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Original Article

Conflicts and Treaty over the Nile Basin. A Critical Review

Asabeneh Alemayehu^{1*}

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Keywords:

Conflict, Cooperation, Nile Basin, Riparian Countries, Treaty. The Nile, which flows through ten river basin nations, is the most crucial water channel in Africa's north-western region. The river receives its water from two key rivers: the White Nile in Burundi and the Blue Nile in Ethiopia. The Atbara River, which commences in Sudan and runs north of Khartoum, connects the two rivers. The Nile River is the foundation of life and conflict. Conflicts between riparian countries that rely upon this common freshwater source have grown as a result of the river's deterioration and problems with water scarcity in the basin. The bilateral agreement that governs the allocation of water among the nations allocates the majority of the Nile river's flow to Egypt, which is the downstream country, and the remaining portion to Sudan, leaving the other nations that make up the Nile catchment deprived of determined shares. Although there is a chance for conflict amongst Nile riparians, current attempts to forge an all-encompassing regional agreement to control the river's use encourage riparians to work together rather than compete for water in the future. The Nile River would not have caused conflict amongst its riparian countries if it had been apportioned evenly. For millennia, the Nile's countries that border it have worked cooperatively to overcome problems throughout the basin in order to utilize the resource for the benefit of future generations. Various forms of international technological cooperation have been signed to halt conflicts and bring sustainable management to the Nile basin. This review addresses the conflicts and treaties in the Nile Basin between the Nile riparian countries. It also describes international collaboration, emphasizing the latest Nile Basin Initiative as an example of successful multilateral cooperation that could avert future conflicts over the Nile.

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¹ Ethiopian Forestry Development Bahir Dar Center, P. O. Box 2128, Bahir Dar, Ethiopia.

^{*} Correspondence ORCID: https://orcid.org/0000-0002-7752-4836; Email: alemayehuasabeneh@yahoo.com

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INTRODUCTION

The Nile River Basin, with an extent of 3.1 million kilo meter square, comprises approximately ten percent of Africa and 2.3 percent of the globe's surface territory (Mohamoda, 2003; Mwangi & Mbaku, 2015). It is the longest river in the entire globe, although it merely transports little water. The huge Nile River is Africa's critical and shared water basin. The basin's inhabitants, economic progress, and the desire to maintain hundreds of millions of people's lives have increased the anxiety in the Nile River basin, which is shared by eleven countries (Mwangi & Mbaku, 2015). Despite making up 10% of Africa's geography, these nations are home to 40 percent of the area's inhabitants, and 70 percent of them live in the Nile basin (Mwangi & Mbaku, 2015).

Egypt, which is located further downstream, has always used the Nile extensively, virtually fully using its waters. Egypt's superior economic and military power over its upstream countries allows it to effectively govern most of the water (El-Fadel et al., 2003). However, the upstream regions are starting to think about gaining more control over the basin in an effort to spur economic growth and support the expanding populations. Unresolved conflicts have impeded the economic progress that the majority of the countries in the basin have been pursuing. In fact, disputes over the Nile's usage have existed for a long time because these nations are dependent on the Nile for their water needs (El-Fadel et al., 2003). The discriminatory sharing of the Nile's waters has caused grave anxieties all over the region for half a century. As an illustration, Godana (1985) notes that with the establishment of European colonial law over the Nile basin during the last decades of the 1800s, the use of the Nile River was regulated by a number of treaties, along with the obligations and water rights associated to the different colonial territories throughout the basin.

Several agreements, for example, in 1929 and 1959, authorized Egypt to consume and govern

the Nile Stream. The initial agreement (1929) settled Egypt's rejection power over any developments concerning Nile water, and the next (1959) agreement permitted full use of the resource (Yaekob, 2011), countenancing Egypt to share purely 15.5 percent of the river with Sudan. Egypt has achieved control over the use and development of water from its origin to the end since those accords sited Egypt in a hydrohegemonic stance. As a result, unlike other important global rivers, the Nile lacks a basin-wide consensus or regulatory organization (Arsano & Tamirat, 2005; Yaekob, 2011).

In the pre-colonial periods, the preparedness to forge technical collaboration among riparian states was puny (Arsano & Tamirat, 2005). Well ahead, owing to the rising population and improvement requirements in the agriculture, industry, and energy as well as the De-Colonization of some nations in the Basin from British rule, the need has arisen for a review of old agreements such as 1929, 1959, and others (El-Fadel et al., 2003), which favour the advantage to Egypt over Nile River. The countries bordering the upper Nile have contested Egypt's attempt to seize its water resources by securing plans for further autonomous expansion. All of the Nile's riparian nations, notably Egypt, developed the ingenuity to establish an everlasting legal body responsible for the river's supremacy in order to address this difficult state of affairs (El-Fadel et al., 2003). Consequently, the Nile Basin Initiative (NBI) emerged. In this initiative, the six riparian nations signed the Co-operative Framework Agreement (CFA) following a decade of negotiations facilitated by the World Bank. However, Egypt and Sudan rejected it, and the agreement is still outshined by an essential fight among upstream nations requesting to advance the water resources and Egypt besieged to keep current downstream flows. By addressing these problems, we can better grasp the existing literature and arguments pertaining to the Blue Nile basin. Therefore, this review paper is

intended to address the conflicts and treaties regarding the practice of the Nile Basin by lower and upstream riparian states as well as non-riparian countries. Firstly, the Nile Basin's general background and basic hydrology have been discussed. Then conflicts, treaties, and multilateral cooperation over the Nile Basin were assessed and elaborated in detail. This study employed books, articles, and journals to review conflict, treaties, and cooperation over the Nile Basin.

