



The Grand Ethiopian Renaissance Dam Crisis

Dimensions, Repercussions and Future Courses

Special Edition





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EGYPTIAN CENTER FOR STRATEGIC STUDIES



Dr. Khaled Okasha

General Manager

Dr. Abdel-Moneim Said

Academic advisor

The Grand Ethiopian Renaissance Dam Crisis

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Editing and Supervision

DR. Ahmad Amal

DR. Khaled Hanafy

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100 Al-Mirghani St, Heliopolis, Cairo
Tel: 226905861 - 226905862 - 226905863

Email: info@ecsstudies.com

www.ecsstudies.com

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Prefix

Following the latest round of negotiations on the Grand Ethiopian Renaissance Dam (GERD), held in the Sudanese capital Khartoum, Egypt – for the first time – announced tripartite negotiations had reached a deadlock.

As Ethiopia adopted intransigent policies, it speeded up construction works on the dam in the past few months, without implementing the items agreed upon in the Declaration of Principles, particularly those related to the impartial technical evaluation of the design of the dam, which poses multiple threats to Egypt's national security.

In the face of the reality Ethiopia imposes, the Egyptian scene witnessed important developments, manifested in the speech of President Abdel-Fattah Al-Sisi at the United Nations General Assembly in September. President Al-Sisi stressed that the Nile water was a matter of life and existence and that Egypt rejected altogether Ethiopia's imposition of realities on the ground and its unilateral solutions.

Egyptian Center for Strategic Studies



Egypt, Ethiopia, and the GERD: Good Faith vs Intransigence

Ethiopia's refusal to compromise has soured negotiations over the Renaissance Dam and compelled President Al-Sisi to warn the project cannot begin operating as a result of the imposition of de facto realities

Attia Eissawy

The writer is an expert on the Africa affairs, Al-Ahram newspaper.

As President Abdel-Fattah Al-Sisi pointed out, Egypt is almost exclusively dependent on the Nile for its water needs and an acceptable agreement is essential to avert potentially disastrous consequences for Egypt and its people. Not only did he sound the alarm for all the world to hear from the podium of the UN General Assembly, he put paid to the falsehoods Ethiopian officials have spread when they claim Egypt is seeking to block Addis Ababa's development plans.

"We are not against [Ethiopian] development or the construction of dams, but this must not come at Egypt's expense," Al-Sisi said.

"We all want to live and grow. In 2015, we signed a framework agreement with the Ethiopians over the filling of the Renaissance Dam's reservoir. Unfortunately, the technical committees have so far been unable to reach consensus on the issue."

The president stressed the need to maintain Egypt's current water quota and said Cairo preferred a policy of dialogue to ensure this. However, he added, "we are responsible for the safety of our people.

"No country exposes itself to the dangers of water deficiency unless it is weak," he said, offering as illustration the example of Iraq which, until 1990, received around 100 billion m³ of water a year from transboundary rivers (primarily from Turkey) and now only receives 30 billion m³.

In meetings in the US on the sidelines of the UN General Assembly last month, President Al-Sisi stressed that the failure of negotiations with Ethiopia will have detrimental consequences for development and stability across the region.

He appealed to the international community to help persuade Ethiopia to demonstrate the flexibility needed to reach an agreement satisfactory to all parties. Egypt had already demonstrated such flexibility, and while Cairo sympathises with Addis Ababa's Grand Ethiopian Renaissance Dam (GERD) project its potential detrimental impacts on downstream nations have not been given sufficient study.

Egypt has proposed a draft for an agreement on a set of principles to govern the filling of the reservoir and operation of the dam but negotiations over the document have failed to produce results.

The Egyptian proposal calls for a seven- to 10-year timetable for filling the reservoir and for measures that would allow 40 billion m³ to flow through the dam annually and maintain a water level of 165 metres behind the Aswan High Dam. The proposal also calls for a reduction in the quantity of water diverted to fill the GERD reservoir in low flooding seasons and for a mechanism that coordinates GERD's hydraulic system with the operation of dams in Sudan and Egypt so as to guarantee the latter's production of electricity.

Ethiopian intransigence frustrated attempts to secure an agreement over this proposal in the meeting of the irrigation ministers from Egypt, Sudan and Ethiopia held in mid-September, and in the meetings of the independent tripartite technical committee and irrigation ministers in Khartoum held between 30 September and 5 October.

The Egyptian proposal offered equitable ground rules for filling and operating GERD. It respected Ethiopia's electricity generating goals while safeguarding Egypt's water interests.

The proposal was based on earlier Egyptian-Ethiopian discussions, most notably the commitments made in the Declaration of Principles, signed in Khartoum on 23 March 2015, which obliges the three parties to come to an agreement over rules for filling and operating the dam. Addis Ababa also rejected Egypt's request to introduce a mediating party despite the option being included in the Declaration of Principles.

Ethiopia has persisted in its obstinacy despite the fact that Al-Sisi and Ethiopian Prime Minister Abiy Ahmed Ali agreed, in June 2018, to adopt a "joint vision" for the dam that would permit both countries to pursue their development goals without infringing on the rights of the other.

Earlier, in May 2018, Cairo, Khartoum and Addis Ababa had agreed to create a 15-member scientific research group, with five members from each country, to study ways to strengthen understanding and cooperation between the three countries.

The group was tasked with drawing up different scenarios for filling and operating GERD, observing the principle of the just and prudent use of common water resources and the need to take all necessary precautions to avert any harm being caused to others. Sadly the experts were unable to reach an agreement.

No one disputes Ethiopia's sovereign rights, or its right to bring electricity and potable water to every home. But GERD is being built on the Blue Nile, which provides 65 per cent of the water that reaches Egypt.

The Nile is a transboundary river, the Blue Nile one of its main tributaries, meaning no upriver country has the right to build a dam or undertake actions that will diminish or delay the flow of Nile water to Egypt and Sudan without their approval.

