

New Ethiopian dam sparks controversy among Nile states

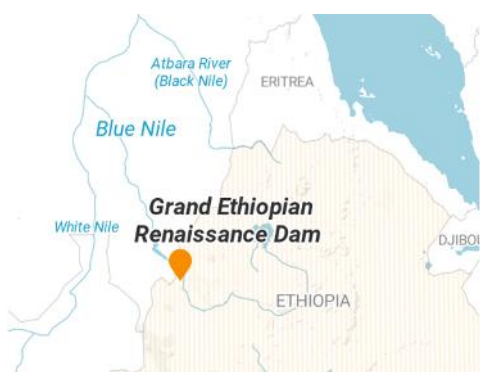
SUMMARY

Successive negotiation rounds between Ethiopia, Sudan and Egypt about the filling and operation of the Grand Ethiopian Renaissance Dam (GERD) have ended in stalemate. This new dam, built by Ethiopia on the Blue Nile (the Nile's main tributary), will bring into operation Africa's largest hydropower plant. It is expected to secure access to electricity for the majority of Ethiopians, to foster economic development and to provide revenues from the sale of surplus electricity abroad. For its part, Sudan expects the new dam will not only help regulate the flow of the Nile and prevent devastating floods but also provide access to cheap energy; still, it fears the new dam will hinder the yield of its own dam – Roseires – situated within a short distance downstream. Egypt too is worried about the potential impact of the new dam on its own Aswan High Dam, and that it will give Ethiopia control over the flow of the Nile and reduce the fresh water available for Egyptians.





Yet again, the GERD has reignited a long rivalry about the sharing of waters among the Nile basin countries. Most – including Ethiopia – have signed a comprehensive framework agreement on the water management of the Nile and its tributaries. However, Sudan and Egypt have refused to take part in the Nile basin comprehensive framework agreement, unless it recognises their right to oversee the use of most of the Nile waters, which a bilateral treaty of 1959 accorded to them, but which is contested by other basin countries.

The EU supports the African Union in the quest for a negotiated solution on the GERD, which risks further setbacks due to the conflict in Ethiopia's Tigray region.

This is an update of a Briefing published in December 2020. The author acknowledges the assistance of Christian Meseth from the Directorate-General for External Policies (DG EXPO) with the updating.



In this Briefing

-  The Grand Ethiopian Renaissance Dam
-  Impact on downstream countries
-  Failed negotiations
-  The EU's role

The Grand Ethiopian Renaissance Dam

The construction of the Grand Ethiopian Renaissance Dam (GERD) on the Blue Nile started in 2011. Its reservoir, an artificial lake of 1 874 km², has a total capacity of 74 billion m³. Ethiopia's minister of water announced that the hydroelectric plant operated by the dam would [start generating](#) power before the autumn of 2021. When fully operational, the plant would have a capacity of 5 to 6 GW, with an annual potential output of 15 759 GWh ([official data](#)). This is more than [twice the power capacity](#) of Egypt's Aswan High Dam, with a reservoir half as big. The dam could [provide electricity](#) to more than half of Ethiopia's population (110 million); only a third have access today. The dam would also foster industrial development and bring in about €1 billion annually from selling the surplus to neighbouring countries. Italian construction company [Salini Costruttori SpA](#), (now [Webuild](#)) which has built several dams in Ethiopia since 1967, both drafted the feasibility study and supervised the works, estimated at more than €4 billion. Ethiopia provided most of the funding through [taxes](#) and [bonds](#). China reportedly agreed to extend a [loan](#) of roughly €0.7 billion to finance and build transmission lines between the GERD plant and Addis Ababa. According to some [experts](#), Ethiopia would not be able to get the expected return on investment if transnational

transmission lines are not built and power trade agreements not concluded. The creation of the reservoir necessitated the [relocation](#) of nearly 20 000 people and had a non-negligible environmental impact on the site. On the other hand, the dam would contribute to mitigating climate change impacts once it starts producing clean energy and regulating water flow.

