

The GERD Debates and Possible Consequences

An Overview

Zoltán Prantner¹, Abdallah Abdel-Ati Al-Naggar²

Abstract:

The Greek historian, Herodotus (c. 484 - c. 425 BC), formulated the proverb often used today that "Egypt is a gift of the Nile". This finding is a good reflection of the thousands-of-years-old firm belief that the river and the country form an inseparable, organic entity. This conspicuous consensus in Egyptian society over the Nile goes beyond the historical heritage that the river played in the formation and survival of Egyptian civilizations. The existence of Egypt is still closely intertwined with the lifegiving river, which accounts for 90% of the Arab state's freshwater needs. The steady flow of the water of the Nile is therefore almost synonymous with survival for the country. The dam built by Ethiopia along the Nile could therefore lead to a serious water crisis in Egypt, as in other neighbouring states, which is otherwise a common cause of armed conflicts. Cairo considered the situation so critical that it was described as a threat to security and peace in the region. At the same time, Ethiopia's priority is to ensure its own economic development and improve the livelihoods of its citizens, rather than the stability of the region. It hopes to implement the latter from Africa's largest hydropower plant to date, the Grand Ethiopian Renaissance Dam (GERD).

Keywords:

Nile; Ethiopia; Egypt; Sudan; GERD Project; revolution; water crisis;

¹ Associate professor at the Kodolányi János University (Budapest, Hungary), Institute of Welfare Society, Department of International Studies; prantner.zoltan@gmail.com

² Researcher, visitor lecturer, translator; Academy of Scientific Research & Technology, Egypt; Eötvös Loránd University (ELTE), Hungary; Africa Research Institute, Doctoral School of Safety and Security Sciences, Óbuda University, Hungary; Abdallah.alnagggar@gmail.com



Introduction

On 22 February 2022, the Grand Ethiopian Renaissance Dam facility began generating electricity in the Benishangul-Gumuz region of western Ethiopia. The hydropower plant has been built on the Blue Nile, the most important tributary of the Nile, since 2011. Its importance is well illustrated by the fact that about 85% of the total water flow of the Nile reaches Egypt on this branch. In addition, the river is also of paramount importance to Sudan due to the Roseires³ and Sennar⁴ dams that together produce 80% of the country's energy production. In addition, these dams contribute to the irrigation of the Gezira system,⁵ which is renowned for its high-quality cotton, wheat, and fodder production. For this reason, the possible decline in the amount of water available has been a matter of serious concern in both states. As tensions escalated, Egypt, not for the first time in history, threatened Ethiopia with military intervention to enforce its interests and will. However, neither the threat of armed intervention nor the influence of the international public has been able to force Ethiopia to abandon its plans or try to resolve the current crisis through legal means.

Conventions on the Use of the Nile

The Nile, one of the longest rivers in the world, and its three main tributaries (the White Nile, the Blue Nile, and the Tekeze-Atbara), passes through 11 African countries from its sources to its estuary. Disputes over the yield of its water cannot therefore be considered new, it has already been regulated in several agreements between the parties involved. Regarding the latter, Egypt had practically occupied a dominant position for millennia. Its privileged position had persisted after the emergence and settlement of European colonial powers in the region. Its special strategic position, especially following the handover of the Suez Canal, also required cooperation between rival colonizers and made it essential to ensure the smooth functioning of the Egyptian state. To guarantee the latter, the Contracting States had consistently recognized Egypt's "natural and historical rights" and had undertaken to refrain from any investment along the entire length of the river which could had disrupted the flow of the Nile and/or reduced the inflow of water into Egyptian territory. All these principles were clearly set out, inter alia, in the Rome Convention between Great Britain and Italy occupying Eritrea, signed on 15 April 1891, in the Addis Ababa Agreement between Great Britain and Ethiopia of 15 May 1902, the Treaty of British-French-Italian (London) of 13 December 1906, and the 1925 Treaty of Rome (ALIAZEERA, 2009). However, the 1929 Nile Waters Agreement between Egypt and Britain went beyond all this. The right of veto enshrined in the treaty empowered Egypt to prevent any threating investment in neighbouring states which could have adversely affected its share of the waters (Okoth-Owira, 2004, pp. 7-8). The latter convention was revised 30 years later after Sudan also began using the Nile extensively for irrigation (Agreement..., 1959). However, a serious shortcoming of the 1959 agreement was that while

 $^{^3}$ It was constructed on the Blue Nile in Sudan and it consists of a concrete buttress dam 1 km wide with a maximum height of 68 m.

⁴ It was built on the Blue Nile, approximately 320 kilometres southeast from the Sudanese Capital and 270 kilometres downstream of the Roseires Dam.

⁵ An Arabic term, meaning Island System.



Egypt allocated 55.5 billion cubic metres (BCM) and Sudan 15 BCM, it did not take into account the water needs of the other Nile-affected states at all (Abedje, 2020; Swain, 1997).

However, Ethiopia and the states along the upper reaches of the Nile were not willing to accept agreements that were detrimental to them. Therefore, as a kind of compromise, the water ministers of the nine countries⁶ sharing the river established the Nile Basin Initiative (NBI) in February 1999 as a kind of forum for coordination and cooperation for a more equitable use of water resources. However, Ethiopia and three other states still considered it unfair that the implementation of their development visions continued to depend on Egypt's approval, so in 2010 they signed the so-called Nile Basin Cooperative Framework Agreement (CFA). The convention found an extremely fierce rejection in Egypt and Sudan, which had previously enjoyed a hegemonic status over the Nile. The two states openly threatened the signatory countries to stop their cooperation with them completely if they would try to force the implementation of the document (Ibrahim, 2011, pp. 301-302). Cairo had consistently adhered to its rejection position in the case and failed to reach the hoped-for compromise during Ethiopian Prime Minister Meles Zenawi's personal talks with Egyptian President Hosni Mubarak⁸ and Omar Suleiman,⁹ the head of Egyptian General Intelligence Service (GIS).¹⁰ Ethiopia did not start building the dam as long as the situation in Egypt was stable, avoiding any confrontation with the militarily and economically superior Cairo. Taking advantage of developments in the Arab Spring, it began construction of the dam unilaterally in March 2011, without consulting Egypt, rejecting all political pressure, and refusing to back down. (Bakri, 2015, pp. 12-14).