This principle is enshrined in international laws and conventions regulating transboundary water-

courses, and in specific treaties signed by Ethiopia. The Anglo-Ethiopian Treaty of 1902, signed by Addis Ababa at a time when Egypt and Sudan were under British occupation, prohibited the construction of dams on the Blue Nile, Lake Tana (its source) and the Subat River (its southern tributary) without Egypt's approval.

An earlier agreement — the 1891 treaty between Britain and Italy, the colonial power in Ethiopia at the time — prohibited any facility on the Atbara River (the northern tributary) that could impede the flow of the Nile. In 1929 Egypt and Britain, on behalf of its colonies in Tanzania, Kenya, Uganda and Sudan, signed an agreement giving Cairo the right to veto any project that might diminish or delay Egypt's quota of Nile water.

Addis Ababa claims it was forced to sign these treaties in the colonial era and they no longer apply. Under international law, though, they are agreements that must still be honoured. In 1992, Ethiopia and Egypt signed another agreement regulating cooperative use of Nile water in accordance with international law and in a manner that causes no harm to either side. It is an agreement Addis Ababa cannot claim it was “forced” to sign given Ethiopia had long been an independent sovereign state.

In signing the Agreement on the Declaration of Principles in 2015, Egypt, Ethiopia and Sudan committed themselves to agreeing on guidelines and rules for the filling of GERD and the annual operation of the dam that would ensure no reductions in water flow and water levels that could harm downstream nations.

They also agreed to establish a coordination mechanism to ensure the annual operation of GERD was coordinated with downstream reservoirs.

In signing the Declaration Ethiopia gave Egypt a written pledge that it would not cause tangible harm to Egypt's historic rights to Nile waters. In exchange, Addis Ababa obtained Cairo's and Khartoum's approval of the construction of the dam pending the outcomes of the required feasibility and environmental impact studies as detailed in the final report of the tripartite technical committee and the recommendations of the International Panel of Experts concerning the measures needed to offset any possible detrimental environmental impacts or harmful reductions in the flow of Nile water.

The text commits the three countries to cooperate on the basis of international law, respect of the water needs of both upstream and downstream nations, and to take all measures necessary to prevent any significant harm from occurring to any of the parties. Should any harm occur, the signatories are obliged to take all measures necessary to eliminate or mitigate it and, where necessary, to discuss compensation.

Although all three countries signed it, the agreement fell short of both Egypt's and Ethiopia's aspirations. It contained wording they did not like and overlooked formulas that would have enabled the two sides to meet halfway.

It calls for the “equitable and appropriate” use of Nile waters, wording Ethiopia had insisted on and which is similar to the Entebbe Agreement that Egypt rejected because it advocated a redistribution of Nile waters among Nile Basin countries that overrode earlier Nile water agreements. It states that the parties should “respect” the recommendations of the international panel of experts rather than “commit to the implementation” of the recommendations.

Ethiopia had argued that the latter would impinge on its national sovereignty. The agreement does not explicitly mention Egypt's quota but then nor does it state that this quota should be abolished.

The agreement did not refer to cooperation over projects that could take advantage of the billions of cubic metres of rainwater that falls on Ethiopia only to be lost, nor address ways to compensate for any reductions in the flow of water during the initial filling of the reservoir.

As for disputes that might arise in the course of implementing agreements, the Declaration of Principles states that the three signatories will settle them through consultation, negotiation or mediation. No mention was made of possible recourse to and commitment to implement the rulings of international arbitration or the International Court of Justice.

Instead, it emphasises “good faith” and “understanding of the water needs” of the other parties, wording that renders implementation contingent on the interpretational whims of the parties and the nature of their relations with the other parties.

Egypt signed the Declaration of Principles despite its drawbacks. It wanted to demonstrate good faith and show that it trusted Ethiopia to meet its commitments. Some people criticised Egypt for being too trusting when it agreed to wording or provisions that facilitated possible Ethiopian attempts to evade its obligations and pointed to Ethiopia’s refusal to furnish any concrete guarantees that the dam would not cause harm to Egypt or Sudan as grounds for their scepticism.

Addis Ababa has said repeatedly that GERD will not affect Egypt’s Nile quota. Three years ago, the Ethiopian minister of irrigation stated that if two additional studies proved that GERD would harm Egypt and Sudan, Addis Ababa would come to an agreement on ways to mitigate the harm.

Yet Addis Ababa obstructed the studies by refusing to approve a plan submitted by the contracted French consultative firm. Cairo, for its part, submitted studies confirming that the dam, if completed in accordance with current specifications, would cause considerable harm.

The logical solution was to bring in international experts to resolve the differences and for all sides to commit to implementing their recommendations but Ethiopia refused to wait for expert opinions before beginning construction and since then it has refused to halt building work so the dispute could be resolved.

It is important to recall that, in 2010, Addis Ababa presented Cairo with a project for a dam that would be 90 metres high with a reservoir capacity of 14.5 billion m³. Before Cairo could even respond, Ethiopia began to implement a totally different design, raising the height to 145 metres and the reservoir capacity to 74 billion m³.

It also appears the development projects Ethiopia has linked to the dam will extend beyond electricity production. According to a number of reports, it plans to place four million acres of land (more than half of Egypt’s agricultural land) under cultivation using water it plans to deduct from Egypt and Sudan’s share.

Unless the water level remains at a minimum of 165 metres behind the High Dam during the period in which the GERD reservoir is being filled Egypt risks losing \$1.8 billion of its GDP, more than a million jobs a year, and \$300 million worth of electricity.

While the per capita share of water in Egypt is less than 625 m³ a year, the per capita share in Ethiopia is 38,000 m³. Whereas Egypt has only the Nile, Ethiopia has 12 rivers. Egypt gets less than 1.3 billion m³ of rainfall a year.