General Background on Nile Basin and Its Basic Hydrology

The Nile gets its name from "Nahal," referring to "river valley" in Semitic, after which it gets "neilos" in Greek and "Nilus" in Latin (Lowell, 2008). It is the earth's largest river, running 4,187 miles from its headwaters in Burundi's highlands (Lowell, 2008). Its foundation is far from the Mediterranean. It flows from south to north (6,695) km) across 35 degrees of latitude, passing past ancient civilizations (Taha, 2005; Lowell, 2008). The basin is inhabited by eleven nations, including Egypt, Sudan, South Sudan, Eritrea, Ethiopia, Uganda, Kenya, Tanzania, Burundi, Rwanda, and the Democratic Republic of Congo (DRC). It emerges from two independent places: the White Nile in equatorial Africa and the Blue Nile in Ethiopia's highlands.

The overall basin area discharges 3,200,000 m³ annually, similar to the rivers La Plata, Congo, and Mississippi. The White and Blue Nile have been divided into ten smaller sub-basins (Lowell, 2008). The Blue Nile contributes to approximately 85% of the basin's total annual flow and is the Nile River's largest provider of water. While the White Nile accounts about 15% of total Nile Basin flow (Lowell, 2008).

The Blue Nile runs from the Ethiopian highlands into the capitol of Sudan, traversing several significant dams along the way. For example, there are three reservoir dams in the Tekeze-Atbara sub-basin, a regular section of the Nile.

These include the Khashim and Girba dams in Sudan and the TK5 dam in Ethiopia. The sub basin for White Nile includes i) Lake Victoria sub-basin, that delivers all of the liquid towards Jinja's Victoria Nile (Uganda), ii) the Victoria sub-basin, which discharges water commencing Jinja to the Lake Albert, iii) the Lake Albert sub-basin, which comprises the fabled Ruwenzori Mountains, Lake Edward, and Lake George (Taha, 2005; Lowell, 2008) and Iv) The Bahr el Jebel sub basin (known as the Mountain River). Once the Nile Albert flows northward through the Bahr el Jebel sub-basin, the Bahr El Jebel River appears.

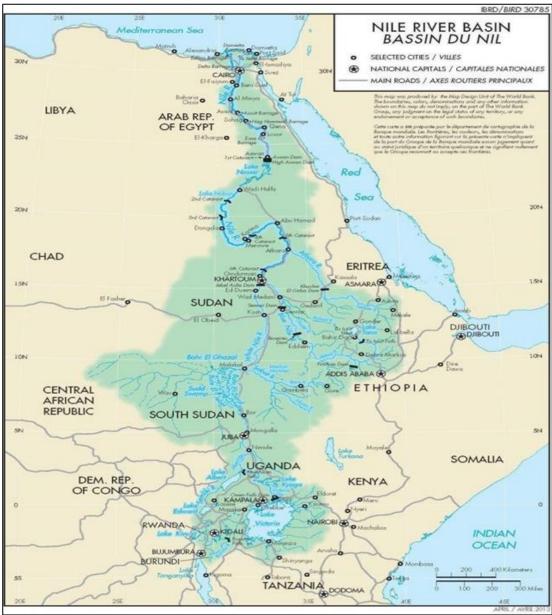
The Bahr el-Jebel receives water from the Ethiopian highlands as well as from the South Sudanese plains (Akobo, Pibor, and Sobat Rivers). This results in the creation of the White Nile, which stretches from South Sudan's Malakal to Sudan's Khartoum (Taha, 2005; Lowell, 2008).

Finally, the major Nile sub-basin, or single stream, was finally formed near Khartoum, Sudan, when the White and Blue Niles converge.

More than 257 million people, or around 54 percent of the total population in the 11 nations that belong to the Nile, live in the Nile Basin (Lowell, 2008). Its habitats are incredibly diverse, with a sizable portion falling into the dry and semi-arid categories (Taha, 2005; Lowell, 2008).

It has been discovered that these different ecosystems, along with their distinct climate zones, influence the population's geographic distribution across the watershed (Lowell, 2008). For their subsistence, the riparian people rely mostly on the extraction of the environment and water resources. The complicated hydrology of the Nile, the wide distribution of water resources among the many nations that share it, the increase in population, development, and climate changes all present serious obstacles to the long-term preservation of the common water resources (Lowell, 2008).

Figure 1: Nile River Basin map



Source: (NBI, 2016)

The reasons for Nile water degradation include water diversions by dams and canals, industrialization, and population growth. While these factors have social and economic benefits, they also distress the amount and quality of accessible freshwater. The effects of Nile contain thoughtful human health problems, impairment to agricultural products and fisheries, and human displacement. When combined, these factors frequently result in domestic unrest, which can spark international conflict, especially when a shared resource is the cause of the issue.