The Special Ethiopian Interests

With a total investment cost of \$4.6 billion, the Ethiopian government originally planned to build the GERD in five years. However, the construction work has been dragged on due to diplomatic tensions and domestic political crises. The works are carried out by Webuild Group,¹¹ a subsidiary of Salini Costruttori SpA, Italy, awarded the contract without competitive

⁶ Egypt, Sudan, Ethiopia, Uganda, Kenya, Tanzania, Burundi, Rwanda, and the Democratic Republic of the Congo (DRC). Eritrea only attended the meeting as an observer.

⁷ Meles Zenawi Asres - born Legesse Zenawi Asres - (Adwa, 9 May 1955 - Brussels, 20 August 2012) was an Ethiopian soldier and politician. He joined the Tigray People's Liberation Front in 1985 and was its chairman from 1989. He was also elected leader of the Ethiopian People's Revolutionary Democratic Front, which was formed in 1988. He governed Ethiopia from 1991 to 1995 as president and from 1995 as prime minister until his death in 2012.

⁸ Mohamed Hosni El-Sayed Mubarak (Kafr-El Meselha, May 4, 1928 - Cairo, February 25, 2020) was an Egyptian military officer, politician, and the fourth President of the country from 1981 to 2011. During his pragmatic dictatorship, Egypt was one of the most important allies of the West, especially the United States, in the Middle East, and represented a moderate trend in the Arab world. Throughout his presidency, he respected the Camp David Accords and managed to maintain relations with the Jewish state while his country was able to return to the Arab League in 1989. Finally, the 2011 revolution caused his downfall. ⁹ Omar Mahmoud Suleiman (Kena, 2 July 1936 - Cleveland, 19 July 2012) was an Egyptian soldier, politician, and diplomat. He served as the director of the Egyptian General Intelligence Service from 1993 to 2011 and then Vice-President of the country from 29 January 2011 to 11 February 2011.

¹⁰ At the above-mentioned Zenawi-Mubarak-Suleiman meeting, the Egyptian side firmly refused its consent to the construction of the planned Ethiopian facility and stressed that "such a dam should not be built. There can be no question about that. We will not allow it. If you start, we will bomb it immediately. For us, it is a matter of life and death". (BAKRI, 2015, pp. 12–14).

¹¹ The Milan-based Webuild SpA is a company managed and coordinated by Salini Costruttori SpA with a share capital of EUR 600,000,000. For more information about the Company, see: https://www.webuildgroup.com/en



tender, for Electric Power, which is owned by the Ethiopian state. Upon completion, it will consist of a 145-metre-high main dam as well as two power plants on the right and left banks of the river. The filling of the reservoir has already started in July 2020 and the amount of 13.5 BCM of water needed to start energy production had already been collected in June 2021. It is estimated that it will store about 74 BCM of water after its full commissioning, which is about one and a half times the average annual flow of the Blue Nile (49 BCM) (Ashton, 2007; El-Fekki–Malsin, 2021). This will allow the production of 5.15 gigawatts of power, which alone is 22% more than Ethiopia's current 4.2 gigawatts of capacity. 12 The latter is particularly important for the political leadership, as the country is currently facing severe electricity shortages and about 65% of the population is not connected to the electricity grid¹³ (Mutahi, 2020). According to the Ethiopian government, the full implementation of the investment would therefore allow both the full satisfaction of domestic energy needs by 2030 and the sale of the remaining surplus energy on the international market, which could provide a significant source of revenue for the state. And the latter has a very serious chance, as only several of the neighbouring states, namely Sudan, South Sudan, Eritrea, Kenya, and Djibouti, are forced to deal with huge energy shortages every day. ¹⁴ For all these reasons, Ethiopia considers Africa's largest hydroelectric plant to be the country's industrial symbol and a fundamental national interest¹⁵ (Schipani–Saleh, 2022). The implementation of the project is mainly financed from private sources, government bond issues and donations. 16 The main reason for this is, on the one hand, the absence of foreign investors, who consider the investment to be too risky due to a possible outbreak of a regional conflict. On the other hand, Ethiopia cannot count on the World Bank's financial assistance either, as it has not yet received the necessary approval from Egypt for its participation (Abdulrahman, 2018, p. 140). Finally, the declared goal of Addis Ababa was to eliminate all attempts at foreign influence, for which it was prepared to reject the substantial financial contributions offered. To maintain exclusive control, it also rejected an offer to allow Cairo to make a significant contribution to the financing of the construction of the dam, as this would have given it access to the works and the right to supervise its operation once the dam is completed (Reuters, 2014). For all these reasons, the project was practically supported only by China. As early as 2013, it became involved in other infrastructure developments related to the project and provided a \$1.2

¹² Based on the original 6.4-gigawatt project, the facility would have been equipped with 16 375-megawatt Francis hydro turbines. However, Ethiopian officials changed the volume of investment in 2019, reducing the number of turbines to 13. It is calculated that even under the changed conditions, the annual production of the dam will reach 15.76 terawatt hours (PATEL, 2022).

¹³ The picture is further nuanced by the fact that while in cities about 85% of the population has access to electricity, in rural areas this proportion is only 29%.

¹⁴ Another important aspect for Sudan is that the dam would be able to regulate the flow of the Nile evenly throughout the year, thus eliminating the severe flooding that often occurs in August and September.

¹⁵ The expectations and sentiment associated with GERD are well illustrated, among other things, by the fact that a number of poems and reggae songs have been written in honour of the facility, which is considered a symbol of national pride.