Ethiopia gets more than 800 billion m³, or 50 per cent of the total rainfall received by the 10 Nile Basin

countries. When Egypt signed the Nile Waters Agreement with Sudan in 1959, Egyptians' per capita share of the water was 2,500 m³. Today, Egypt's population has reached 104 million. Its water quota has remained fixed, meaning per capital figures are 20 per cent of what they were 60 years ago.

Egypt was generous when it did not insist Ethiopia halt construction of GERD until studies confirmed the dam would not jeopardise Egypt's historical water rights. In so doing Egypt made it possible for Ethiopia to receive foreign funding, which would have been prohibited given World Bank rules governing projects that are under dispute.

Egypt now expects Ethiopia to return the favour by eliminating the obstacles hampering the work of the tripartite committee and the committee of technical experts. Cairo has said many times it has no problem with development projects in upper riparian countries as long as they do not affect its share of Nile water. It approved the Waw Dam in South Sudan and even prepared the feasibility study for Juba. It approved the Owen Dam in Uganda.

But how can it approve a dam, currently under construction, which threatens to deprive it of two million acres of agricultural land and to cut electricity production at the High Dam by 25 per cent at a time? And this at a time when Egypt already suffers a water deficit, and Ethiopia can produce its electricity needs from smaller dams.

It is crucial Egypt, Sudan and Ethiopia reach agreement over GERD. If they do not, the consequences for regional stability and development could be disastrous, as President Al-Sisi rightfully said. You cannot expose a people whose lives depend on the Nile to the danger of cutting off their water supply without this having an impact on stability, and you cannot speak of development in a region that is unstable.

In March an International Crisis Group report warned of the humanitarian consequences — threatening millions of Egyptian farmers and food supplies in Egypt — should Egypt and Ethiopia fail to reach an agreement to share water resources.

The report recommended a more comprehensive agreement between all Nile Basin countries in order to avert future conflicts that could wreak economic and environmental havoc. Egyptian experts have warned on numerous occasions that GERD, as currently designed, will reduce Egypt's share of water by 20 billion m³ a year and cause Lake Nasser to run dry within three years.

They are also concerned that should Egypt approve the dam with its current specifications it will signal Egypt has effectively relinquished its water quota and encourage other countries in the Nile Basin to build dams.

Ethiopia insists on filling the GERD reservoir in three years and refuses to take into account low flooding seasons or to consider a mechanism to coordinate GERD's operations with the operations of dams in Egypt and Sudan.

Addis Ababa is offering to allow just 35 billion m³ to flow through the dam to Egypt annually, a paltry figure given Egypt's rapidly growing population and the inadequacy of its current quota of 55.5 billion m³.

It seems fairly obvious, given the above, just who is obstructing an agreement that will realise the interests of the people of all three countries.





The Conflict of Visions on GERD

Dr. Hassan Abu Taleb

Advisory board member at the Egyptian Center for Strategic Studies

Even though relations between Egypt and Ethiopia have generally improved in the past four years, progress in the Grand Ethiopian Renaissance Dam (GERD) issue has been moving in the opposite direction. The warmer relationship between the two countries is not reflecting on efforts to reach an agreement on the filling of the reservoir in its first few years and the permanent operation of the dam without harming the interests and rights of the two downstream countries.

Such an agreement requires transparency, cooperation and the continual exchange of information about the rates of water flow and rainfall. To Egyptians, the Nile water is a matter of life.

President Abdel-Fattah Al-Sisi sounded the alarm bells during his participation in the 74th round of the United Nations General Assembly, held in September. He pointed out to the lack of agreement on the GERD issue and its negative repercussions on Nile Basin countries, foremost among which on the lives of Egyptians.

President Al-Sisi said Egypt didn't accept imposed realities. His remarks were a direct expression of worry concerning Ethiopia's refusal of the Egyptian proposals on the rules to fill and operate the dam in a flexible way dependent on floods and the amount of rainfall each year at a time, as well as Ethiopia's rejection to discuss the matter scientifically, at least.

Egypt has put the GERD crisis within not a political, but a scientific framework that focuses on the possible scenarios for the filling of the dam. Egypt demands being involved in the management of the dam in a manner that allows Ethiopia to benefit from the generation of electricity and agricultural expansion resulting from building the dam, and at the same time preserves Egypt and Sudan's water rights.

This is the formula President Al-Sisi has been stressing since he was sworn in in 2014. The formula is based on accepting the dam as a regional development project and preserving Egypt and Sudan's rights to Nile water. Practically, Egypt would shoulder some damage, provided that it be under control.

In application of this policy, Egypt suggested the participation of experts from the World Bank in the negotiations to present solutions accepted by the three parties. Ethiopia refused. Egypt recently de-

manded the mediation of the international community via the United Nations or US mediation. Again, Ethiopia refused.

On the other hand, Ethiopia's stance is based on the concept of sovereignty, believing that since the Blue Nile passes through it, it has the right to benefit from it according to its interests and priorities, before looking to the interests of the downstream countries. In other words, it believes the Blue Nile is an Ethiopian river first and foremost, and whatever remains of its water is not up to downstream countries to decide or regulate.

Based on this Ethiopian stance, it refused to share information about the rates of water flow, the technical details of the GERD, and its plan to manage it according to the rainfall rate.

In the same context, and based on the history of Ethiopian politics regarding the River Nile, Ethiopia refuses to sign agreements on dealing with the river water on a regional level. It rejects the agreements of 1929 and 1959 that determine Egypt and Sudan's right to Nile water, believing that they are not its concern, basing its argument on the rhetoric that it was not part of the deals.

Ethiopia believes the Declaration of Principles signed with Egypt and Sudan in Khartoum in March 2015 and the 1993 agreement signed by former Egypt president Hosni Mubarak and former prime minister of Ethiopia Meles Zenawi are both a set of general principles that express good will, but that the application of these principles primarily depends on Ethiopia's vision.

The Egyptian and Ethiopian visions lie at the opposite ends of the spectrum, each of them rejecting the other. The question here is whether the general improvements in bilateral relations can solve the crisis and what Egypt can do to preserve its interests and historic rights to Nile water.