Impact on downstream countries

As 85 % of the Nile River's waters flow from the Blue Nile in the Ethiopian highlands, the filling of the reservoir and operation of the new dam will directly affect Sudan and Egypt. Ethiopian officials have pointed out the potential [positive impacts](#) of the dam for downstream countries (flood control, cheap energy and reduction of water loss). **Sudan's** authorities [hope](#) that the dam, which is near the country's south-eastern border with Ethiopia, will prevent the occurrence of [devastating floods](#), such as those that destroyed more than 100 000 houses and affected over 700 000 Sudanese in the summer of 2020. The regulation and predictability of water levels would also ease Sudan's irrigation projects and possibly its access to cheap energy from the GERD. However, Sudan insists on data exchange and cooperation regarding the Nile dams, so that the filling and the operation of the GERD would not hinder the functioning of Sudan's Roseires Dam, only a hundred kilometres downstream. **Egypt** essentially relies on the Nile for its water resources: nearly all Egyptians live near the river (half along the valley and half in the delta where the Nile flows into the Mediterranean Sea). Its projected [population growth](#) alone (from 100 million today to 160 million in 2050) would create tensions over land and water access, in addition to the impact of climate change, as the [rise in sea level](#) could cause the reduction of available land and fresh water, notably due to the shrinking of the delta and intrusion of saltwater. The filling of the GERD would additionally reduce the already [scarce freshwater reserves](#): according to a [study from 2017](#), the Nile's flow to Egypt might be reduced by 25 % during a filling period of five to seven years. Yet again, this might also decrease the volume of electricity produced by Egypt's Aswan High Dam. Egypt has demanded guarantees that the filling

Figure 1 – The GERD in the regional context



of the GERD reservoir would [slow down](#) during droughts, which Ethiopia has rejected, as this could result in filling the dam over 12 years, more than twice its scheduled timeframe. Egypt is also concerned that the operation of the dam will result in a permanent reduction in water flow. According to Egypt's minister of water resources, a 2 % water reduction in the Nile would result in a loss of more than 800 km² of land, putting at stake the survival of 1 million people. It would not be solely attributable to the GERD, as the Nile water flow is already [highly variable](#) due to natural causes and existing infrastructure. Most recent research makes it possible to [observe](#) and [model](#) these variations more efficiently. Furthermore, it can provide useful insights on how to dynamically adjust the filling and operation of the GERD (and other Nile dams) in order to adapt them to rainfall, drought, electricity needs and other circumstances. However, this requires an agreement between the Nile basin countries, or at least between those directly affected by the GERD: Ethiopia, Sudan and Egypt.

Failed negotiations

After nearly four years of negotiations following the start of the dam's construction, Ethiopia, Sudan and Egypt reached an **agreement on a Declaration of principles in March 2015**. Inspired by the [1997 UN Convention](#) on non-navigational uses of international watercourses, these [principles](#) include 'equitable and reasonable utilization', 'not to cause significant harm,' 'cooperate on the first filling and operation of the dam' and 'exchange of information and data'. However, despite [successive rounds of negotiations](#) and the commission of technical reports, the three countries have not succeeded in agreeing on rules and measures that would secure the implementation of those principles. After yet another, [US-mediated](#), round [failed](#) in February 2020, the **African Union** (AU) took up the matter. On 26 June 2020, an [AU communiqué](#) stated that '90 % of the issues of the Tripartite Negotiations between Egypt, Ethiopia and Sudan [had] already been resolved' and 'welcomed the undertaking by the three Parties to refrain from making any statements, or taking any action that may jeopardize or complicate the AU-led process'. A few weeks later, however, Ethiopia announced that the '**first-year filling**' (estimated at [4.9 billion m³](#)) of the dam had been reached. It is unclear whether this filling had been the result of heavy rainfalls or had been deliberately sped up in order to allow the [testing](#) of the turbines. [Egypt](#) and [Sudan](#) had separately written in June to the UN Security Council that such a move, in the absence of binding rules for filling and operating the GERD, would risk threatening international security. [Ethiopia](#) pledges it is not against agreeing on technical guidelines with downstream countries – such as determining the level of retention according to the incoming flow – provided they do not interfere with its sovereignty as the owner of the dam. Ethiopia also considers such guidelines should be binding only if Egypt and Sudan endorse a broader agreement on the management of the Nile waters, also involving other Nile basin countries. Egypt and Sudan, which in 1959 concluded a bilateral agreement on the sharing of the Nile waters (see box), consider that a revision of this agreement, demanded by Ethiopia and other upstream countries, is outside the scope of the GERD negotiations.