¹⁶ Donations exceeded 13 billion Ethiopian birr between 2011 and 2020, equivalent to about \$41 million. See the article in the Egyptian Almal Economic Gazette for more details:

https://almalnews.com/%D8%A5%D8%AB%D9%8A%D9%88%D8%A8%D9%8A%D9%8AA%D8%AA7-%D8%AA%D8%B9%D9%84%D9%86-%D9%85%D8%B5%D8%A7%D8%AA7%D8%AA7%D8%B1-%D8%AA%D9%85%D9%88%D9%8A%D9%84-%D8%B3%D8%AF-%D8%AA7%D9%86%D9%87%D8%B6%D8%A9-%D9%88%D8%AA%D8%A4/ (Accessed: 9 March 2022).



billion loan to build power transmission lines connecting the dam with nearby towns and cities. This was followed in 2017 by another \$652 million loan, and Chinese companies were commissioned to carry out construction work and accelerate developments that had stalled in the meantime (Piliero, 2021).

However, the on-site impact studies carried out at the same time as the work highlighted a number of risk factors in addition to the benefits. First of all, it was pointed out that changing the flow of the river will certainly significantly reduce the damage caused by the floods in the rainy seasons. At the same time, this will have a very negative effect on agricultural activity in the river valley below the dam, as it will deprive the arable land there of the natural water supply necessary for its irrigation. In addition, nearly 12,500 people had to be relocated from the area designated as a reservoir and below the river. In addition, the livelihoods of local families rely heavily on the region's forests and river ecosystem. All of this is threatened by the fact that the reservoir will flood 1,680 square kilometres, 90% of which is forest, while unfavourable changes could occur in the river's fish population. Finally, experts have emphasized that the greatest risk is from the sedimentation of the reservoir, which, in addition to the environment, could adversely affect the performance of the dam itself and, ultimately, its lifespan (International Rivers, 2013).

Position of Egypt and Sudan

Of the Nile's 84 BCM of annual waterflow, 55.5 billion is currently used by Egypt and 18.5 billion by Sudan, while the remaining 10 BCM are virtually lost due to evaporation. Egypt covers 90% of the freshwater needs of its more than 102 million people¹⁷ from this share of water (El-Fekki–Malsin, 2021). The remaining 10% can be replaced by rainwater and groundwater¹⁸, or only by extremely costly methods such as wastewater recycling, seawater desalination, or just importing the amount of water that is still needed. Egyptian experts have particularly complained that the country's per capita freshwater share has been steadily fluctuating between 550 and 560 cubic metres a year for decades, regardless of the population growth that has taken place in the meantime, while at least 114 BCM would be needed. All this is fundamentally slowing down the development of industry, endangering agricultural production, which uses 82% of the water, and therefore requires radical changes as well as increasing the salinisation of cropland and the country's vulnerability to importing water-intensive food crops.¹⁹ Projects launched by the Egyptian government (construction of aqueducts, drilling of water wells or start-up of water treatment and desalination plants) to

¹⁷ Based on 2020 estimates and statistics.

¹⁸ The country has significant groundwater reserves primarily in the western desert.

¹⁹ Due to the scarcity of water resources, for example, the Cairo government was forced to order a significant reduction in rice production (around 35%) as early as 2018, and farmers who violated the rules could be fined or even imprisoned under a law passed back in April 2017. Due to the gradual cessation of cultivation, half of the rice stocks had to be covered by imports, which, in addition to the country's consumption rate of four million tons, meant an additional cost to the state of \$1 billion a year. In addition, instead of sugar cane, they were forced to gradually switch to less water-intensive sugar beet growing in the northern part of the country, which at the same time increased unemployment in the industries related to the processing of sugar cane plantations. A similar situation has arisen in the cultivation of bananas and broadleaf vegetables (Nouredding, 2018).



recover and recycle water are only a symptomatic treatment of the problem and are not a reassuring solution in the long run. In view of all this, it was considered particularly damaging that, while the average rainfall in the Ethiopian highlands is roughly 936 million cubic metres, Egypt and Sudan can only benefit from less than 10% of it, which has officially plunged them into water poverty²⁰ (Al-Kady, 2022). The Cairo political leadership has therefore officially declared that "the Ethiopian dam is one of the biggest challenges facing Egypt today, especially in light of the unilateral measures taken by the Ethiopian side to fill and operate the dam. The huge negative consequences of unilateral measures will not be accepted by the Egyptian state". (State Information of Egypt, 2021)

The Egyptian leadership has therefore expressed serious concerns about the project from the outset, which it sees as an existential threat. Above all, it feared that the dam could further restrict the already scarce water supply of the Nile, which is almost the only source of water for its citizens. Experts also agreed that the full commissioning of the dam would certainly reduce the amount of water reaching Egypt, not least because the amount of water captured in the reservoir would evaporate on a much larger surface than the narrow water-plane of the Blue Nile. A further concern was that lower water levels could limit traffic and transport on the river and could have an extremely negative impact on the livelihoods of some 2 million farmers who use the water of the Nile for irrigation in their agricultural activities. In addition, the country suffered from severe electricity shortages in some months, mainly in the summer, due to aging infrastructure and insufficient generation and transmission capacity between 2011 and 2016. This has raised serious fears that a reduction in water flow would also adversely affect Lake Nasser, the reservoir behind the Aswan Dam, which could have led to a 25–40% drop²¹ in the country's electricity production (Aljazeera, 2013). Finally, according to Egyptian, Sudanese, and international experts, the dam is one of the most dangerous projects in the world, the construction and operation of which will endanger the security and viability of the region. Dr Hisham Bakhit, a professor of hydraulics at the Cairo University's Faculty of Engineering and a member of the Egyptian delegation to the GERD talks, said the geological conditions in the area were extremely likely to cause the dam to collapse, which would result in a catastrophic situation in Sudan. Dr Mohamed Abdel-Ati, Egyptian Minister of Water and Irrigation, also said that the dam had serious flaws, some of which had already been reported to the Ethiopian side, but no substantive response to their inquiries had been received (Alarabiya, 2021).

At first, Sudan also acknowledged on the one hand that the Ethiopian facility could help regulate water levels in the Nile, thereby reducing land and housing damage caused by floods.²² Experts, on the other hand, pointed out that the changes would adversely affect the

²⁰ According to the World Bank, a country can be considered water poor if its renewable freshwater supply does not reach a minimum of 1,000 cubic metres per capita, which would be essential to meet the balanced water and food needs of its citizens.