It is obvious the relative improvement in the economic file and contacts between high-level officials from the two countries are so far irrelative to the GERD issue. It may even seem that Cairo's interest to develop its relations with Addis Ababa and other Nile Basin countries is misunderstood as weakness on the part of Egypt. President Al-Sisi alluded to this at the youth conference held in September, saying that the fall of a state, just like what happened in Egypt after 2011, allows other countries to disregard its water rights. He referred to Iraq, which used to annually receive 100 billion cubic meters of water and now receives 30 billion cubic meters.

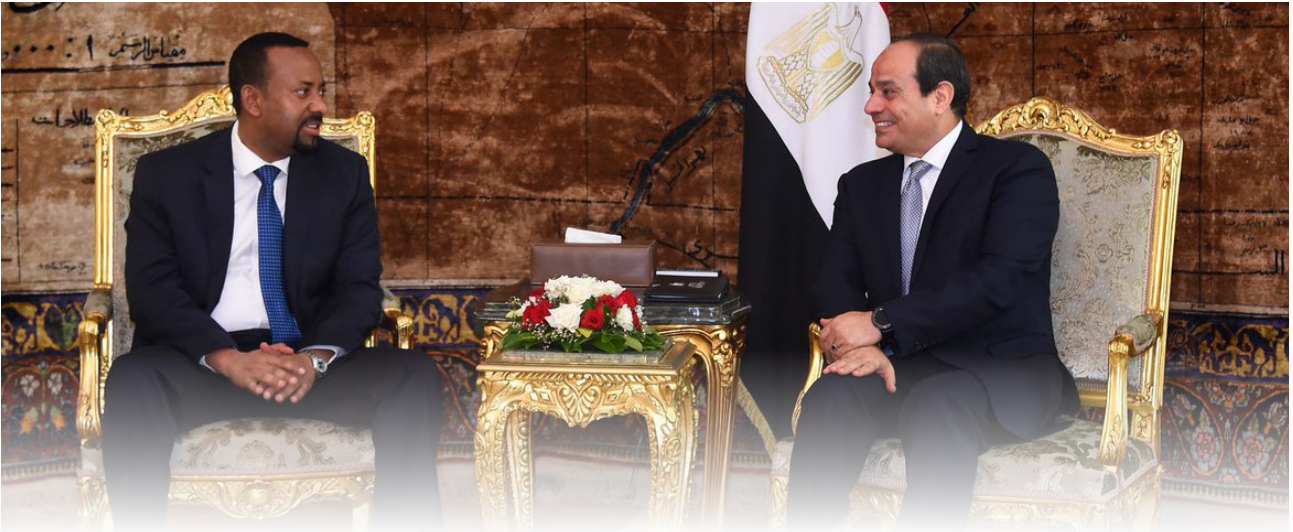
It also appears that the binding Declaration of Principles of 2015, comprising 10 principles derived from international law, concerning the effect of the GERD on downstream countries, is ringing hollow in Ethiopia's ears. Ethiopia is interpreting the principles, some of which sentences are loosely termed, in a different way.

The more difficult question is, what will Egypt do to preserve its rights and shoulder the least possible damages?

Noteworthy to mention is that any military action on the part of Egypt is out of the question due to practical and humanitarian reasons. Putting the military option on the table will reap negative repercussions not only to Ethiopia but all the countries of the Nile Basin, which is not what Egypt wants.

This is why negotiations remain within an active political and diplomatic circle. The negotiations shall reap benefits on three conditions: Africa's understanding of Egypt's fears, which will put pressure on Ethiopia to adopt more lenient positions; more coordination with Sudan, that doesn't look like it has recovered from the policies of the overthrown Omar Al-Bashir regime; and that the GERD file and Ethiopia's intransigence become a fixture in Egypt's relations with other countries.

The understanding and support of powerful Arab countries to Egypt's water rights will undoubtedly reflect positively on the lives of Egyptians.



Egypt, Ethiopia discord over the Nile

Dr. Mohamed Nasr El-Din Allam

Egypt's former minister of water resources and irrigation

“Power Play on the Nile” is the title of Erik Stokstad’s article published in Science magazine on the Grand Ethiopian Renaissance Dam (GERD) crisis. The article was spread over four pages, half of which were pictures of the dam. The article began by reciting the history of the plans of Ethiopian dams, starting with the study conducted by the US Office for Land Reclamation from the late 1950s until 1964. The study was updated throughout the years.

Stokstad then discussed the 1999 Nile Basin initiative which received \$200 million in Western funding. Through the initiative, several studies were conducted on joint projects for Nile Basin countries. Egypt agreed to the construction of an Ethiopian dam in 2008 to generate 2,100 MW of power on the Blue Nile. At the same time, former prime minister of Ethiopia Meles Zenawi was planning to build a mega dam on the Blue Nile with local funding through bonds.

The time Ethiopia chose to announce the construction of its mega dam was during the 25 January 2011 Revolution of Egypt. On 3 February 2011, Zenawi announced his country’s intent to build the GERD. The foundation stone was laid in April 2011.

Today, the dam is near completion. Its maximum capacity is 6,000 MW, but on average it will produce 2,000 MW, which will be used to cover some of Ethiopia’s domestic needs, while the rest will be exported to Sudan.

The Blue Nile discharge will benefit Sudanese large farms year-round, such as the 800-hectar Island project. It will, however, cause multiple harms to Sudan’s small farms that depend on flood waters to wash their lands and rejuvenate the soil. Small farms will have to use pumps to deliver water to their lands, use fertilizers and build a draining network.

Stokstad added that the regulation of Blue Nile water throughout the years will increase the productivity of Sudanese power-generating dams by 20 percent, or 1,000 GW, per year, and that Sudan will benefit from reserving the silt and sediment in front of the GERD instead of them filling Sudan’s dams and shortening their lifespan.

