would cause water insecurity in Egypt. This objection does not fit the right of all riparians because it affects their interest and demand. On the other hand, Sudan has shown a sign of moving away from downstream historical claims. This was indicated in the 1991 Ethio-Sudan agreement on the equitable utilization of the Blue Nile and Atbara rivers (Zeydan, 2018). A slight slide of

Sudan from this counts to equitable and reasonable basin-wide utilization of the Nile water resources.

In 1993, an agreement was signed in Cairo between the Transitional Government of Ethiopia and Egypt. The agreement mainly emphasizes the consolidation of friendship and cooperation between these countries “to establish a broad sense of common interest” (Arsano, 2007). Both parties agreed not to cause significant harm, especially to the downstream nations. They also looked into basin conservation and development on the Nile water has to be consulted or made known before its commencement. This was broken when Egypt developed several projects in the West and East of Sinai, Toshka project and North Sinai Development projects (Swain, 2008).

Before the 1990s, Ethiopia took an observer position and Egypt was the mastermind of the Nile basin negotiations. In the post-1990s, Ethiopia has visibly begun to demand a comprehensive framework on the utilization of Nile water (Nicol and Shahin. n.d). The GERD is a response to past injustice as well as lapses of development efforts in Ethiopia. The population surge in Ethiopia necessitates a sustainable economy to survive the negative impact of the population increase. It is not an option to utilize the Blue Nile water, but a matter of existence (Arsano, 2007). Taye Atske Selassie, Ethiopia’s Ambassador to the UN on 29 June 2020 said, “The Nile is as important to Ethiopia as it is to Egypt and Sudan as a source of livelihood and development”. The Ethiopian government indicated more than fifty million people live without electric light and still depending on wood fires. Here, Ethiopia has two options. The first is observing Blue Nile water running down through the course to flourish downstream countries and singing about it for the rest of its life. This is not possible because it does not contribute to Ethiopia’s development and to reduce surging poverty. The second argument is that Ethiopia should utilize its water resources and provide light to its poor people, address the scarcity of drinking water, fish production, and tourism. This has to be done in a way it does not affect the downstream countries. Sudan and Egypt, on the other hand, should cooperate on project development in Ethiopia to tackle perceived damages proactively.

On the other hand, Egypt’s military threat to Ethiopia for many years bears no solution to Nile basin tension. The Ethiopian government responded that this threat is a daydream and nonsense (Abteu, 2014). Military threats would worsen the situation and reverse the condition that could be resolved by cooperation. Military threats bear no promising fruit because of the following

facts. First, Egypt shares no border with Ethiopia. This is a challenge to Egypt's military actions against Ethiopia. The only means to do this is if Sudan cooperates with Egypt. If this is so, military action against Ethiopia by a coalition of Egypt and Sudan is more than a Nile water and might be an invasion. The issue of Nile will not obtain a lasting solution by military action. No disagreement has ever been solved through war. Yohannes Gedamu, a Lecturer of Political Science at Georgia Gwinnet College indicated that threatening a country that contributes more than 85% of water to the Nile would make Egypt's future more complicated (Foster, 2020). Adel Darwish argued on the TRT World "the Nile issue is not going to be resolved through war because war is a means to an end" (*ibid*). Abere Adamu, head of the GERD Public Participation Coordination Office indicated that Ethiopians commitment to fund the GERD and to confirm their concern has increased than ever. The fact is that any attempt that Egypt might make to demoralize Ethiopia motivates them to double their participation to the extent of sacrificing their life. The truth is that Ethiopians have the strength and determination to stand for their sovereignty and country (Surafel and Lidya, 2020).

Second, suppose Egypt strikes the GERD. The question is why would Egypt attack the GERD? Is it because the dam is a threat to Egypt's water security or another intention is behind it? If it is for the first one, the issue can be resolved through negotiation. If it is for the second question, it is clear that Egypt's demand is beyond the GERD and water security. There would be no significant gain to both Ethiopia and Egypt from war. It would be significant to tolerate short-term risks and enjoy lasting economic and infrastructural benefits (Abdelhady *et al*, 2015).