²¹ Regarding the above statistics, it should be noted that hydropower utilization has accounted for barely 7.2% of Egypt's total

²¹ Regarding the above statistics, it should be noted that hydropower utilization has accounted for barely 7.2% of Egypt's total energy production in recent years. The 25% reduction in the statement therefore actually represents a fall of around 1.8% in total energy production. (US ENERGY INFORMATION ADMINISTRATION, 2018).

²² The Sudanese statements at the time were clearly aimed at exerting a kind of pressure on Egypt, which significantly increased tensions between the two states during this period.



Blue Nile and Kassala²³ regions in particular, where Nile floods had previously provided soil fertility. For this reason, Sudan, like Egypt, must change its previous agricultural strategy and switch to irrigated production at least in these areas. All of this affects some one million hectares, where it would only be possible to build the necessary sewers and drainage networks at a cost of billions, the financing of which the Sudanese economy is unlikely to be capable of affording. In addition, maintaining the fertility of the land would make the use of fertilizers and pesticides essential, which are often harmful (Noureddin, 2018).

Khartoum expressed concern about the project's negative impact on the efficiency of the 280-megawatt Roseries dam and strongly condemned the unilateral Ethiopian steps to fill GERD's reservoirs²⁴ (Patel, 2022). Its fears about the latter in particular were confirmed when the first-stage filling of the reservoir caused serious disruption to Sudan's water treatment plants, leaving thousands of households without water for days in July 2020. It was feared that the second phase of the reservoir planned for 2021 could endanger the lives of 20 million Sudanese citizens, which had contributed significantly to the escalation of tensions with Ethiopia (Hendawi, 2021).

Deepening of the Conflict

Egypt has on several occasions given clear signals in recent decades that it is sufficiently determined to safeguard its specific national interests and maintain the status quo. For example, almost after the 1979 peace treaty with Israel, Egyptian President Anwar Sadat stated that "the only thing that could lead Egypt into war again is water" (Gleick, 1993, p. 86). On another occasion, he also declared that "any action that endangers the waters of the Blue Nile will face a determined response from Egypt, even if it leads to the outbreak of war" (Kendie, 1999, p. 141). A similar statement was made by Boutros Boutros-Ghali²⁵ even as Egyptian foreign minister when he said that "the next war in our region will erupt because of water, not politics" (Klare, 2001, p. 59.).

It is therefore particularly worrying that the dialogue with Ethiopia on this issue for more than 10 years has so far not yielded any substantive results and that no legally binding agreement has been reached on the filling and operation of the dam (Raafat, 2020). From the

²³ It regularly provided shelters for refugees from the protracted Ethiopian civil war.

²⁴ The other side of the coin, however, is that GERD will undoubtedly prevent the accumulation of sludge in the reservoirs of the Sennar and Roseires dams, which will significantly increase their water storage capacity (NOUREDDIN, 2018).

²⁵ Boutros Boutros-Ghali (Cairo, 14 November 1922 - Cairo, 16 February 2016) was an Egyptian politician, diplomat and sixth Secretary-General of the United Nations. He was a member of the Central Committee of the ruling Arab Socialist Union from 1974 to 1977 and then Egyptian Foreign Minister from 1977 to 1991. In this capacity, he accompanied President Anwar al-Sadat to his historic visit to Jerusalem, played a key role in the summit in Camp David, and played an important peace-building role in the Organisation of African Unity. He served as Egypt's Minister of State for Foreign Affairs from 1977 until early 1991 and then he became Deputy Minister for Foreign Affairs for several months before he was elected UN Secretary-General. Under his secretariat, the UN has been idle in monitoring several conflicts (such as the break-up of Yugoslavia, the Angolan civil war or the Rwandan genocide), and Boutros had opposed NATO bombings during the Bosnian war. As a result, he lost support from the United States, which vetoed his re-election in 1996. After his resignation, he was Secretary-General of La Francophonie, an organisation of French-speaking nations, from 1997 to 2002, and then Director of the National Council for Human Rights in Egypt from 2003 to 2012. See for more details: AL-NAGGAR AND PRANTNER, 2021, pp. 84–85.



outset, it was an insurmountable problem that Egypt wanted to obtain permission to oversee the design and construction of the dam itself in order to allay its concerns. However, Ethiopia would have been willing to do so only if Egypt had renounced its veto over water distribution, which in turn was an unacceptable option for Cairo (Egypt Independent, 2011). Due to the lack of agreement, it has been increasingly said in Egypt since 2011 that the country's existence depends on the Nile not only in the past millennia, but even today. To increase mass support, the government has communicated virtually openly to the general public that if diplomatic means fail, they will not shy away even from war to prevent Ethiopia from limiting the flow of the river for years to completely fill the reservoir after the dam is completed, endangering thereby the livelihoods of the Egyptians. This was implied, among other things, by statements by then-President Mohamed Morsi,²⁶ and then a secret recording was also leaked in 2013 in which Egyptian politicians had proposed sabotage, support for Ethiopian rebels or even direct military intervention against Ethiopia to prevent the construction of the dam, which was seen as a threat to national security²⁷ (Alarabiya News, 2013). The subsequent changes in the Egyptian leadership have not changed anything about this determined position. President Sisi has also repeatedly made clear in his statements that his country is ready to take whatever steps it deems necessary to protect their rights to the Nile. However, all this only further increased the Ethiopians' determination to carry out the investment.

The escalating tensions seemed to ease in 2015, when stakeholders signed a tripartite declaration in Khartoum, committing themselves to a joint effort to resolve issues surrounding GERD.²⁸ The ministers of the three states, Egypt, Ethiopia, and Sudan, held a joint visit to the construction site in October 2017, and at the UN General Assembly, Ethiopia and Sudan pledged to share their analyses and impact studies on the dam with Egypt (Shaban, 2017). Barely half a year later, it was also agreed that the three states would set up a common platform to answer questions about the dam and hold regular summit meetings every six months specifically to review current affairs in GERD, always in another of the three capitals. Political thaw was not hampered by the fact that Ethiopia and Sudan also concluded a special agreement to set up a joint military contingent to protect GERD. The positions converged best in June 2018, when Ethiopian President Abiy Ahmed Ali made an open commitment that his country would not reduce Egypt's share of the waters of the Nile. In return, President Sisi stressed that they were working to finalize an agreement that would simultaneously ensure both a fair share for Egypt of the Nile and the development of Ethiopia. He also firmly ruled out the use of armed force by his country to prevent construction.