The writer, nonetheless, admitted that the GERD will decrease the water level in the reservoir of Egypt's Lake Nasser, reducing Egypt's production of electricity and its irrigation water.

Stokstad said the leaked report of the international tripartite committee on GERD, issued in May 2013, caused heated controversy after being obtained by the International Rivers organization in early 2014. The report recommended the revision of studies on the repercussion of the GERD on the flow of Nile water to Egypt and Sudan, pointing out to grave errors in the design of the foundation of the dam that may lead to its collapse. The author added that the report of the international tripartite committee recommended international studies be conducted on the dam's construction safety, its negative effects on the quality of water and other environmental problems.

The writer added that International Rivers said the blueprints and designs of the dam were inaccurate and incomplete and that the dam's effect on local residents were not clear. Ethiopia claimed that the 3,000 residents of the GERD area would be relocated, while US geography expert Jennifer Felix at the University of Florida said that the locals in the GERD area numbered at least 20,000 people. Felix added the residents were minorities and the GERD would erase their communities and ancient civilizations.

Stokstad said opponents of the GERD fear its negative effect on Egypt while filling the reservoir that is expected to take between five and seven years. During the first year, 10 percent of the average annual sediment of the Blue Nile will be stored in Egypt. The sediment will steadily increase on an annual basis.

The writer said Dr Paul Block of the University of Wisconsin published a research in 2014 in the magazine of the American Society of Civil Engineers explaining that filling the GERD reservoir would result in a water crisis and shortage in electricity generation in Egypt.

If the GERD reservoir is to be filled during high or medium flood years the repercussions on Egypt will not be catastrophic, but if the dam is filled during drought Egypt will suffer, the research added. And in a blatant provocation to the Egyptians, the writer stated, Dr Yilma Seleshi of the Addis Ababa University told him that Ethiopia can't wait to generate electricity from the GERD and that if Egypt and Sudan were not to understand that, Ethiopia will fill the reservoir from Egypt's share of Nile water.

The author then wrote about the Egyptian Nile Basin group, formed of university professors and intellectuals who warned in a 2013 publication that the catastrophic repercussions of the GERD will not be limited to the years of filling the reservoir but will be permanent. The negative effects of the GERD will reach their maximum during the years of Nile drought when a drastic decrease in the reservoir of Lake Nasser will be observed, huge lots of agricultural lands will not be cultivated, and millions of farmers will become jobless.

The article added that the Egyptian Nile Basin group warned that the decrease of Nile water flowing to Egypt will result in the accumulation of salt in the Delta region and increase the saltiness of underground water due to mixing with sea water. Stokstad added that other experts shared different views, such as Dr Amiore Tilmant of the Laval University in Canada who believes that coordinating the operation of the High Dam with the GERD can decrease the negative repercussions on Egypt and that the GERD reservoir can provide additional water to Egypt during the years of drought.

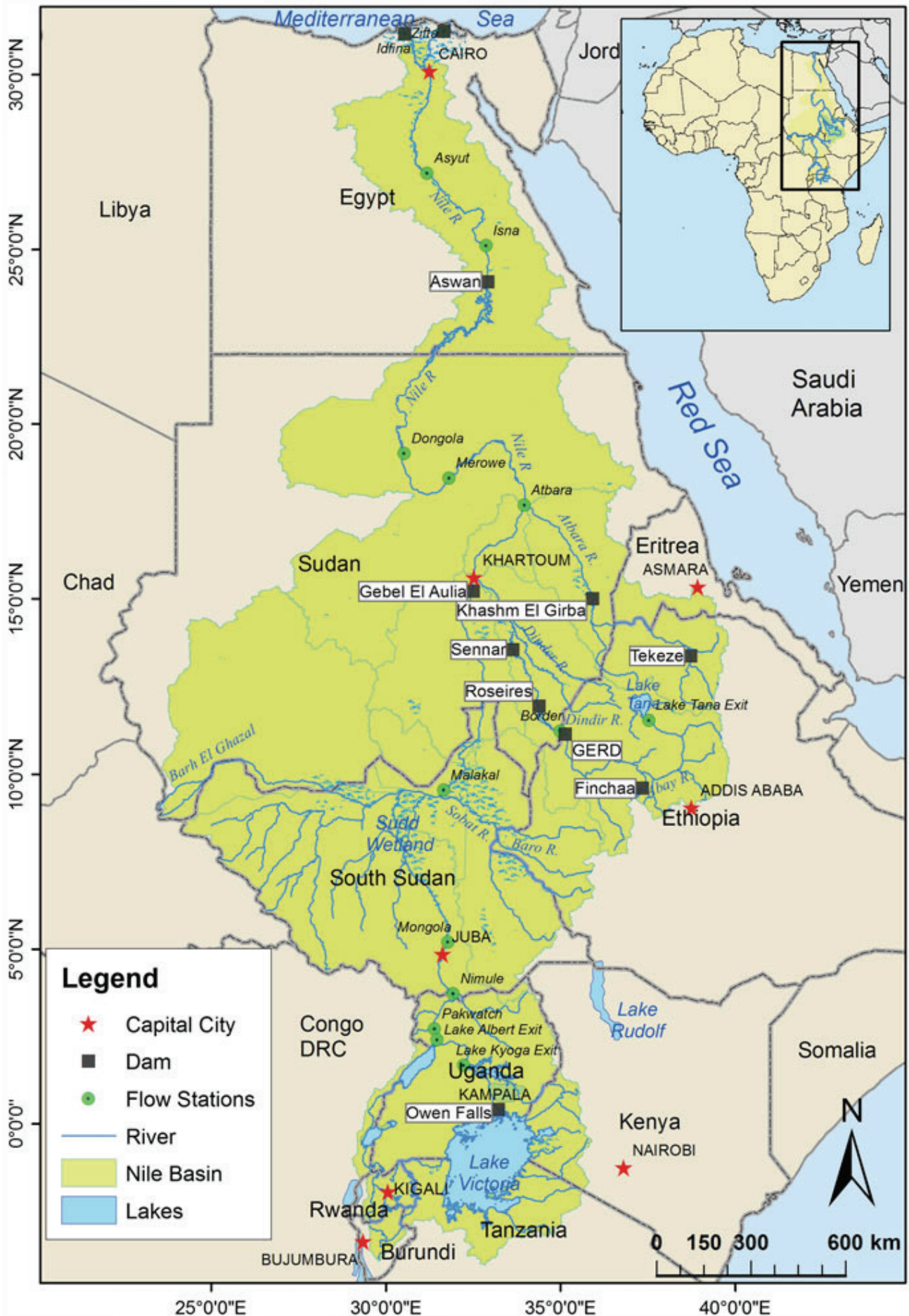
Stokstad said that Dr Mohamed Nasr El-Din Allam, a professor in the Faculty of Engineering at Cairo University and former irrigation minister in Egypt, was fearful of Ethiopia's real intentions behind build-