Unfinished cooperation in the Nile basin

The Nile River and its two main tributaries, the White Nile and the Blue Nile, flow through 10 countries (Burundi, the Democratic Republic of the Congo, Egypt, Ethiopia, Kenya, Rwanda, South Sudan, Sudan, Tanzania, and Uganda). These countries are members of the [Nile Basin Initiative](#) (NBI, created in 1999), an international partnership aimed at fostering cooperation and consultation between them – with Eritrea as an observer. However, they have not succeeded in reaching an agreement that would be binding on all riparian countries. After intensive negotiations, six Nile basin countries signed a [Cooperative framework agreement](#) (CFA), which provides for an institutional set-up, including an intergovernmental Nile River Basin Commission with legal capacity and its own staff, and a dispute-resolution mechanism. The CFA would enter into force after six countries have ratified it; according to the NBI website, so far only [three, including Ethiopia](#), have done so. In any case, non-signatory countries – including [Egypt and Sudan](#) – will not be bound by the CFA. The two have so far refused to sign the CFA unless it mentions their 'current uses and rights' under a [bilateral treaty](#) they signed in 1959 (enhancing a colonial-era Anglo-Egyptian treaty of 1929). The 1959 treaty annually allocates 55.5 billion m³ and 18.5 billion m³ of the Nile waters to Egypt and Sudan, respectively, as well as an extra share in case of higher yield. This arrangement ignores the water needs of Ethiopia and other upstream countries, and would in practice prevent them from operating dams – such as the GERD – conducive to reducing the allocation of waters to Egypt and Sudan.

The escalation of the conflict between the central Ethiopian federal government and the [Tigray People's Liberation Front](#), as well as a [border dispute](#), further complicated relations between Ethiopia and Sudan. Sudan's transitional government, already facing internal and regional [challenges](#), [pushed](#) for greater AU involvement [in the negotiations on the GERD](#). Negotiations officially resumed on 21 November 2020, but [failed to produce an agreement](#). The last round of talks was hosted in Kinshasa (Democratic Republic of the Congo, DRC) by DRC President, Félix Tshisekedi, in his capacity of AU chair, in the first week of April 2021. The main points of [disagreement](#) remained the speed at which the reservoir would be filled, the annual replenishment plan and the settlement of future disputes. Importantly, Egypt and Sudan insist on a legally binding agreement, while Ethiopia seeks a less stringent accord. In addition, Sudan and Egypt argue for enhanced international mediation, involving the EU, the United States and South Africa (currently only participating as observers in the AU-led mediation efforts), while [Ethiopia insists](#) on 'full ownership of the process by the three countries and the integrity of the AU-led process', which should resume, in its view, in the third week of April. Following the collapse of the negotiations, Egypt's and Sudan's air forces conducted [a joint exercise](#) dubbed *Nile Eagles 2*, and Egyptian President, Abdel Fattah al-Sisi, warned Ethiopia that '[all options](#)' were open. Meanwhile, the Ethiopian minister for water and irrigation [invited](#) Egypt and Sudan 'to nominate focal persons/dam operators to exchange data among the three countries with regards to the second-year filling which will take place in July and August 2021'. Both governments [rejected](#) the proposal, but on 13 April 2021, the prime minister of Sudan [invited his counterparts](#) to a summit to evaluate the negotiations.

The EU's role

The EU is now involved as an observer in the AU-backed negotiations. Contrary to the US, which put [pressure on Ethiopia](#) and froze US\$100 million in aid, the EU did not take sides, as Egypt and Ethiopia are two of its key partners as regards its policies in the [Southern Neighbourhood](#) and the [Horn of Africa](#). The EU High Representative/Vice President, Josep Borrell, has expressed '[full support](#)' for the AU efforts 'to bring the parties to a negotiated solution', a position [reportedly reiterated](#) by the European Council President, Charles Michel, in an interview with an Egyptian TV channel. Some researchers have hinted at deeper EU involvement in efforts to reach an agreeable solution. The [German Institute for International and Security Affairs](#) notably suggested [compensation by Egypt](#) for slower filling of the GERD, with EU participation under certain conditions, such as better governance and accountability. The [Crisis Group](#) proposed that targeted EU funds could [mitigate](#) the negative effects of the GERD on downstream countries, if and when they occur. An agreement between Egypt, Ethiopia and Sudan would be a positive step in [cooperation](#) among all Nile basin countries. Experience, notably with the Ethiopian [Gibe III](#) dam, has shown that supporting projects with high [environmental, societal](#) and international impacts can be a risky endeavour for the EU. The **European Parliament** relayed these concerns in [February](#) and [November](#) 2014.

DISCLAIMER AND COPYRIGHT

This document is prepared for, and addressed to, the Members and staff of the European Parliament as background material to assist them in their parliamentary work. The content of the document is the sole responsibility of its author(s) and any opinions expressed herein should not be taken to represent an official position of the Parliament.

Reproduction and translation for non-commercial purposes are authorised, provided the source is acknowledged and the European Parliament is given prior notice and sent a copy.

© European Union, 2021.

eprs@ep.europa.eu (contact)

www.eprs.ep.parl.union.eu (intranet)

www.europarl.europa.eu/thinktank (internet)

<http://epthinktank.eu> (blog)