²⁶ Although President Morsi stressed that "we do not want a war," many had interpreted his announcement as a covert threat that "no one can compromise Egypt's water security and we will not shy away from any means in this matter". However, he placed special emphasis on what was said with a quote from an ancient song about the Nile that "even if it diminishes by one drop then our blood is the alternative." (BBC News, 2013)

²⁷ On the above-mentioned incident, the contemporary Egyptian president convened Egyptian politicians and opposition party leaders to discuss the water issue on 3 June 2013. The meeting was broadcast live without the knowledge of the participants, who were not informed of the recording by the Office of the President. The latter was the reason why opposition MPs articulated their thoughts more openly when they called for military intervention. For more information, see the BBC Arabic detailed report: www.bbc.com/arabic/middleeast/2013/06/130604_egypt_nile_meeting (Accessed: 9 March 2022.)

 $^{^{28}}$ See the text of the agreement: Agreement on Declaration of Principles ... 2015.



Political rapprochement, on the other hand, was soon overshadowed when Simegnew Bekele, the GERD project manager and chief engineer, was found dead in his vehicle in a busy square in Addis Ababa on 26 July 2018. Although official investigation concluded that the chief engineer had committed suicide, there was widespread speculation that he was killed by the Egyptian secret service (Champion–Manek, 2019). Another defining development was the coup against President Omar al-Bashir on 11 April 2019. The former Sudanese leader and his regime, despite their reservations, supported the establishment of GERD. Because of this, Ethiopia lost a valuable ally with their fall (Ahmady, 2022). By 2019, the propaganda war had reached a critical level, when the International Crisis Group had already issued a warning about a possible outbreak of the conflict. Finally, the two states invited their common ally, the United States, as well as the European Union, the United Nations, and the African Union, to mediate in the conflict to avoid a possible outbreak of war (Hendawi, 2021).

Since June 2020, the African Union has made several attempts at mediation between the parties, to no avail. The stalemate has not been resolved, despite the fact that the United States suspended some of its aid to Ethiopia in September 2020, as a kind of pressure (Aljazeera, 2020). The failure to reach an agreement deepened tensions again between the three states, especially following the violent clashes on the Sudan-Ethiopian border in November 2020²⁹ (Reuters Staff, 2020). While cooperation and coordination between Egypt and Sudan intensified on issues affecting both the interests and national security of the two states following the armed border incident, Khartoum's position on GERD became more rigid.³⁰ Therefore, Sudan completely refused Ethiopian proposals *that do not say anything new*, and declared African Union mediation attempts useless (Aman, 2021). On the other hand, it strengthened its military ties with Egypt by signing a military cooperation agreement and conducting joint air, naval and land exercises (HENDAWI, 2021).

The situation was further exacerbated when, in early September 2021, Ethiopia implicitly accused Egypt and Sudan of supporting the Tigray People's Liberation Front, which was fighting with government forces in the northeast of the country, in order to prevent the completion of GERD. However, experts stressed that despite political pressure,³¹ neither Cairo nor Khartoum had an interest in the outbreak of the armed struggle, as it would naturally have dissipated the Ethiopian government's remaining willingness to compromise in the GERD negotiations. The Ethiopian accusation was therefore declared an untrue conspiracy theory to provide some sort of explanation to the Ethiopian public for the delay in completing GERD and starting power generation (SAIED, 2021). This seemed to be justified by the fact that in February 2022, the Ethiopian side reiterated its allegations of cooperation between Egypt and Sudan

²⁹ The disputed al-Fashqa area is officially located within Sudan's international borders, but Ethiopian farmers have settled on it and cultivated hundreds of acres of fertile agricultural land there since the mid-1990s.

³⁰ Lt. Gen. Abdel Fattah al-Burhan, then the adviser to the head of the Sudanese Sovereign Council, had already openly envisioned the outbreak of an unimaginable water war if no solution could be found (BBC NEWS, 2021).

³¹ Egyptian President Sisi, for example, declared on 30 March 2021, that "I say once again, no one can take a drop from Egypt's water, and if it happens, there will be inconceivable instability in the region". (ALIAZEERA, 2021).



and the Tigray rebels without providing concrete and clear evidence after failing to restart previously stalled talks (Saied, 2022b)

The Current Situation

According to Ethiopia's announcement, 82% of the total investment was completed in November 2021 and one of the 13 turbine units started operating on 20 February 2022 (Africa News, 2022). The second turbine is scheduled to be commissioned in just a few months and the dam is expected to be fully completed by 2024. Cairo immediately protested the commissioning of the first turbine and accused Addis Ababa of violating the Declaration of Principles for the Project signed by the three nations in 2015 (Aman, 2022). At the same time, experts assessed the launch of GERD as an extremely positive development that could alleviate the divisions in the country caused by the fight against the Tigray rebels and could give a new impetus to the recovery of the economy affected by the combined adverse effects of armed conflict, rising fuel prices, and the Covid-19 pandemic (Aljazeera, 2022). A similarly positive statement was made by Redwan Hussein, Ethiopia's ambassador to Eritrea, who emphasized above all the importance of the interests of the Sudanese people and ruled out the possibility that the border conflict could only be resolved in an armed manner on a lasting basis. He also stressed that Egypt should encourage Ethiopia to complete GERD as soon as possible, which could then, at Cairo's request and taking into account its specific interests, even serve as a water bank and lifeline during the drought season (Ethio12.com, 2022). Despite reassuring announcements, analysts have drawn attention to the fact that Addis Ababa's intransigence on the issue makes it extremely difficult to resume stalled talks. At the same time, it was emphasized that, although the likelihood of a military action based on recent developments was low despite the threats made in Egypt, the possibility of an armed confrontation with unpredictable consequences for the already volatile region could not be ruled out (Saied, 2022a). Avoiding the latter is not only a regional, but also a global interest due to the nearby Red Sea and the maritime transport that takes place on it. For this reason, for example, the European Union, which handles around 20% of its trade on this vital maritime route, has already indicated its readiness to work more closely with the three countries to reach a common agreement. (Kotb, 2022). Furthermore the development of a common, reassuring consensus position has become increasingly urgent, especially since the outbreak of the Russo-Ukrainian war, given Egypt's vulnerability to the dependence on Russian and Ukrainian wheat imports. As a result of the conflict, the price of the food crop per tonne skyrocketed, surpassing even the most pessimistic expectations. For this reason, the Cairo government cannot allow even a single hectare from cultivated land to be lost due to water shortages (Ahmady, 2022).