ing the dam, believing that its size was exaggerated and that Ethiopia will build other dams to control every drop of Blue Nile water.

The writer also expressed fears of the construction design of the Saddle Dam, extending for five kilometres, at the height of 50 meters, south of the GERD. Stokstad said that millions of people will be killed if the Saddle Dam were to collapse.

He stated that the report of the international tripartite committee said the GERD lacked the right design that can prevent its collapse under the pressure of water stored in front of it. The writer added that a 2014 workshop at MIT University in the US expressed fears of the possibility of the collapse of the dam, explaining that Dr Yilma Seleshe said that concrete will be used for the outer surface of the dam and to close the cracks under it.

Stokstad concluded by saying that multiples hurdles were expected to come up during negotiations on decreasing the negative effects of the GERD.





GERD: Ethiopia's Motives and Challenges

Mahmoud Salama

Researcher at the Egyptian Center for Strategic Studies

The Grand Ethiopian Renaissance Dam (GERD) has been encountering hurdles since laying its foundation stone in April 2011. Ethiopia's plan was to finalize the construction of the dam in 2017. The date was put off till 2018 and again till 2022 due to problems in funding and implementation. The delays aroused many questions regarding the position of the dam in Ethiopia's politics after the shifts the country witnessed throughout the past year.

First: Ethiopia's motives to continue building the GERD

There is no doubt Ethiopia has strong reasons to continue building the dam. The political changes in and around Ethiopia are an additional motive for finishing the construction of the GERD in the nearest time possible. Ethiopia's motives include:

1- Ending the shortage in electricity and bringing in revenues

Ethiopia had been exporting electricity to Sudan and Djibouti. Two months ago, however, the Ethiopian government embarked on a plan to rationalize electricity consumption because of the water shortage in electricity-producing dams. This resulted in the decrease of Ethiopian electricity by 460 MW, shortage of electricity in households and the reduction of working hours in cement and steel companies.

According to the rationalization plan, consumers were divided into three sections, each receiving electricity for five hours. The plan included suspending electricity exports to Sudan and reducing electricity exports to Djibouti by 50 percent. This resulted in the loss of more than \$100 million in revenues from exporting electricity to neighboring countries.

Ninety percent of Ethiopia's electricity production – estimated at 3,815 MW – comes from hydroelectric power plants, which means that the GERD can generate double the current amount of electricity. This will result in providing the Ethiopian people and companies with double the amount of electricity they currently receive and the government will be able to commit to the agreements it signed with neighboring countries to export electricity – 200 MW to Sudan and 50 MW to Djibouti. Ethiopia will

also be able to sign new agreements to export energy to other countries such as Tanzania, Rwanda, Burundi, and Yemen, thereby increasing its economic revenues.

2- Improving the image of Abiy Ahmed and the ruling party

Since Abiy Ahmed was sworn in as prime minister Ethiopia has been hoping to achieve political stability that would reflect positively on the social and economic conditions of the country.

Ahmed has been moving in different directions towards these goals. On the domestic front, he announced his intention to reconcile with opposition movements, welcoming the return of their leaders from exile, dropping the charges against them, and releasing those arrested from the opposition.

On the foreign level, Ahmed ended a 20-year conflict when he visited Eritrea and signed a reconciliation agreement with Eritrean President Isaias Afwerki after which flights between the two countries resumed and their embassies reopened.

As a result, the Time magazine selected Ahmed among the world's most influential leaders. However, the political reform Ahmed introduced in Ethiopia needed to be consolidated by economic achievements to guarantee his stay at the helm and to send reassuring messages to the outside world about the stability of the domestic front, the improvement of the business environment, and the state's efforts to develop and improve the living conditions of its citizens.

Building the GERD will help paint a positive picture of Ahmed's government on the political and economic fronts.

3- Balancing international partnerships

Ethiopia wants to diversify its international relationships. The policies of Meles Zenawi and Hailemariam Desalegn were based on simulating the Chinese development model and the dependence on China as a main economic partner. This resulted in China's acquisition of 35 percent of Ethiopia's foreign investments and 50 percent of its foreign debts.

Ahmed is capitalizing on the GERD to build more balanced and diversified international relationships. This couldn't have been more apparent than during his European tour in October 2018 to invite countries such as France, Germany and Italy to participate in the GERD project.

4- Using the GERD symbolically on the domestic and foreign fronts

The GERD is a source of inspiration to African peoples that share the same economic conditions with Ethiopia. To them, the GERD is a lesson on building mega projects with local funding and without resorting to foreign loans.

Delegations from Congo, Zambia and Zimbabwe visited Ethiopia to learn from the Ethiopian experience. The delegates said that the local funding of such projects created a national feeling of ownership shared by the people.

Building the GERD strengthens the position of the Ethiopian regime in front of its people and shines the light on Ethiopia as a leading country in Africa.