Conflicts over the Nile Basin

From the time of the ancient Egyptian empires to the overseas era to the present, the Nile basin has seen a protracted period of instability and disagreement. It continues to be viewed as the root cause of a protracted confrontation between riparian nations, with Ethiopia and Sudan's counter threats to Egypt's principal concerns (Mohamoda, 2003). The Nile basin dispute began in 1704 when the Ethiopian King rejected an Egyptian Pasha's bluff that he might halt the Nile the water's flow (Wolf, 1998). Non-riparian

nations including France and Britain were involved in "water battles" over the waters of the Nile in 1898 in order to protect their individual colonial objectives as well as the well-being of their colonies. Merrill (2008) reports that during that year, an attempt was made by a French army to seize control of the White Nile's headwaters, which originate in Lake Victoria.

Throughout history, Egyptian rulers have attempted multiple times to subjugate Sudan and convey the Nile under their control (Inventory of Conflict and Environment (ICE), 1997). For instance, attacks on Sudan occurred often under the reigns of Queen Sheba and Nero, the Roman emperor. Recent wars among Nile River countries, according to ICE (1997), are simply an extension of a two-thousand-year-old fight concerning who is in charge of the area's limited water resources." The British conquest of Egypt (in 1882), Uganda (in 1894), and Sudan through the "river war" of 1896 and 1898 is the foundation of the history of the Nile clash. The following section has covered and elaborated on the principal disputes surrounding the Nile basin.

The Nile Conflict among Egypt and Sudan (1958)

A botched military action was conducted by Egypt in 1958 during negotiations over the Nile's waters. When Nasser took office in the early 1950s, he thought about building the High Dam, also known as the New Aswan Dam (Jeffrey, 2011; Peña-Ramos et al., 2022). Nevertheless, Sudan's intentions to construct the Roseires project ran counter to the dam's designs. Subsequently, tensions between Sudan and Egypt grew, leading to the 1929 treaty being deemed invalid (Turton, 2000).

In 1956, Ethiopia demanded the right to use Blue Nile water. This war was exacerbated by Sudan's autonomy, which increased tensions between the two countries because Sudan, it consequently, sought sovereignty of the Blue Nile. In the interim, Egypt dispatched a military mission to the border region of Egypt and Sudan (Postel, 2000; Conflicto entre Botsuana, 2013; Espinosa, 2013

Pea-Ramos et al., 2022). However, following an assassination in Sudan, which resulted in the formation of an armed regime and enhanced ties with Egypt, everything reverted to normal.

The 1929 convention was changed in 1959, and an amendment was made, which now administers and sets an allocation of m³ per nation that is identical as the agreement of 1929 and fails to tackle the riparian nations' predicament (Mekonnen, 1999; Jeffrey, 2011; Pea-Ramos et al., 2022). Aswan Dam building was finished in 1971 (Postel, 2000). Now, the issue regarding Nile Rivers remains contentious.

Concerning the Nile Projects, Egypt warned Ethiopia (1978 onwards)

After Ethiopia's declaration of constructing dams at the river's source, Egypt emphasized the crucial role of the Nile River (Peña-Ramos et al., 2022). The subsequent dispute in the area brought by the Nile water, not by political thought, according to statements from Egyptian President Sadat in 1979 and Foreign Minister Butros Ghali in 1988. Furthermore, the 1959 Nile Accord between Egypt and Sudan excluded the other nations, which angered Ethiopia, which warned that it might limit freshwater access to the other nations. As a result, Egypt-Ethiopia relations have remained strained since the agreement's ratification. Ethiopia seeks to consume Nile water, and Egypt consistently reacts with the prohibitive prospect of violence (Rahman, 2013; Pea-Ramos et al., 2022).

In 2010, a number of nations in the Nile basin, including Tanzania, Kenya, Ethiopia, Sudan, Burundi, Rwanda, and Uganda, contracted the Entebbe Agreement, which recognized a new dissemination of resources. However, Egypt and Sudan oppose, and far ahead, Ethiopia declared the Great Ethiopian Renaissance Dam (GERD) project, aimed at generating more hydroelectric power for the country (Rahman, 2013; Peña-Ramos et al., 2022).

In 2015, an agreement was signed by Ethiopia, Sudan, and Egypt to end the conflict. Nevertheless, the parties do not understand this

remark in the same way, and it is unclear in many respects. As an illustration, there is not a clear consensus over how long the reservoir filling operation should take (González, 2020; Peña-Ramos et al., 2022). To construct the dam, the Ethiopian government had to redirect a percentage of the Blue Nile in 2013. President of Egypt Mohamed Morsi clarified that he had not been advocating for violence when he publicly voiced his opposition, saying it was either "water or blood." International negotiations began thereafter, sometimes at Egypt's request (Peña-Ramos et al., 2022).

Egypt-Sudan confrontation over the Ethiopian Renaissance Dam (2012)

The dispute concerned Ethiopia, Sudan, and Egypt. According to undisclosed deal within Egypt and Sudan, Egypt planned to establish an airstrip in Sudan to attack the GERD (Pea-Ramos et al., 2022). According to the Pacific Institute Water Conflict Chronology (PIWCC, 2021), Sudan might enable Egypt to invade Ethiopia if the two (Ethiopia and Egypt) failed to reach a compromise. This battle is related with the Nile dispute between Egypt and Sudan (1958), and Egypt warned Ethiopia against the Nile project beginning in 1978 (Pea-Ramos et al., 2022).

