

Ethiopia strives for independence with the Renaissance Dam, but finds opposition from neighbouring countries

Millions of Ethiopians have made sacrifices to help fund a nearly completed hydro dam on the Blue Nile that aims to mitigate the country's crippling electricity shortage, but the a project is raising tensions with Egypt, which sees the dam as a threat to its own water supply

Johannesburg



Construction on a turbine to be installed at the Grand Ethiopian Renaissance Dam, which will generate electricity to power Ethiopia. EDWARD BURTYNSKY / COURTESY NICHOLAS METIVIER GALLERY, TORONTO

As a teenager, Mekdelawit Deribe donated two months of her small student allowance to help Ethiopia build its most ambitious national project: a hydro dam on the Blue Nile, a tributary of the Nile.

It was the equivalent of a few dollars a month, a tiny contribution to a vast multibillion-dollar project that has taken a decade to build. But millions of ordinary Ethiopians have made similar sacrifices for the dam. Students gave up meals for it. Older people bought bonds to help finance it.

Ms. Deribe later donated a month of her teaching salary for the same cause. And today, as a water science researcher, she devotes her career to studying the Nile and explaining why the Grand Ethiopian Renaissance Dam (GERD) is so vital for her homeland.

While Egypt, which is downstream from the dam, sees the GERD as a threat to its water supply and to its future, Ethiopians are equally convinced that any halt to the nearly completed dam would be an existential threat to their own country. Without the dam, they say, tens of millions of Ethiopians would lose their dreams of a normal life: a life with electricity and water in their homes, a chance at jobs and the hope of an escape from poverty.

“People in Ethiopia are living a medieval life in the 21st century, and that’s not fair by any standard,” Ms. Deribe says. “It’s unthinkable in this century to have 65 million people living in darkness.”

Ethiopia’s dam

Ethiopia’s Grand Ethiopian Renaissance Dam on the Blue Nile is about 80 per cent complete and expected to reach full generating capacity in 2023, making it Africa’s largest hydroelectric plant.



ETHIOPIA: Says the dam is essential to promote economic development and to make sure the vast majority of its population does not lack electricity.

EGYPT: Depends on the Nile for 95 per cent of its fresh water. It has pushed Ethiopia to fill the dam's reservoir over a longer period and to guarantee minimum flows of water to Egypt.

SUDAN: Could gain from the dam's electricity and flood mitigation, but has called for information sharing to minimize the impact on its own dams.

GRAPHIC NEWS, SATELLITE IMAGE: GOOGLE EARTH

Ethiopia's population is about 120 million, making it the second-most populous country in Africa, but only 48 per cent of its people have access to electricity. That's low by the standards of its East African neighbours, and far below the norms in Egypt, where almost 100 per cent of the population has power.

Ethiopia's crippling electricity shortages have severely damaged its economy, keeping most of its people in poverty and creating huge obstacles for industrial growth.

The spillover effect on education and health care is immense. Students often do their homework under street lights, the only source of light in their towns or villages. Rural women walk for hours with firewood on their back, since they have no other fuel for cooking or light. Even the capital, Addis Ababa, is often hit with power outages.

Only about one-third of the estimated US\$5-billion cost of the Blue Nile dam has been externally financed, primarily with loans from Chinese banks. The bulk of the cost is financed by Ethiopia itself, by the government and its citizens and diaspora. They buy stock in the dam, they hold crowd-funding campaigns or they organize walks and bicycle races to raise money.

"We know that no international funder is going to fund an Ethiopian dam on the Nile without the approval of Egypt," Ms. Deribe told The Globe and Mail. "History has taught us that. There have been multiple projects that were planned and then blocked by the World Bank or other international financiers. This is a dam that was born out of frustration. We know there's nobody out there to help us, so it's up to us. If we don't do it, it's not going to get done – it's as simple as that."

The Ethiopian government's war against Tigrayan rebels, now in its second year, has intensified this mood of geopolitical isolation and patriotic self-reliance.