Conflict of Interest

The authors hereby declare that no competing financial interest exists for this manuscript.

Notes on Contributors

Zoltán Prantner is associate professor at the Kodolányi János University (Budapest, Hungary), Institute of Welfare Society, Department of International Studies. He holds a PhD in History of international relations between the Socialist countries and the states of the Arabian Peninsula. He has published various articles and book chapters, focusing on the Middle Eastern countries' internal and external conflicts as well as their security problems in the modern era.

Abdallah Abdel-Ati Al-Naggar is an Egyptian Historian, researcher, visitor lecturer (Academy of Scientific research and technology, Egypt, and Eötvös Loránd University, Hungary). He achieved his PhD at the Szeged University in 2014. Previously he worked as the director general of the "EIA for Consultation and Training" (2009–2013). He is author and chief-in-editor of several multilingual books and papers specialized in modern history and international relations, as well as a translator of more than thirty books. He is a principal investigator of 5 international projects, and effective member of another four.

Bibliography

Al-Naggar, A. A. and Prantner, Z. (eds.) (2021) Az arab világ történeti és kulturális kislexikona. Eötvös Loránd University: Budapest.

Abedje, A. (2011) 'Nile River Countries Consider Cooperative Framework Agreement', *VOA*. Available at https://www.voanews.com/a/nile-series-overview-11march11-118252974/157711.html (Accessed: 18 February 2022)

Abdulrahman, S. A. (2018) 'The River Nile and Ethiopia's Grand Renaissance Dam: challenges to Egypt's security approach', *International Journal of Environmental Studies*, 76(1), pp. 136-149.

Africa News (2022) 'Ethiopia dismisses rumours Nile mega-dam will starve Egypt and Sudan', *Africa News*. Available at https://www.africanews.com/2022/02/21/ethiopia-dismisses-rumours-nile-mega-dam-will-starve-egypt-and-sudan/ (Accessed: 21 February 2022)

Agreement between the Republic of the Sudan and the United Arab Republic for the full utilization of the Nile waters signed at Cairo, 8 November 1959. Available at https://www.fao.org/3/w7414b/w7414b13.htm (Accessed: 18 February 2022)

Agreement on Declaration of Principles between The Arab Republic of Egypt, The Federal Democratic Republic of Ethiopia and The Republic of the Sudan on the Grand Ethiopian Renaissance Dam Project (GERDP) (2015) Available at https://www.internationalwaterlaw.org/documents/regionaldocs/Final Nile Agreement 23 March 2015.pdf (Accessed: 20 February 2022)

Ahmady, M. (2022) Waiting for the 'Ethiopian Godot', *Ahram Online*. Available at https://english.ahram.org.eg/NewsContent/50/1201/462044/AlAhram-Weekly/Egypt/Waiting-forthe-%E2%80%98Ethiopian-Godot%E2%80%99.aspx (Accessed: 28 February 2022)



Alarabiya News (2013) 'Caught on Camera: Egyptian Politicians Talk Covert Ethiopia Attack', *Alarabiya News*. Available at https://english.alarabiya.net/News/middle-east/2013/06/04/Egyptian-politicians-suggest-sabotaging-Ethiopia-s-new-Nile-dam (Accessed: 28 February 2022)

Aljazeera (2013) 'Death on the Nile', *Aljazeera*. Available at https://www.aljazeera.com/program/inside-story/2013/5/30/death-on-the-nile (Accessed: 28 February 2022)

Aljazeera (2020) 'US Suspends Aid to Ethiopia Over Blue Nile Dam Dispute', *Aljazeera*. Available at https://www.aljazeera.com/news/2020/9/3/us-suspends-aid-to-ethiopia-over-blue-nile-dam-dispute (Accessed: 25 February 2022)

Aljazeera (2021) 'Egypt's Sisi Warns Ethiopia Dam Risks 'Unimaginable Instability', *Aljazeera*. Available at https://www.aljazeera.com/news/2021/3/30/egypts-sisi-warns-ethiopia-dam-risks-unimaginable-instability (Accessed: 25 February 2022)

Aljazeera (2022) 'Ethiopia Starts Electricity Production at Blue Nile Mega-dam', *Aljazeera*. Available at https://www.aljazeera.com/news/2022/2/20/ethiopia-electricity-production-gerd-blue-nile-mega-dam (Accessed: 25 February 2022)

Al-Kady, B. (2022) 'Egypt Officially Enters State of Water Poverty', *Al-Monitor*. Available at https://www.al-monitor.com/originals/2022/01/egypt-officially-enters-state-water-poverty (Accessed: 26 February 2022)

Aman, A. (2021) 'How Egypt is Supporting Sudan in Border Conflict', *Al-Monitor*. Available at https://www.al-monitor.com/originals/2021/01/egypt-sudan-ethiopia-support-border-conflict-gerd-talks.html (Accessed: 25 February 2022)

Aman, A. (2022) 'Egypt Reacts as Ethiopia Switches On First Nile Dam Turbine', *Al-Monitor*. Available at https://www.al-monitor.com/originals/2022/02/egypt-reacts-ethiopia-switches-first-nile-dam-turbine (Accessed: 25 February 2022)

Ashton, P. J. (2007) 'Disputes and Conflicts Over Water in Africa. In: Mlambo, N. (ed) Violent Conflicts, Fragile Peace: Perspectives on Africa's Security. London: Adonis & Abbey Publishers Limited, pp. 119–135.