As a quick precedent, consider the enactment in 2010 of the Kampala Pact, which set a new resource sharing while Egypt and Sudan resisted (Pea-Ramos et al., 2022). Following that, Ethiopia proclaimed the GERD development project, which would increase the amount of land and produce extra hydroelectric energy, a move that Egypt strongly protested. According to Egypt, the breaches were intended to impair relations with Ethiopia, disregarding the reality that, as we noted in 1979, President Sadat declared, "The sole problem that might bring Egypt to war again is water." Egypt has long been engaged in river control and has elevated it to the level of national security concern (Pea-Ramos et al., 2022). According to the accords negotiated throughout the colonial era, Sudan and Egypt make use of 90 percent of the water from the Nile, but the other countries like Rwanda, Tanzania, Kenya, and Ethiopia urged the agreements to be revised (Pea-Ramos et al., 2022).

Treaties relating to the Nile Basin

The Nile River 10 countries' interactions have been regulated by agreements and treaties sign up during the twentieth epoch (1902, 1929, and 1959), which are usually referred to as the Nile Basin Treaties (Khalil, 2020). It asserts that the upstream states (Kenya, Tanzania, Uganda, and Ethiopia) must defend the river's downstream nations' (mainly Egypt and Sudan's) claims to the Nile's river (Khalil, 2020). Moreover, they are not permitted to build dams or begin building projects on the river without the agreement of the downstream countries, specifically Egypt. The accords not only gave Egypt ownership of water from the Nile for decades and allowed it to execute advancement and agricultural endeavours, but they also gave Cairo and Khartoum veto power over any construction plans or projects that would impact the distribution of the water (Khalil, 2020).

However, the upper riparian governments argue about the legality of colonial-era Nile agreements; their claims fall short of the legal standard. These accords, according to the upstream riparian states, are discriminatory and hamper their agricultural and development ambitions (Khalil, 2020). They said that because the treaties were ratified by colonial powers and their governing bodies were not involved. A historical examination of the Nile treaties: the past, the present, and the future controversy has been provided here.

The Colonial Era Treats

Treaties governing Nile River water rights date back to the colonial period and are being used in court proceedings today. Treaties negotiated just earlier in the 1950s, when overseas sovereigns governed the Nile, are referred to in this portion as colonial-era agreements. During the early 1900s, colonial powers and Nile River riparian governments negotiated historically significant agreements (Table 1). It consisted of the Tripartite Treaty, the Ethiopian-British Agreement, the contract between Egypt and the Anglo-Egyptian

Sudan, and others. Despite the Blue Nile passing through Ethiopia's sovereign territory, the treaties severely weakened Ethiopia's claim to the Nile water and favoured Egypt and Sudan's claims. Given its military power and control over Sudan, Egypt, Kenya, Tanzania, and Uganda, the United Kingdom was in a position to maintain effective governor over the Nile River (Arun, 1999), and the bulk of covenants were favourable to Egypt from the time of colonialism as Egypt's close position with Great Britain.

Anglo-Italian protocol or Italy and Great Britain agreement (1891)

As a result of mounting disagreements over the delivery of water, Italy and the United Kingdom signed the Treaty of 1891 to form their respective regions (Shih and Stutz, 2013). Italy agreed to abstain from constructing anything "that ought to influence the flow of water into the Nile on the Atbara in terms of irrigation", with the intention of invading Ethiopia. However, Italy failed in this endeavour, losing the Battle of Dogali (in 1887) and the Battle of Adwa (in 1896) (Shih and Stutz, 2013).

Ethio-British Agreement (1902)

Cognizant of the cotton industry's reliance on the Nile River, Great Britain signed the Contract for a Restriction of the Frontier through Ethiopia on behalf of Egypt and Sudan (Shih and Stutz, 2013). The accord stipulates that Ethiopia will not undertake or permit the execution of any building projects that would impede the movement of its waters into the Blue Nile, Lake Tsana, or the Sobat, unless agreed upon with the governments of Sudan and His Majesty (Edward et al., 1902; Shih and Stutz, 2013).

Simply put, it restates the core ideas of the protocol from 1891. Despite signing the 1902 pact as an independent nation, Ethiopia vigorously opposed it since it bound her to such unfavourable terms, and Ethiopia did not enter into any accords pertaining to the Nile from 1902 until 1993. Then, due to Ethiopia's conflict with Britain, she was banned from entering subsequent conventions such as the Anglo-Italian, Anglo-Egyptian, and

Egypt-Sudan commitments in 1925, 1929, and 1959, respectively (Abraham, 2004; Shih and Stutz, 2013).

Great Britain, Congo, and London agreements (1906).

A covenant was made in 1906 between Belgium's King Leopold II and Great Britain on behalf of the Congo. It declares that, unless in accord with the Sudanese government, the authority of the sovereign nation of the Congo agrees not to build any construction across or close to the Semliki or Isango Rivers that may lower the amount of water entered into Lake Albert (Smith, 1906). This treaty bears similarities to the treaties that Great Britain signed in 1902 with Ethiopia and the 1891 Protocol, as well as the subsequent 1929 pact (Shih and Stutz, 2013).