Social media in Ethiopia is filled with nationalist oratory and militant rhetoric, making compromise difficult. And at a time of U.S. threats of sanctions on Ethiopia if it refuses to negotiate a ceasefire in the civil war, many Ethiopians are increasingly hostile to external pressure of any kind.

"The name, the Grand Ethiopian Renaissance Dam, indicates it is very much a symbol of national revival," said William Davison, senior Ethiopia analyst at the International Crisis Group, an independent research group. "Such patriotic sentiments are heightened by everything else that's going on now, in terms of the perceived disrespect for Ethiopia's sovereignty."

Many Ethiopians believe that Washington is tacitly supporting Egypt in the Nile dispute. Those suspicions make it unlikely that the administration of President Joe Biden will have enough influence to negotiate a solution.

The brutal and exhausting civil war, meanwhile, is jeopardizing Ethiopia's capacity for high-level talks with Egypt and Sudan to resolve the Nile conflict.

A neighbouring president, Salva Kiir of South Sudan, recently disclosed that Ethiopia's negotiations with Egypt had been due to resume in October. Those talks did not happen, he said, because of the military conflict with the Tigrayan rebels, who have advanced to within a few hundred kilometres of Addis Ababa.



Seleshi Bekele, Ethiopia's minister of water, irrigation and energy, and Minister for Foreign Affairs Gedu Andargachew accused the U.S. of being 'undiplomatic' in its push to resolve a row over the Grand Ethiopian Renaissance Dam, which has been a source of tension between Addis Ababa and Cairo since 2011. MICHAEL TEWELDE/AFP/Getty Images

But the delays in the negotiations are unlikely to stall the dam itself. Every day, Ethiopia moves closer to its dream of power production from the dam. The first electricity could be produced within weeks or even days – a much anticipated event that will trigger joyous celebrations in Addis Ababa.

“Ethiopia is at a pivotal point in its history,” said Seleshi Bekele, a former Ethiopian water minister who is now the country's chief negotiator on the Blue Nile dam. “The transformation is our quest for growth and prosperity.”

At a recent conference of Ethiopian water engineers, Mr. Bekele showed no sign of flexibility on the country's basic stance. "The downstream countries, Egypt and Sudan, the way they look at it is that this river water belongs to them, which is completely unacceptable," he said.

"Nowhere in the world does such a law or principle exist. Ethiopia will not recognize what they call their existing water share, water quota or water security."

Ethiopia believes that international law and historical justice are both on its side, legitimizing its efforts to build the dam even if Egypt and Sudan oppose it. About 80 per cent of the Nile's waters originate in the rainfall of Ethiopia's highlands – yet Ethiopia was excluded from earlier agreements that divided the Nile's water entirely between Egypt and Sudan. This sense of injustice means that Ethiopia today is unwilling to bow to foreign pressure on the dam if it believes that these demands would unfairly constrain it – especially at a time when it is already resentful of external pressure on its Tigrayan conflict.

"I think the receptiveness of the Ethiopian government to international influence, let alone pressure, has been reduced because of all of the disputes about the civil war," Mr. Davison told The Globe. "When push comes to shove, Ethiopia is not willing to sign up to commitments that might constrain it, now or in the future. It feels no compulsion to make such concessions. This is an Ethiopian project. As far as they're concerned, and this is indeed the case legally, they don't need anyone's permission to build the dam."



Aerial view of the Grand Ethiopian Renaissance Dam, during construction in late 2019. The turbines will sit at the bottom of the building. Water will enter a total of 16 turbines through the two round holes in the bottom of the wall, which will generate electricity for Ethiopians. EDWARD BURTYNSKY / COURTESY NICHOLAS METIVIER GALLERY, TORONTO

The Ethiopian government – and many independent experts – reject the Egyptian argument that the hydro dam is inherently a threat to the downstream countries. A proper water-sharing agreement would allow the Nile’s waters to be used more efficiently, to the benefit of all countries, they say.