Second: Challenges facing the continuation of the construction of the GERD

Ethiopia has several motives to continue building the GERD, but it is facing multiple challenges as well, such as:

1- Funding problems

The GERD costs approximately \$4.7 billion, or 80 billion Ethiopian birr (ETB), to build. But so far Ethiopia has spent 98 billion ETB on the dam as a result of the depreciation of the Ethiopian currency against the dollar, in addition to mismanagement, as stated by Kifle Horo, the GERD's new manager. Delays in building the dam have been costing Ethiopia \$800 million annually, adding to Ethiopia's burdened economy.

Until the end of 2018 the Ethiopian people contributed 12.3 billion ETB, or 15 percent, to the construction of the GERD. It was originally planned that the people contribute 20 percent and the government shoulders the majority of costs. But the economic challenges facing the Ethiopian government were increasing. It was required to pay 35 percent of the costs of the GERD – most of which would go to the hydroelectric infrastructure – in addition to the costs of delay.



2- Political instability

Since Ahmed has risen to the helm, he's been trying to introduce changes to Ethiopia's political scene. He lifted the emergency rule, released thousands of prisoners, allowed leaders of the opposition and armed movements to return from exile, and provided relative freedom to the media.

However, some observers believe that Ahmed's decision to allow for the return of political movements, such as the Oromo Liberation Front and its armed wing, was not a wise call because it was a policy that drastically endangered the stability of the country.

Some believe these measures are part of a transitional roadmap heading towards building a democratic state, while others insist the transition was designed "recklessly", without providing guarantors that dictatorial and ethnic elements would not rise to the surface.

This conflict proves that Ethiopia's political position is getting more complicated, which in turn affects economic projects such as the GERD. This was clear when the army-affiliated METEC company was assigned the building of the dam and then it was no longer in charge due to its delay in construction and the corruption accusations against its leaders. This is currently a part of the ongoing impasse between some military leaders and the government.

3- Security threats

Conflicts, violence and displacement are the order of the day in Ethiopia, particularly in the north and west. Violence is raging in Benishangul-Gumuz where ethnicities from Benishangul, Gumuz, Oromo and Amhara are in semi-perpetual conflicts, resulting in the killing of tens of Ethiopians and the displacement of the inhabitants of the region.



A Win-win Solution on the Dam?

Ethiopia must act to recognise Egypt's legitimate objections to its policies in building the Grand Ethiopian Renaissance Dam

Mostafa Ahmady

The writer is a former press and information officer in Ethiopia and an expert on African affairs.

On 2 April 2011, Ethiopia laid the foundation stone of the largest dam ever to be built in Africa and the tenth largest in the world, the Grand Ethiopian Renaissance Dam.

With an installed capacity of 6,450 Megawatts, the reservoir of the dam, named Lake Zenawi after the late Ethiopian prime minister who initiated the project, will hold as much as 74 billion m³ of water, which is more than Egypt's annual quota of the Nile water estimated at 55.5 billion m³.

The bone of contention is how long it will take to fill this reservoir. Based on the project schedule, though delayed, Ethiopia wants to start power generation from the dam by September 2020 when two of its 15 turbines go online producing 700 Megawatts of electricity. In other words, Ethiopia should be starting to fill the reservoir shortly.

On the other hand, Egypt, which depends on the Nile as its sole source of fresh water, wants the filling of the reservoir to take place over seven years and has requested Addis Ababa to release 40 billion m³ of water per annum. Ethiopia has "summarily" rejected Egypt's proposals, seeing them as a violation of its "sovereignty".

The two countries, along with Sudan, have been engaged in talks to mitigate the side-effects of the dam on downstream nations, and Ethiopia's policy though successive regimes has been bent on buying as much time as possible until the dam is rendered a reality.

This policy, aiming at attaining pre-set goals and making use of the turmoil and instability that unfolded in Egypt in the wake of the 25 January Revolution until 2014, is incommensurate.

As soon as President Abdel-Fattah Al-Sisi assumed office in Egypt in 2014 he met with top Ethiopian

officials to discuss the project, embracing a new spirit that recognised Ethiopia’s right to development and the use of the River Nile, maybe for the first time by a sitting Egyptian president, without inflicting any harm on Egypt’s right to life.

However, it seems that the Ethiopians have been reluctant to embrace Egypt’s new spirit as they are still beating about the bush, holding endless talks and meetings to no avail. For a long time, Egypt and Ethiopia have been at loggerheads over the use of the River Nile.

Though the source of the “Tiqur Abbay” (literary the “Black Abay,” Amharic for the Blue Nile), Ethiopia believes it has never used the river enough to serve the welfare of its people. Many Ethiopians think that Egypt has historically engaged in activities bent on blocking Ethiopia from fully utilising the Nile, rhetoric that Cairo has repeatedly denied.



One indication of this was when President Al-Sisi went to Addis Ababa in March 2015 and addressed the Ethiopian parliament for the first time by an Egyptian president, reiterating that Egypt was in no way against Ethiopia’s endeavours to utilise the Nile waters as long as this did not inflict any harm on Egypt’s historical rights to the river.

But Ethiopia does not recognise that “historical right,” and the country at the top level denies that Egypt has a right to claim 55.5 billion m³ of the Nile’s water annually, as stated in the 1959 Agreement, which Ethiopia since its last emperor Haile Selassie I has not officially recognised.

This situation has resulted in an impasse, especially because although based on Egypt’s proposals Cairo wants the release of 40 billion m³ of the Nile’s water per annum, which is lower than its due of 55.5 billion m³, in truth it loses roughly 10 billion m³ of this because of evaporation behind the Aswan High Dam.

This means that Egypt would only receive 30 billion m³ of water, which would not meet the growing needs of its population, whether for potable water or for different agricultural plans.

As a result of such huge projected losses, Egypt is braced for major impacts and has been taking harsh measures including the banning of the cultivation of rice, a daily staple for many Egyptians.

Ethiopia, on the other hand, has not been willing, given the procrastination of the talks, to reach a win-win agreement. Rather, it seems determined to move ahead with its plans. It is hard to see how there can be any workable compromise between “Egypt’s inalienable rights to the Nile water” and “Ethiopia’s sovereignty” as a result.