France, Great Britain, and Italy treaty (1906)

On December 13, 1906, the three-way agreement was signed with the intention of reaffirming the conditions of the 1902 treaty and the 1891 agreement (Shih & Stutz, 2013). Ethiopia's significance to the Nile River's flow made it a target for intrigue from Great Britain, France, and Italy during a period when those nations were vying for power in the Nile Valley. For instance, France sought to gain more economic clout in Ethiopia by building railroads; Italy desired to reabsorb northern Ethiopia as part of her empire; instead, Great Britain depended on the Nile for irrigation of its cotton grounds in Egypt, which subsequently provided textile mills (Shih & Stutz, 2013). They discussed the preservation of the status quo in the earlier signed pacts, including the 1902 treaty (Shih & Stutz, 2013).

Italy and Great Britain agreement (1925)

By controlling the source, Lake Tana, Great Britain sought to protect its rights to use the Nile, even if it also affected Egypt's agricultural interests. Tana Lake is still Ethiopia's, but not included in the letters that Italy and Britain submitted (Shih & Stutz, 2013). According to the consent, the Abyssinian government, working with the Italian command, recognized the

previous hydraulic rights held by Egypt and Sudan and agreed to not build any projects that could reasonably change the movement the two Nile rivers, its tributaries, or the waste water from their headwaters (Shih & Stutz, 2013). The inscriptions acknowledge Sudan and Egypt's "prior" hydrological entitlements.

In the enclosed letter, Ethiopia refers to the 1902 agreement as though it were still in effect. The 1902 agreement seems to have been in force for approximately two decades. The Ethiopian government, dissatisfied with the reprimand letter, appealed the contract to the League of Nations, which ruled that Ethiopia was not bound by the terms of the agreement (Shih & Stutz, 2013). It is crucial to remember that Ethiopia was an exhibit to the 1902 Contract, which was not mentioned in the League of Nations ruling; rather, it solely applied to the 1925 Interchange of Notes (Shih & Stutz, 2013).

The Anglo-Egyptian Contract (1992)

The initial covenant pertaining to the distribution of the water from the Nile among the neighbours in the basin was signed in 1929 by the British administration. The agreement favoured Egypt as it granted the right to use 48 km³ of water in a year, while Sudan granted just four km³ of water per year. Furthermore, the agreement stated that neither dams nor agricultural projects for development should be built in any of the upperstream nations and it granted Egypt the authority to reject any plans that would harm its interests (Patrick and Otieno, 2007).

The Anglo-Egyptian agreement excluded all Nile Basin neighbours and overlooked their water-related demands (Patrick and Otieno, 2007). This lopsided distribution continues right now, with Egypt receiving eighty percent of the Nile flow, Sudan receiving 18 percent, and upper riparian nations receiving 1.5 percent (Patrick and Otieno, 2007; Shih & Stutz, 2013). The unequal allocation and Egyptian water dominance infuriated the riparian nations particularly Sudan, resulting in substantial disputes. The majority of Nile Basin territories declared that they would not sign on to

this convention. As a result, in 1959, an updated water deal was signed (Swain, 2011; Shih & Stutz, 2013).

The 1934 London Agreement

The 1934 Treaty on River Holdings on the Tanganyika-Ruanda-Burundi-London Border was signed in November 1934 by the United Kingdom (represented Tanganyika) and Belgium (represented Rwanda and Burundi). Smith (1906); Abraham (2004); Shih and Stutz (2013). The treaty stipulates that neither the government nor anyone else may "contaminate or induce the accumulation of any hazardous, harmful, or polluted material in the waters of a river or stream."

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Table 1: Pre-colonial Treaties over the Nile basin

Year	Types of agreements	State parties to the agreement	Agreement details and patterns of use	Those who gain	Status at present-day	Sources
1891	Protocol agreement	Italy and Great Britain (Anglo- Italian Protocol)	Italy made the decision to forgo any construction on the Atbara River that would alter its course.	Egypt will gain	Ethiopia argues that after colonial rule ended, it is no more functional.	Paulos & Getachew (2005)
1902	Agreement of Addis Ababa	Great Britain and Ethiopia	Ethiopia agreed to neither constructing nor permitting the construction of any work on the Nile, Lake Tana, or the Sobat.	Egypt will gain	Ethiopia claims that the treaty is unacceptable	Edward et al. (1902), Abraham (2004); Shih & Stutz (2013)
1906	London agreement	Congo and Great Britain	Reformed domains of impact; Congo committed to not construct any construction on Semliki or Isango river.	Both Egypt and Sudan	Congo contends, when colonial rule ended, the accord lost its effectiveness.	Smith (1906); Abraham (2004), Shih & Stutz (2013)
1906	London (1891)	Great Britain, Italy, France	Three countries promised to preserve Ethiopia's unity and ratified the 1891 and 1906 treaties.	Italy, Great Britain, and France gains	Not applicable upon the end of colonial control because the treaty only mentioned the colonies and not the nations.	Shih & Stutz (2013)
1925	Rome Agreement	Italy and Great Britain	Sudan and Egypt's hydraulic interests were acknowledged after Great Britain won the Ethiopian regime's permission to construct a dam on Tana Lake.	Both Egypt and Sudan	The League of Nations ruled in 1925 that the treaty was not legally enforceable.	Shih & Stutz (2013)
1929	Nile Agreement	Egypt and Great Britain (represented Sudan, Kenya, Tanganyika, Uganda)	Egypt received 48 billion m³ of water under the deal, while Sudan received 4.0 billion m³ for agriculture. Egypt's approval was required before any form of construction done on the Nile or the Equatorial Lakes.	Both Egypt and Sudan	While the Equatorial countries view it as non-binding, Egypt views it as enforceable.	Swain (2011), Shih & Stutz (2013)
1934	Agreement of London	Belgium and Great Britain (represented Rwanda and Burundi) and Tanganyika	The pact forbade building projects that may impair the Kagera River's flow into Lake Victoria.	Egypt and Sudan	Its validity is contested as it was agreed before the end of the colonial control	Smith (1906), Abraham (2004)