“Regulating the flow of the Nile more consistently through the year, as the dam could do, would help both Sudan and Egypt,” said Mark Lowcock, the UN humanitarian affairs co-ordinator from 2017 to 2021, in a written commentary for the Center for Global Development, a Washington-based research organization.

Ethiopian scientists argue that the dam could help to preserve the Nile’s water from evaporation, since a larger share of the water would be in a deeper reservoir in Ethiopia at higher altitudes and cooler temperatures, rather than in the shallow reservoir of the Aswan Dam in Egypt, where temperatures are far hotter and evaporation is much faster.

They also argue that Egypt’s concerns about water scarcity would be alleviated if Egyptian farmers shifted to efficient forms of drip irrigation, rather than flooding their fields from open canals, a more wasteful system, as they most commonly do. The problem, they say, is not a scarcity of water but a lack of basic agricultural reforms by Egypt’s government.

A study published in September in the journal Nature Communications concluded that Egypt could gain significant benefits from the Blue Nile dam – higher economic growth, more hydro power and improved water supply for irrigation – if it reached agreement with Ethiopia on a co-ordinated plan for filling and operating the dam.

World’s largest reservoirs

By volume, in cubic kilometres

Reservoir	River	Country	Volume (km3)
Lake Kariba	Zambezi	Zambia/Zimb.	180
Bratsk Reservoir	Angara	Russia	170
Lake Volta	Volta	Ghana	148
Manicouagan Reservoir	Manicouagan	Canada	142
Lake Guri	Caroní	Venezuela	135
Lake Nasser	Nile	Egypt/Sudan	132
GERD	Blue Nile	Ethiopia	74-79
Williston Lake	Peace	Canada	74.3
Krasnoyarsk Reservoir	Yenisei	Russia	73.3
Zeya Reservoir	Zeya	Russia	68.4

THE GLOBE AND MAIL, SOURCE: LAKEPEDIA; WORLD RIVERS DATABASE; WATER-TECHNOLOGY.NET

For Ethiopia, another key issue is the Egyptian tendency to rely on historical treaties in which Ethiopia was excluded. The 1959 agreement, dividing the Nile's waters entirely between Egypt and Sudan, did not bother to include Ethiopia or any of the other eight African upstream countries in the Nile basin. "It completely disenfranchised Ethiopia," Ms. Deribe said.

The 1959 treaty, in turn, was influenced by an earlier 1929 agreement in which Britain, the colonial power in the region, granted the Nile's waters to Egypt. This was far from coincidental: Britain's textile industries were heavily dependent on Egypt's vast cotton fields, so Britain had an economic incentive to let Egypt control the Nile.

While Egypt often claims that the Nile is threatened by Ethiopian intransigence and unwillingness to talk, the negotiations over the dam have made significant progress in the past. Ethiopia, Egypt and Sudan signed an agreement in 2015 in which all of them accepted the basic principles of a water-sharing deal, including the principle that the water resources should be used "in an equitable and reasonable manner."

In later negotiations in 2020, Ethiopia and Egypt reached agreement on most of the Nile issues, including the question of how to fill and operate the dam when there is sufficient rainfall. They disagreed mainly on two key questions: drought mitigation protocols and a dispute resolution mechanism.

Even on the drought issue, Ethiopia agreed that it would release a predetermined amount of water when drought reduces the water flow below an agreed minimum. The remaining dispute is about whether Ethiopia would "owe water" to Egypt and Sudan when there is a multiyear drought.

In the end, the differences between Egypt and Ethiopia are largely political. For domestic reasons, neither side wants to make concessions that could make it appear weak to its own people. Both countries are headed by populists with a military background. Neither has any history of compromise or flexibility.

Ms. Deribe believes the geopolitical clash between the two countries is largely because the Ethiopian dam represents a threat to the status quo, and to Egypt's traditional power. It is understandable, she says, that Egypt is reluctant to compromise. "Why would you want to share the pie when you are used to eating the whole pie?"