Third, Egypt knows war is not a viable solution to the Nile basin tension. Downstream Sudan is not fond of this, because its concern is Ethiopia's utilization of Blue Nile waters without causing significant harm and the GERD's role to reduce flood and siltation run-off to its dams. The reduction of silt, sand, and clay amounted to 110 tons annually is not only beneficial to Sudan but for Egypt too (Tadesse, 2008). Sudan in advance needs the construction of GERD in a way that it would not cause significant harm and reduce flood and siltation run-off to its dams on the Blue Nile. The project maintains Ethiopia's interest to utilize the water resource within its territory for development and fighting abject poverty. In the same way, it also interlocks these countries to work for collective prosperity and a common future through the utilization of the Nile water.

Is GERD a Potential Threat to Downstream Countries?

The issue of utilizing Nile water has been a cause of disagreement between the upper and downstream countries. The sharing of water between Sudan and Egypt without considering the interest of upstream nations led to a quest for equitable and reasonable utilization. The GERD on its completion will hold 74.01 bcm³ of water and storage of 59.22 bcm³ (Upadhyay and Gaudel, 2017). Egypt and Sudan are scared it will affect their historical right on the Nile waters. Ethiopia argues it has a natural right to utilize water running from its territory. Ethiopia does not consume water resources that balance its water contribution compared to Egypt, the consuming riparian. Egypt's reluctance to change the status quo and work for joint water management has been a potential cause of unilateral developments (Swain, 2002). Likewise, unilateral development of large-scale projects by downstream countries did not consider Ethiopia's interest (Zeydan, 2015). Besides, the adamant praise of colonial treaties has been a principal obstacle to reaching a comprehensive arrangement. To maintain equitable and reasonable utilization of the Nile water resources, upper riparians signed the CFA in 2010. This agreement incorporated issues of "development, protection, conservation, and management of the Nile River Basin and its resources and establishes an institutional mechanism for cooperation among the Nile Basin States" (CFA, 2010). It was signed by six upstream states (Ibrahim, 2011), while DRC repeatedly expressed its intention to sign it but not yet (Mehari, 2020). Egypt and Sudan did not sign the agreement because they assumed it would nullify their historical right and current use (Swain, 2011). It introduced equitable and reasonable utilization of water resources and no harm principles, which are opposite to historical hegemony over the Nile waters by Egypt. The inclusion of these principles into the CFA has changed the Nile basin geopolitics. It was based on articles 5, 6, 7 of the United Nations Convention on the Law of Non-navigational Use of International Watercourse signed on 21 May 1997.

Salman (2011) identified three areas of disagreement by Egypt and Sudan regarding the CFA. These are i) the existing uses of water by Egypt and Sudan, ii) consideration of colonial treaties, particularly the 1929 Agreement, and iii) the notification for planned projects and the amendment of CFA whether should be by a majority, or by consensus. In 2015, Sherif Ismail, the Egyptian Prime Minister capitalized that Egypt has three main concerns on the GERD. These concerns are preserving Egypt's historical water share, ensuring that the GERD is not used for any political purpose, and implementing the construction stages as previously agreed (El-Sebahy,

2015). Besides, Article 14 (b) of CFA became a cause of disagreement between the upper and downstream states. The Article states, “not to significantly affect the water security of any other Nile Basin State” (CFA, 2010). Egypt and Sudan wanted it to be redefined “not to adversely affect the water security current uses and rights of any other Nile Basin States” (Nicol and Cascão, 2011). The refusal of downstream states to sign and accept CFA has led to unilateral action for GERD by Ethiopia on the Blue Nile and Equatorial Lakes states on the White Nile (Wendmu, 2019). Following CFA, the commencement of the GERD in 2011 shook the long-established hegemony of Egypt and Sudan.