Bakri, M. (2015) *Al-Szundúk al-Aszvad* – Omar Szulejmán (A feketedoboz – Omar Szulejmán). Kairó, Youm7.

BBC News (2013) 'Egyptian Warning Over Ethiopia Nile Dam', *BBC News*. Available at https://www.bbc.com/news/world-africa-22850124 (Accessed: 21 February 2022)

BBC News (2021) 'Gerd: Sudan Talks Tough with Ethiopia Over River Nile Dam', *BBC News*. Available at https://www.bbc.com/news/world-africa-56799672 (Accessed: 21 February 2022)

Champion, M. and Manek, N. (2019) 'Death on the Nile Haunts Ethiopia's Rebirth', *Bloomberg*. Available at https://www.bloomberg.com/graphics/2019-nile-river-ethiopia-dam/ (Accessed: 28 February 2022)

Egypt Independent (2011) 'Ethiopia won't Allow Inspection of Dam, But Ready to Negotiate with Post-Mubarak Egypt', *Egypt Independent*. Available at https://egyptindependent.com/ethiopia-wont-allow-inspection-dam-ready-negotiate-post-mubarak-egypt (Accessed: 18 February 2022)

El-Fekki, A. and Malsin, J. (2021) 'Egypt, Ethiopia Tensions Escalate as Nile Dam Talks Falter', The Wall Street Journal. Available at https://www.wsj.com/articles/egypt-ethiopia-tensions-escalate-as-nile-dam-talks-falter-11617808239?mod=saved_content (Accessed: 17 February 2022)

El-Fekki, A. and Malsin, J. (2021) 'Egypt, Ethiopia Tensions Escalate as Nile Dam Talks Falter', The Wall Street Journal. Available at https://www.wsj.com/articles/egypt-ethiopia-tensions-escalate-as-nile-dam-talks-falter-11617808239?mod=saved_content (Accessed: 17 February 2022)



Ethio12.com (2022) 'Egypt, Sudan Should Embrace GERD Project for Their Benefit – Amb. Redwan', *Ethio12.com*. Available at https://ethio12.com/2022/02/17/egypt-sudan-should-embrace-gerd-project-for-their-benefit-amb-redwan/ (Accessed: 27 February 2022)

Gleick, Peter H. (1993) 'Water and Conflict: Fresh Water Resources and International Security', *International Security*, 18(1), pp. 79–112.

Hendawi, H. (2021) 'Nile Crisis: Egypt Says Millions Will 'Suffer' If Ethiopia Continues Filling Dam', *MENA*. Available at https://www.thenationalnews.com/mena/egypt/nile-dam-crisis-egypt-says-millions-will-suffer-if-ethiopia-continues-water-filling-1.1207222?gclid=CjwKCAiAgbiQBhAHEiwAuQ6
<a href="https://www.thenationalnews.com/mena/egypt/nile-dam-crisis-egypt-says-millions-will-suffer-if-ethiopia-continues-water-filling-1.1207222?gclid=CjwKCAiAgbiQBhAHEiwAuQ6
<a href="https://www.thenationalnews.com/mena/egypt/nile-dam-crisis-egypt-says-millions-will-suffer-if-ethiopia-continues-water-fillin

Ibrahim, A. M. (2011) 'The Nile Basin Cooperative Framework Agreement: The Beginning of the End of Egyptian Hydro-Political Hegemony of the End of Egyptian Hydro-Political Hegemon', *Journal of Environmental and Sustainability Law*, 18(2), pp. 282–313.

International Rivers (2013) 'Field Visit Report on the Grand Ethiopian Renaissance Dam', *International Rivers*. Available at https://archive.internationalrivers.org/fr/node/7815 (Accessed: 28 February 2022) Kotb, A. (2022) 'EU says ready to engage more to reach agreement on GERD', *Ahram Online*. Available at https://english.ahram.org.eg/NewsContent/1/1234/462057/Egypt/Foreign-Affairs/EU-says-ready-to-engage-more-to-reach-agreement-on.aspx (Accessed: 1 March 2022)

Kendie, D. (1999) 'Egypt and the Hydro-Politics of the Blue Nile River', *Northeast African Studies*, 6(1–2), pp. 141–169.

Klare, M. T. (2001) 'The New Geography of Conflict', Foreign Affairs, 80(3), pp. 49-61.

Mutahi, B. (2020) 'Egypt-Ethiopia Row: The Trouble Over a Giant Nile Dam', *BBC News*. Available at https://www.bbc.com/news/world-africa-50328647 (Accessed: 17 February 2022)

Noureddine, N. (2018) 'Renaissance Dam Water Conflict Will Pass Down Generations', *SciDev.Net*. Available at https://www.scidev.net/global/opinions/renaissance-dam-water-conflict-will-pass-down-generations/?gclid=CjwKCAiAgbiQBhAHEiwAuQ6BkqbMzJSvf-Ay1pT2UAvNF0bJS_jmP3W1l0Zoz8NVby0b7Fd7wkP3xhoCv7QQAvD_BwE (Accessed: 27 February 2022)

Okoth-Owiro, A. (2004) *The Nile Treaty. State Succession and International Treaty Commitments: A Case Study of The Nile Water Treaties.* Konrad Adenauer Foundation, Law and Policy Research Foundation: Nairobi.