Post-Colonial Treaties

An overview of historical covenants was created, much like with colonial treaties, to demonstrate the different attempts made to establish a variety of Nile-based agreements over post-colonial treaty periods (Table 2).

Nile Waters Treaty (1959)

On November 4, 1959, Egypt and Sudan ratified the Nile Waters Contract. According to Shih and Stutz (2013), this deal allocated 55.5 km³ to Egypt and 18.5 km³ to Sudan, providing little or no water for other nations. The upstream nations made it very evident that the 1959 deal was a reform and deferral of the 1929 Agreement, not a replacement for it.

The preamble to the 1959 accord noted that the Nile's water was not fully distributed because the 1929 treaty had restricted a share of its use. The 1959 Agreement called for full utilization of the Nile flows. Sudan waived its objection to the 1929 agreement's illegality by signing it. Under the provisions of the agreement, Egypt was also given permission to construct the Dam of Aswan (Amdetsion, 2007). The fifth part of the treaty restates Egypt's and Sudan's power to accept or deny any projects tied to the Nile (Amdetsion, 2007; Shih & Stutz, 2013).

The 1959 pact still binds Egypt and Sudan. The other riparian nations argue that as they are not parties to the 1959 contract, they do not abide by its terms. Nonetheless, the nations that were bound by the 1929 assent and its extension continue to be bound by it, as the 1959 pact did not replace or nullify it (Amdetsion, 2007; Shih & Stutz, 2013). Since the mid-1950s, Ethiopia has thoughtfully considered creating a dam on Lake Tana in order to benefit from the Nile (Kimenyi & Mbaku, 2015).

Nile Hydro-meteorological Survey (with UNDP Agreement) (1967)

Egypt, Kenya, Sudan, Tanzania, Uganda, the United Nations Development Programs (UNDP), and the World Meteorological Organization (WMO) carried out the 1967 contract for the

hydro-meteorological evaluation of Lake Victoria, Kyoga, and Albert (United Nations Legislative Series (UNLS), 1977; Shih & Stutz, 2013). Its goal was to gauge Lake Victoria's water level and movement into the Nile. This arrangement shows that Sudan and Egypt are open to signing deals with other upstream nations. Both Egypt and Sudan acknowledge in their contracts that in order to accomplish a result that is larger than the sum of its parts riparian governments must work together (Shih & Stutz, 2013).

Treaty on the Kagera Basin (1977)

On August 24, 1977, Burundi, Rwanda, and Tanzania (which joined in 1981) reached a deal to create the Association for Managing the Kagera River (UNLS, 1977). The 1929 and 1959 accords are not mentioned in the contract, and all other riparian nations are left out, aside from the that "consensus is ready membership by Uganda," which rejoined in 1981 (Shih & Stutz, 2013). Each of the three signatories is represented on the commission, which will supervise the contract's execution. The following projects are provided under Article 2 of the agreement (Shih & Stutz, 2013).

- a) Development of water and hydroelectricity
- b) The provision of drinkable water for various purposes, as well as water-related services, to mining and industrial operations
- c) Land reclamation, forests, and the development of agriculture and cattle
- d) Exploration and utilization of minerals
- e) Pest and disease management and Communications and transportation
- f) Development of Trade and Tourism and
- g) Wildlife maintenance, Fisheries, and aquaculture expansion

Ethiopia and Egypt's Framework for General Cooperation (1993)

Ethiopia and Egypt reached a consensus on this framework on July 1, 1993, in Cairo. This is the second treaty Ethiopia agreed to sign after the one from 1902. There were no formal agreements among Ethiopia and Egypt prior to the Agenda for Overall Collaboration in 1993. It stipulates that neither participant may take any action that might jeopardize the other's interests or advantages in connection with the usage of the river Nile (Abraham, 2004; Mason, 2004; Shih & Stutz, 2013). They pledged to be "good neighbours because of their shared stake in the Nile Basin" in this agreement (Shih & Stutz, 2013). Every

provision in the deal is just as vague when it comes to laying out specific guidelines for fostering harmony and cooperation between the two nations over the Nile River. Article 5 prohibits, for instance, any behaviour that "can cause substantial damages to the advantages of another state" by either nation (Shih & Stutz, 2013). Ethiopia pledges under the 1993 Agreement to do no harm to Egypt, even if Ethiopia claims the 1902 Agreement is not binding upon her. Egypt has maintained that this is equivalent to maintaining the status quo. Moreover, the 1993 Convention remains legally enforceable (Abraham, 2004; Shih & Stutz, 2013).