On the other hand, Ethiopia, Sudan, and Egypt signed the DoP in 2015. Article II of the DoP indicates, “the purpose of GERD is for power generation, to contribute to economic development, promotion of transboundary cooperation and regional integration through the generation of sustainable and reliable clean energy supply”. Similarly, the principles of not causing significant harm (Art. III) and Equitable and Reasonable Utilization (Art. IV) were included to resolve the Nile water utilization nightmare. Getachew Mekonen, Ethiopian Foreign Relation Strategist and International Researcher indicated on Ahadu Television that the DoP suggested that these countries, based on the finding by the International Panel of Expert and Technical National Committee comprised of scientists from these states, have to reach an agreement (Surafel and Lidya, 2020). An attempt to maintain its historical interest and monopoly over the Nile water urged Egypt to claim that the GERD is potential harm to its water security. The reality on the ground, however, differs. If Egypt needs to sustain its water needs and benefit from the Nile, sticking to equitable and reasonable utilization without causing significant harm is a wise choice. Fekahmed, the Executive Director of the Eastern Nile Technical Regional Office (ENTRO), indicated on Ahadu Television that, in May of 2018, a tripartite committee of Scientists was organized to study the filling and water release. He stated, the members of the Committee presented their findings for water ministers of Nile riparians on 25 September 2018 at Addis Ababa. Majorities of water ministers agreed including Egypt’s water minister, who later changed his mind after he was back in Egypt (Surafel and Lidya, 2020).

The Convention of transboundary water indicates that states have sovereign rights to utilize water resources in their jurisdiction without causing damage to the environment and significant harm to lower riparian countries (Okoth-Owiro, 2004). The construction of the GERD hinges on this standard, which Ethiopia made clear from its start. On 2 July 2020, the good way to respond

to this tension is through hydro-diplomacy and joint basin management that are vital instruments to reduce predictable harms in the future. The GERD does not pose a substantial threat to downstream states; however, it encourages cooperation. According to some studies, increased hydropower project development in Ethiopia regulates the flow of water to downstream riparians, decreases high water evaporation, and maintains water availability downstream (Satti and Siddiqui, 2015). Ethiopia, the origin of the Blue Nile has vast potential for hydropower development. Karyabwite (2000) argues that developing mutually beneficial arrangements has to be appreciated and Egypt has to work with Ethiopia to address its hydroelectric power scarcity by constructing dams in Ethiopia. Furthermore, Egypt and Sudan will benefit from the dam as it “protects them from flooding, reducing sedimentation, allowing irrigation expansion, boosting water use efficiency, and providing them with cheap and clean energy” (Sudan Tribune, 2013).

A recent interview with Fekahmed Negash indicates the GERD has importance to Egypt and Sudan as well. He pointed out that the dam reduces water evaporation at the Aswan High Dam and Lake Nasser. Likewise, it guarantees the safety of dams built on the Nile in Sudan and Egypt by holding silt and sand run-off (Surafel and Lidya, 2020). The GERD will produce huge power that Ethiopia will not only use for itself but also export to neighboring countries. Some argue Egypt’s development is more confronted by lack of power than lack of water. On the other hand, Ethiopia has enormous potential for generating hydroelectric power. To address the power shortage in the Nile basin, cooperation with Ethiopia will yield a win-win solution (Karyabwite, 2000). The GERD would help Sudan to regulate “its irrigation system more rapidly, like water stored in those locations would be delivered by gravity flow, and pumping expenses would be kept to a minimum” (Wu and Whittington, 2006).

Generally, the GERD is not a threat to the downstream countries as they attempted to portray. Their commitment to utilizing the Nile water equitably and reasonably as mentioned in the DoP yields more results if they add their respective political commitment. Besides, resorting to their tripartite solutions and work on the detailed technical issues as mentioned in the DoP is productive. Egypt and Sudan should come to recognize that Ethiopia as a country contributing 86% of water to the Nile has the right to utilize the water resource within its territory. They have to also share the benefit of the GERD yields in terms of hydroelectric power, reduction of flood and sedimentation, and reduction of water loss through evaporation. Moreover, the economic and

cooperative aspect of the project for investment, regional cooperation, and integration is very significant.

The Filling Tension and Controversy on the Annual Operation of GERD

The filling of the GERD and its annual operation are other sources of tension between Ethiopia, Sudan, and Egypt. The dam progress is at 76%, thus, the need to store water in the reservoir is necessary to start the test as per the statement of the Ethiopian government. This tension arises from the period of filling and the operation of the GERD, given the fear of downstream states. Regarding the filling of the dam, according to their agreement in the DoP, the implementation of filling and the operation of the dam will be implemented based on the recommendation of the IPoE and the Technical National Committee drawn from these three countries (DoP, 2015).