Patel, S. (2022) 'Ethiopia Produces First Power at GERD Mega-Dam', *Power*. Available at https://www.powermag.com/ethiopia-produces-first-power-at-gerd-mega-dam/ (Accessed: 20 February 2022)

Piliero, R. J. (2021) 'Ethiopia's Grand Renaissance Dam: Assessing China's Role', *U.S.-China Perception Monitor*. Available at https://uscnpm.org/2021/06/05/gerd-assessing-chinas-role/ (Accessed: 27 February 2022)

Rafaat, S. (2020) 'Video | GERD: A Decade of Futile Negotiations Over Nile Dam Dispute', *Daily News Egypt*. Available at https://dailynewsegypt.com/2020/07/21/video-gerd-a-decade-of-futile-negotiations-over-nile-dam-dispute/ (Accessed: 18 February 2022)

Reuters Staff (2020) 'Sudan declares full control of border territory settled by Ethiopians', *Reuters*. Available at https://www.reuters.com/article/sudan-ethiopia/sudan-declares-full-control-of-border-territory-settled-by-ethiopians-idlNKBN2951BG (Accessed: 25 February 2022)

Shaban, A. R. A. (2017) '[Photos] Work at Ethiopia's GERD project; ministers meet over concerns', *Africa News*. Available at https://www.africanews.com/2017/10/20/photos-work-at-ethiopia-s-gerd-project-ministers-meet-over-concerns/ (Accessed: 24 February 2022)



Saied, M. (2021) 'International Momentum Dwindles Over Nile Dam Dispute', *Al-Monitor*. Available at https://www.al-monitor.com/originals/2021/09/international-momentum-dwindles-over-nile-dam-dispute (Accessed: 25 February 2022)

Saied, M. (2022a) 'Ethiopia to Generate Electricity from GERD Amid Negotiations Deadlock', *Al-Monitor*. Available at https://www.al-monitor.com/originals/2022/01/ethiopia-generate-electricity-gerd-amid-negotiations-deadlock (Accessed: 25 February 2022)

Saied, M. (2022b) 'Ethiopia's Accusations Against Egypt, Sudan Dispel Hopes for Renaissance Dam Crisis', *Al-Monitor*. Available at https://www.al-monitor.com/originals/2022/02/ethiopias-accusations-against-egypt-sudan-dispel-hopes-renaissance-dam-crisis (Accessed: 25 February 2022)

Schipani, A. and Saleh, H. (2022) 'Ethiopia's Blue Nile Mega-Dam Starts Generating Electricity', *Financial Times*. Available at https://www.ft.com/content/e5f3ab13-1796-471e-8438-a7c14c89fdcf (Accessed: 28 February 2022)

Swain, A. S. H. O. K. (1997) 'Ethiopia, the Sudan, and Egypt: The Nile River Dispute', *The Journal of Modern African Studies*, 35(4), pp. 675–694. DOI: 10.1017/S0022278X97002577

US Energy Information Administration (2018) 'Egypt Overview'. Available at https://www.eia.gov/international/analysis/country/EGY (Accessed: 25 February 2022)

نهر النيل والخلافات المائية حوله' (2009) Aljazeera. Available at <a href="https://www.aljazeera.net/opinions/2009/7/20/%D9%86%D9%87%D8%B1-%D8%A7%D9%84%D9%86%D9%84%D8%A7%D9%84%D8%A7%D9%84%D8%A7%D9%84%D8%A7%D9%84%D8%A7%D9%84%D8%A7%D9%84%D8%A7%D9%84%D8%A7%D9%84%D9%84%D9%84%D9%84%D9%84%D9%84%D9%88%D9%84%D9%87

(Accessed: 5 March 2022)

2021) akhbarelyom. Available at https://m.akhbarelyom.com/news/newdetails/3606194/1/%D9%88%D8%B2%D9%8A%D8%B1-%D8 %A7%D9%84%D8%B1%D9%8A--%D9%A9%D9%A7--%D8%A7%D8%B9%D8%AA%D9%85%D8%A7%D8 %AF-%D9%85%D8%B1-%D8%B9%D9%84%D9%89-%D8%A7%D9%84%D9%86%D9%8A%D9%8A%D9%84%D9%88%D9%84%D9%88%D9%84%D9%88%D9%84%D9%88%D9%84%D9%85%D8%B1-%D8%AA%D9%88%D8%AC%D8%AF-%D9%85%D8%B4%D9%83%D9%84--%D9%85%D8%A7-%D8%AA%D9%88%D8%AC%D8%AF-%D9%85%D8%B4%D9%83%D9%84%D9%8A--%D9%85%D9%8A%D8%A7%D9%87-%D9%81%D9%8A-%D8%AF%D9%88%D9%84-%D8%A7%D9%84%D9%88%D9%84-%D8%A7%D9%84%D9%88-\$ (Accessed: 5 March 2022)

المخاطر (2014) Reuters. Available at مويل سد النهضة قرار أثيوبي جريء يحبط مصر ويجلب معه المخاطر (2014) https://www.reuters.com/article/oegtp-ethiopia-power-mz5-idARACAEA3M07G20140423 (Accessed: 9 March 2022)

at https://www.alarabiya.net/arab-and-world/egypt/2021/07/11/%D9%85%D8%B5%D9%86%D9%81-%D8%B6%D9%85%D9%86-%D8%A7%D9%84%D8%A3%D9%83%D8%AB%D8%B1-%D8%AE%D8%B7%D9%88%D8%B1-%D8%AP-%D9%84%D9%85%D8%A7-%D8%AA%D8%AA%D8%B2%D8%A7%D9%84%D8%A7%D8%AA%D9%85%D8%A7-%D8%AA%D8%AA%D8%B2%D8%A7%D9%8A%D8%AF-%D8%A7%D8%AA%D9%85%D8%A7%D9%84%D8%A7%D8%AA-%D8%A7%D9%86%D9%87%D9%8A%D8%A7%D8%B1-%D8%B3%D8%AF-%D8%A7%D9%84%D9%86%D9%87%D8%B9F- (Accessed: 9 March 2022)

مصر وقضية المياه (2021) SIS. Available at https://www.sis.gov.eg/Story/545/%D9%85%D8%B5%D8%B1-%D9%88%D9%82%D8%B6%D9%8A%D8%A9-%D8%A7%D9%84%D9%85%D9%8A%D8%A7%D9%87?I ang=ar (Accessed: 9 March 2022)

عرج" للرئاسة المصرية بعد بث اجتماع تضمن تلميحات باستخدام القوة ضد إثيوبيا" حرج" للرئاسة المصرية بعد بث اجتماع خدم (2013) Available at www.bbc.com/arabic/middleeast/2013/06/130604 egypt nile meeting (Accessed: 9 March 2022)