Table 2: Post-colonial treaties over Nile Basin

Year	Types of agreements	State parties to the agreement	Contents of agreement and utilization patterns	Beneficiaries	Status at present	Sources
1959	Agreement for the Full Utilization of the Nile Waters	Egypt and Sudan	Building of the Aswan Dam would provide Egypt and Sudan with 55.5 billion m³ and 18.5 billion m³ of energy, water for agriculture, and prevention of flooding, respectively.	Egypt and Sudan	Still binding, but not on third parties	Amdetsion, (2007), Shih & Stutz (2013); Kimenyi & Mbaku, 2015
1967	Nile Hydro meteorological Survey (with UNDP	Egypt, Kenya, Sudan, Tanzania, Uganda	To inspect Kioga, Victoria, and Albert; to gauge Lake Victoria's water balance	Egypt, Kenya, Sudan, Tanzania, Uganda	Binding	UNLS (1977); Shih & Stutz (2013)
1977	Treaty on Kagera Basin	Rwanda, Burundi, Tanzania, and Uganda	Developing of the Kagera basin for multiple uses, including hydropower, agriculture, trade, tourist, and fisheries	Rwanda, Burundi, Tanzania	Binding	UNLS (1977); Shih & Stutz (2013)
1993	Framework for General Collaboration Between Ethiopia and Egypt	Egypt and Ethiopia	General Cooperation commitment	Ethiopia and Egypt	Binding	Abraham (2004); Shih & Stutz (2013)

Multilateral Cooperation on Nile Water

Since the beginning of the 20th century, deals with two or three nations have largely focused on maintaining the levels of water, which reach downstream nations tying the countries in the Nile Basin together. The accords emphasize that upstream nations must not take any actions that could reduce the quantity of water that reaches downstream nations (Mason, 2004; Tariku, 2014; Tayia et al., 2021). The downstream nations, particularly Egypt, made several measures in the

very beginning of the decolonization era to safeguard their interests in preserving the status quo (Tayia et al., 2021). As a result, Egyptian security concerns and self-regard for preserving the Nile's unrestricted flow shaped cooperation efforts throughout the basin after the 1959 accord. In the 1960s, attempts were made to establish river-wide collaboration. The following section discusses the nations that border the Nile and their attempts at international cooperation from earlier in history.

Hydromet Project (1967-1993)

The Hydromet project (Hydro-Meteorological Survey of Lakes Victoria, Kyoga, and Albert) was created by Egypt, Kenya, Sudan, Tanzania, and Uganda following assistance from the World Meteorological Organization (WMO) and the Development United **Nations** Programme (UNDP) in 1967 (Tayia et al., 2021). With the omission of Ethiopia and the DRC, all Nile riparian states were part of the project. The aim was to gather and examine meteorological and hydrological information for the region of the two largest lake catchments to regulate the flow of Nile and the level of Lake Victoria (Kebrom, 2011; Tayia et al., 2021). The Great Lakes nations started it as soon as they gained sovereignty in the 1960s.

Later on, Rwanda and Burundi entered the movement, and as of 1971, Ethiopia participated as a witness (Tayia et al., 2021). It was clear for the nations that gathering hydrometeorological data and researching the climatology, hydrology, and hydraulics of the Nile watershed must be given top priority because the possible regulation and control of the Nile directly affects the economic growth of all riparian nations (Kebrom, 2011; Tayia et al., 2021). Although Hydromet was able to obtain some valuable meteorological data, it is critiqued for failing to significantly reduce nations polarization of priorities (Yacob, 2007). Ultimately, this endeavour was finished in 1993 after 25 years of work (Tariku, 2014).

The cooperation of Undugu from 1983 to 1993

The region's second attempt at cooperation, "Undugu," emerged in 1983 in Khartoum. It means "brotherhood" in Swahili. Once more, Egypt started it, and the initial members were Egypt, Sudan, Uganda, the CDR, and the Central African Republic (CAR) (a non-riparian nation), while Kenya, Ethiopia, and Tanzania opted for the position of observers (Tayia et al., 2021).

The formation of the Undugu project aimed to establish regional collaboration in different fields such as trade, environment, infrastructure, and culture (Yacob, 2007; Tayia et al., 2021). However, the riparian communities have not been able to cooperate economically or socio-culturally since Egypt has not shown genuine dedication (Tayia et al., 2021). Because of this, it was unable to fulfil its goals and, like Hydromet before it, dissolved. Next, the Technical Cooperation Committee for the Promotion of the Improvement and Environment Protection of the Nile took up its place (Tariku, 2014; Tayia et al., 2021).