Egypt announced that Ethiopia would not start filling without reaching on binding agreement on the filling timetable by the three nations (El-Said, 2020). Sudan's Irrigation and Water Resource Minister claimed that signing an agreement is a prerequisite before filling the dam and Sudan has the right to demand it. Sudan does not accept the unilateral filling of the dam and he mentioned, "Sudan's support for the right of any country an equitable use of water without causing harm" (Xinhua, 2020). He argued, "the filling of GERD's reservoir would affect storage in reservoirs at the Roseires and Sennar dams on the Blue Nile" (Daily News Egypt, 2020). According to Article V (a) of the DoP, these nations agreed on guidelines and rules on the first filling of GERD, which shall cover all different scenarios, in parallel with the construction of the dam. Sudan and Egypt stressed that reaching a binding agreement on the filling and annual operation of the GERD is mandatory. Ethiopia, on the other hand, strongly rejected that the agreement will affect its future project development. Instead, Ethiopia drafted a proposal of "guidelines and rules agreement on the first filling of the dam that could be unilaterally modified in some aspects and even repealed in certain cases" (Sudan Tribune, 2020).

Ethiopia arranged the schedule and volume of water to be filled within four-to-seven years considering the probability of drought occurrence in the basin. Egypt, on the other hand, insisted the filling of the dam should be from 12-20 years (Ottaway, 2020). However, Sudan proposed five years to fill the GERD (El-Said, 2020). The negotiation between Ethiopia and downstream Egypt and Sudan is tough as the downstream states strongly insisted on the historical rights, which Ethiopia considers unfair. Egypt perceived the GERD filling as a security issue and took it

to the UNSC on 1 May 2020. In the letter, Egypt requested UNSC to encourage Ethiopia to accept the agreement that was brokered by the World Bank and the USA (Wolde, E. A., & Habte, A. D., 2020). As a response, Ethiopia sent a letter to the UNSC on 14 May 2020 that GERD filling and operation issue is not a political and security issue; rather, a technical issue that can be addressed at trilateral negotiations. In one of its letters to the UNSC on 24 June 2020, Sudan indicated the UNSC should encourage Ethiopia and Egypt to show political will and commitment to resolve the conflict and work for a common future. The UNSC recommended the three countries resolve their common issues through tripartite negotiation under the auspices of AU.

In July, Ethiopia filled 4.9 bcm³ of water (EBC, 2020). Regarding this filling, Adel Darwish on TRT World indicated, “despite some political noises, there was no real hardship due to the filling of the water in Egypt” (Foster, 2020). Osman El-Tom, former Minister of Water Resources and Irrigation discussed on Aljazeera that the first phase filling should not be a serious threat to both Sudan and Egypt. He indicated, water simply passes through the dam and the volume of water in the first phase filling is small (Khan, 2020). Gedion Asfaw, the Head of the Technical Committee, Ethiopian Negotiating Team, and Former Head of IPoE stressed on Aljazeera that the filling of the dam is stage-based that takes 4-7 years although it could be filled within 2-3 years given the hydrology of the Blue Nile (*ibid*). He indicated filling the GERD does not affect the water situation of the downstream counties, because the availability of rainfall in Ethiopia is reliable. The filling of the dam will take place based on the DoP principles that Ethiopia, Sudan, and Egypt that the GERD is not a threat, but a tool of cooperation and integration (Tesfa-Alem, 2016).

Dr. Nasr Allam, former Egypt Water Minister on CGTN specified that Egypt’s requirement was a reduction of the size of the GERD considerably to reduce the damage it causes downstream (Beatrice, 2014). In all its effort, Egypt has been trying to influence Ethiopia to reduce the size of the GERD in its favor. However, Ethiopia remained firm in its project because this matter falls to Ethiopia’s sovereign authority. Mac Sharkawy, a Researcher on Egyptian Affairs and Expert in Middle East Affairs on Aljazeera indicated that the problem with Egypt arises from a lack of trust in Ethiopia. He stressed that “we cannot trust Ethiopia will remain faithful to its word regarding downstream Egypt” (Khan, 2020).

The second stage of filling will be undertaken in the summer of 2021. This year, Ethiopia planned to fill 13.5 bcm³ of water in the GERD reservoir (Khan, 2020). The remaining filling phases require the commitment of tripartite negotiations to manage technical issues as mentioned in the DoP and all parties should take it seriously. The filling of the dam during the months' rain reaches its peak guarantees the interests of the three countries. Sudan and Egypt with Ethiopia have to work hard to achieve collective as well as their separate interest attached to the Nile water (Abdelhady *et al*, 2015). The responsibility to ensure sustainable water use and basin management is at the disposal of all riparian countries. This cannot be realized without the commitment of all parties in the basin guided by the principle of equitable utilization of the Nile water mentioned in the CFA and DoP.

Regarding the annual operation of the GERD, there have been controversies. Ethiopia, Sudan, and Egypt in Article V (b) “agreed on guidelines and rules for the annual operation of the GERD, which the owner of the dam may adjust from time to time”. Article V(c) of the DoP states, “to sustain cooperation and coordination on the annual operation of GERD with downstream reservoirs, the three countries, through the line ministries responsible for water, shall set up an appropriate coordination mechanism among them”. The GERD is the property of Ethiopians, built in the sovereign country to ensure equitable utilization of the Nile water based on the international water law. The matter of the annual operation of the GERD, therefore, remains in the sole authority of Ethiopia, the owner of the project. Regarding this, Fekahmed on Ahadu TV indicated that the GERD is Ethiopian property, is funded by Ethiopians, in the Ethiopian land, and on its river. The filling and managing water release should be left to the Ethiopian government. Ethiopia has the responsibility to release water for the downstream countries, not for the historical relationship we have with them, but for our good neighborhood and regional cooperation (Surafel and Lidya, 2020).

The tripartite negotiation regarding the filling and annual operation of the GERD has not yet reached an agreement. Egypt and Sudan need a binding agreement before Ethiopia fills the dam and operation of the dam. Ethiopia, on the other hand, does not want this because it affects its future development plans on the Blue Nile. At the same time, Egypt and Sudan want to maintain historical claims and current uses of water. These issues and contradictions are challenges to the progress of the negotiation.

Either Cooperation or Conflict: Cost and Benefit Analysis

The Nile water has been a cause of disagreement between the upper and downstream countries. Downstream countries' insistence on the historical right and upstream states' claim for reasonable and equitable utilization tightened the Nile basin hydro-politics (Zeydan, 2018). Mostly, Egypt's claim of dependence over the Nile water for electricity, food, and drinking has been mentioned to be a potential source of conflict. William Davison, an analyst at the International Crisis Group on TRT World described the conclusion of recent treaties in the Nile basin ensured colonial treaties are obsolete and no more reliable (Foster, 2020). Similarly, Adel Darwish argued that the chief factor of tension in the Nile basin is not the dam, but worries predated the GERD and aimed to cherish the 1929 and 1959 treaties (*ibid*). The indicator is, Egypt feared it and called for the UNSC to intervene to stop Ethiopia from filling the dam without reaching an agreement. This was not the matter that the Security Council is responsible for rather it is within the mandate of these riparians. In the interview on TRT World, William Davison discussed:

It is neither clear how does taking the issue of the GERD to the UN Security Council address the dispute nor changes Ethiopia's position which is being consistent since the inception of the project in 2011. Egypt and Sudan should accept the reality of the GERD on the ground that it is filled with 4.9 bcm³ of water, which makes bombing the dam an insane thing to do because of the damage it causes downstream (Foster, 2020).

On the other hand, upstream countries claim they have an equitable and reasonable utilization of water resources in their sovereign territory for their wellbeing and development (Cascão, 2009). To ensure sustainable utilization of Nile waters, the Nile Basin Council of Ministers drafted CFA with an endorsement to establish a permanent Nile basin commission in 2007 (Swain, 2011). This draft was signed by six upstream countries in 2010. The central thesis of this agreement is equitable and utilization of Nile water resources without causing significant harm. Despite their concern of maintaining the status quo, Egypt and Sudan did not sign the CFA. Contrarily, they argue in favor of colonial treaties and historical and current water use, which contradicts the equitable and reasonable utilization of common water resources. The grave barrier to Nile basin cooperation is the downstream states' unjust claim over the just claim of upstream riparians.