The formation of Technical Cooperation Committee (TECCONILE) of the Nile (1993-1999)

In Kampala, Uganda, in 1992, the water ministries of Egypt, Sudan, Rwanda, Tanzania, Uganda, and the DRC signed a document to establish TECCONILE, a new organization with financial aid from the Canadian International Development Agency. Burundi, Eritrea, Ethiopia, and Kenya were the other four riparian countries sitting as observers (Tayia et al., 2021). It sought to create an all-encompassing institutional and legal structure. It has short- and long-term objectives. The short-term goals include creating nation-wide master plans and incorporating them into a basin, well as strengthening capacity implementing strategies for managing water resources (Tayia et al., 2021).

Whereas, the long-term goals were to determine a fair allocation of waters and promote basin-wide coordination to develop the Nile Basin in an interconnected and sustainable way. In this regard, TECCONILE has been involved in several

crucial initiatives aimed at achieving both its immediate and long-term goals. Even with the promises made, not all the projects were carried out since the wealthy countries either did not provide enough funds or provided it later. According to some, the ECCONILE's meagre contribution to the Nile Basin Action Plan's operations is its only noteworthy achievement (Dereje, 2010).

In general, one could claim that the period from 1967 to 1999 was a period of "confined teamwork" in the evolution of the Nile Basin, as efforts at mutual collaboration during this period were eventually unsuccessful due to nations such as Ethiopia and Kenya being only granted the role of observers (Tayia et al., 2021). It is due to their belief that the conferences were controlled by Egypt, as well as a lack of emphasis placed on the topic (Mason, 2004). Therefore, the Nile Basin Initiative took over TECCONILE in 1999, and multilateral cooperation has altered considerably since then because all Nile nations, such as Ethiopia, are active participants (Kang'ethe, 2012; Tayia et al., 2021).

Nile Basin Initiative (NBI) (1999 to date):

The NBI, located in Entebbe, Uganda, is authorized to develop an agenda for regional collaboration for reasonable dissemination, joint water resource planning, and reduction of likely clashes among the riparian countries (Abraham, 2004). The elite utilization of the Nile's water by Egypt and Sudan and the discriminatory distribution between the other riparian nations strapped the upper-stream bordering countries to request a different reasonable treaty for handling the Nile water (Yaekob, 2011).

After multiple unsuccessful decisions since 1960, the Nile Basin countries formed NBI in 1999 (Abraham, 2004; Yaekob, 2011). These countries began to work together to improve institutions that might share Nile water evenly. Then, they came to an agreement known as the Cooperative Framework Agreement (CFA), which defines a set of guiding principles and responsibilities to better facilitate the cooperative and long-term

development of the Nile water (Abraham, 2004; Yaekob, 2011; Tayia et al., 2021).

The CFA agreement has advanced through the years and recognised the Nile River Basin Commission (NRBC). NRBC is an institution that deals with the legal-based management of water ("Cooperative Framework Agreement," 2020). For the first time in history, the NBI tried to unify the riparian nations and simplify the tensions among them. The initiative also gained noteworthy worldwide support and funding from the World Bank and other funding agencies (Abraham, 200; Yaekob, 2011).

The International Association for Nile Collaboration was established by the World Bank in 2001, allowing donors to finance the project through various financial strategies. The Nile Basin Trust Fund (NBTF) was then created in 2003 in response to the riparian authorities' request. Despite the NBI's increasing popularity over time, the member countries were not happy with the benefits that really came from sharing Nile water among them (Yaekob, 2011).

CONCLUSION AND RECOMMENDATIONS

The Nile Basin, with an extent of 3.1 million km², accounts for around 10 percent of Africa and 2.3 percent of the globe. It is one of Africa's most critical water basins. For many years, the Nile River has been the basis of life and fighting. Tensions between riparian nations that rely on this common freshwater source have increased because of the river waters' increasing deterioration. This review looked at the conflicts, treaties, and multilateral collaboration in the Nile Basin. Conflicts over the Nile have long existed between the lower and higher riparian countries. Egypt's claim to veto upper-riparian nations' projects and the latter's requests to use Nile water have resulted in ongoing conflicts of interest in the Nile Basin. Egypt has been a major handler and protector of the Nile, apart from the higher riparian nations, owing to its reliance on Nile water treaties (pre- and post-colonial treaties) and its military power.

However, upper-riparian countries have recently defied Egypt's monopolization of the Nile River by initiating several autonomous development initiatives, notwithstanding the stipulations of several accords over the Nile (e.g. 1929 and 1959 agreements). Thus, Nile riparian governments have created basin-wide agreements to manage their competing interests amicably, beginning with multilateral cooperation like Hydromet, Undugu, and TECCONILE, but have failed to institutionalize these accords. The riparian nations later recognized the NBI, which is a remarkable and revolutionary step for the region. It brings together all countries in the region for the first time to adopt an inclusive strategy for the sustainable development and utilization of the common resource.

To be effective, the NBI must go further and develop a basin-wide treaty that comprises an impartial quarrel resolution procedure as well as specific effluence control protocols. Though the NBI concentrates usage on river development, it has the potential to be ecologically progressive because it currently endorses harm prevention and water protection for upcoming generations. Preservation and management aim to comply with the crucial demands of riparian areas facing a water deficit. Forestalling an imminent war in the region is reliant on effective water use as well as sincere collaboration among riparian countries.

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