Ethiopia as a major contributor to Nile waters has not utilized it yet. The GERD is one of the indicators of equitable and reasonable utilization of the Nile water without causing significant harm. However, the downstream states especially Egypt have been wandering in the Arab Leagues to gather support, escorted by the United States whereby Donald Trump officially told the Sudan Prime Minister that Egypt should bomb the GERD. What Egypt and Sudan are doing by far is not to narrow the gap by adhering to the principle of equitable and reasonable utilization of Nile water, rather extend the status quo. In doing so, they reject what they have agreed in the DoP in 2015. Rather than looking at the riches that the GERD brings to East Africa and Africa as a whole, they misleadingly portrayed the project as a curse. Moreover, a military deterrence that Egypt makes against Ethiopia bears no solution to Egypt's water security. War is the stick of those who have no truth and want to attain the wrong claim unfairly. This will never solve the tension that may arise from the project itself, the filling, and the annual operation.

The Nile basin countries could be more beneficial from cooperation than confrontation. Cooperation is the most important instrument to attaining common development goals (Barnaby, 2009). The Nile water is an important instrument for regional economic and developmental cooperation. Beyond energy, food security, and other aspects of development, the Nile is a potential source for attracting foreign investors and donors (Talwar *et al*, 2013). The cooperative aspect of megaprojects on Nile water creates diplomatic, regional, and economic importance. Infrastructural development along the basin has to focus on national, regional, and transboundary implications whereby these benefits are equitably shared among the riparian states.

Conclusion

The Nile water has been a source of tension among the Nile riparians for many years. The basin has agonized from a lack of far-reaching institutional and legal frameworks, which resolve their disagreement. The argument arises from the historical right thesis purported by downstream countries and equitable and reasonable utilization of Nile water resources by upper riparians. The extreme reliance of downstream states on colonial treaties is challenged by the upper countries who were not a party to it. The CFA included the principles of equitable and reasonable utilization of the Nile water resources without causing significant harm. This has changed the Nile basin hydro-politics as the GERD commenced to follow it. The construction of GERD on the Blue Nile has been depicted by Egypt and Sudan as a monster of concrete that arrests water

flow downstream. Egypt attempted to halt any financial support by international donors and countries to the GERD and to preserve its hegemony regardless of its zero water contribution. The downstream states' self-centered claim has been an obstacle to equitable and reasonable utilization of Nile water resources for developmental purposes.

Besides, the quests for equitable and reasonable utilization of the Nile water resources, the filling, and the annual operation of the GERD have been points of controversies. The tripartite negotiation between upstream Ethiopia and downstream Sudan and Egypt has been on track since the commencement of the GERD. In 2015, these countries signed the DoP, which discusses the equitable and reasonable utilization of the Nile water, not to cause significant harm, the filling, and the annual operation of the GERD. The ambiguity about how to fill the GERD and manage the annual operation has kept the room open for the three states to address it through negotiation. The solution to controversy related to the filling and annual operation of the GERD lies in the hand of the three states. As mentioned in the DoP, the purpose of the GERD is power generation to bring economic development, cooperation, and regional integration. Despite this, the tension between the downstream states and Ethiopia has not yet been overcome. Egypt's and Sudan's securitization of the filling and operation of the GERD and their reluctance to recognize Ethiopia's right to utilize its water resources has been the root causes of all these confusions. Cognizant of the significance it has as agreed in the DoP, tensions attached to the filling and operation of the GERD should be handled at a tripartite negotiation. Furthermore, the dam filling tension proceeds from lack of trust and fear of discredited historical monopoly over the Nile and the change of geopolitical power.

It is recommended that in order to bring a lasting solutions to the Nile basin, all riparians should stick to the principle of equitable and reasonable utilization of the Nile water resources without causing significant harm. They should show political commitment and diplomatic effort for collective development and prosperity as a Nile family. The downstream countries should accept the reality that colonial treaties are obsolete and should not be used to impede others from utilizing water resources in their territory. The conclusion of recent agreements such as CFA and DoP indicates that these treaties are no more valid. The tripartite talk regarding the GERD's filling and management of technical issues should be made from the perspective of equitable and reasonable utilization of Nile water resources without causing significant harm. Egypt and Sudan

should accept the fact that the GERD is a tool of regional economic and infrastructural cooperation.

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