According to the international Water Poverty Index, 1,000 m³ of water is needed annually for each person on earth. Egypt’s share of the River Nile has not changed over time, however. Since the 1959 Agreement, Egypt has been allocated 55.5 billion m³ of water per annum, when its population at the time was roughly 20 million. In other words, under the original terms of the agreement, each Egyptian would receive some 2,000 m³ of water.

But as Egypt’s population has expanded to reach over 100 million by 2019, and given the growing needs of water for agriculture that is vital to sustain the lives of all Egyptians, the amount of water per capita has dropped to an alarming level of just some 55.5 m³ per person annually at 2018 estimates.

As a result, the message that President Al-Sisi delivered at the UN General Assembly meeting in New York in September this year was very much to the point: the water of the River Nile is “an existential issue” for Egypt and the lifeline of the Egyptians cannot be tampered with.

One can understand the difficult situation in Ethiopia at the present time, with growing ethnic rifts, the amassing of arms by militias as if war was at the door, and the turning of part of the nation into a hub for dissidents and former top military and intelligence personnel who once had everything and then almost lost it all overnight.

Ethiopia will also be heading for a scorching summer next year with the holding of general elections in which the incumbent prime minister will be seeking a popular mandate, as he has put it, to amend the constitution and turn the political system into a presidential one.

Given the circumstances, a bait-and-switch policy seems viable to Ethiopian policymakers, the idea being to mobilise the public and unite the country’s conflicting regions behind one goal: the completion of the dam as scheduled whatever the consequences.

Over the course of the negotiations, Egypt has been running a tight ship and has hoped that the talks would be a success. It has acknowledged there will be some negative impacts during the filling process of the dam and that it is ready for these in order not to hinder Ethiopia from development.

It is time the Ethiopian leaders acted to calm the troubled waters of the dam because no ship can set sail successfully in the face of tempestuous winds.



Renaissance Dam Crisis:

Assessing the Egyptian Position After the Stalled Negotiations

DR. Ahmad Amal
Chief of African Studies Unit

Since the beginning of 2019, The Conflict between Egypt and Ethiopia over Renaissance dam has witnessed unprecedented rapid developments that put it again in the forefront of regional issues.

This return came as a result of successive Egyptian efforts to resolve the stalled tripartite negotiations, which were met with repeated Ethiopian delays, while the construction rates of the dam accelerated after being hindered for a period due to political tensions and executive and administrative problems.

This situation requires a reassessment of the current Egyptian negotiating position, as well as an assessment of the Ethiopian chances of completing GERD construction on time.

The current crisis of Negotiations

Since Ethiopian Prime Minister Abiy Ahmed came to power in April 2018, Ethiopia's position in the GERD negotiations has become less hostile, but this new Ethiopian approach has not produced any positive development on the ground.

In an effort to move the situation on hold, a tripartite summit meeting has been held during the African Union summit in February 2019, during which it was agreed to resume the meetings of the Joint Technical Committee to expedite the final agreement.

An expanded meeting was scheduled to be held in Khartoum before the end of February, but was postponed at the request of the Ethiopian side to set a new date after two months, which was also postponed due to political developments in Sudan.

On July 25, the Egyptian President received the Ethiopian Foreign Minister with a message from his Prime Minister stating that he is looking forward to boosting Egyptian investments in Ethiopia, activat-

ing bilateral agreements and continuing close bilateral coordination to achieve stability in the African continent and the region, including the support of the Sudanese people.



The message also affirmed Ethiopia's commitment to resume the tripartite negotiations between Egypt, Ethiopia and Sudan to implement the Declaration of Principles on the Renaissance Dam in order to reach a final agreement on the rules of filling and operating the dam in a manner that takes into account the interests of the three countries.

As a response to the Ethiopian message, the Egyptian steps to reach a final agreement were accelerated. On August 2, the Egyptian Minister of Water Resources and Irrigation handed over to the Ethiopian counterpart the Egyptian view on the rules of filling and operating the Renaissance Dam during the talks held at the Ethiopian Ministry of Water, in order to resume the extended meetings that were scheduled for August 19 and 20.

As a response to Ethiopian demand to reschedule the meeting, Egypt Supreme Committee for the Nile headed by the Prime Minister reviewed the successive phases of negotiations between Egypt, Sudan and Ethiopia on the Renaissance Dam, to determine Egyptian adequate reaction to Ethiopian uncooperative attitude. The Supreme committee came up with a number of important outputs, most notably the emphasis on completing the negotiations according to a strict timetable, in order to reach a final agreement on the rules for filling and operating the dam.

However, the two rounds of negotiations in September and October did not lead to any tangible progress. This situation pushed Egypt to overcome traditional frameworks, to hold the international community to its responsibilities in the crisis as shown in the President's speech to United Nations General Assembly meetings. Egypt has already received some positive feedback of this new approach, especially from the United States, although both Sudan and Ethiopia have declared their rejection of foreign mediation in principle.

Contextual Considerations

International and regional context of the crisis has a great ability to affect its future. These contextual considerations provide Egypt with several opportunities:

- The unstable political situation that may eventually lead Ethiopia to adopt a more rational and balanced foreign policy towards various regional issues including the issue of water sharing among the Nile Basin countries.
- The political changes in Sudan and the important opportunities that may result therefrom in the formulation of new balances in tripartite negotiations.
- The decline of the Ethiopian wave of regional openness, and the resurgence of the natural disharmony in the Horn of Africa between Ethiopian and Eritrean policies.
- Continued traditional patterns of the role of the Middle East parties in the Horn of Africa.

In the same time international and regional context of the crisis, impose number of restrictions on Egypt's position in the renaissance dam negotiations:

- Accelerated construction rate of the dam, which reflects Ethiopia's intention to impose its vision about the size of the reservoir and filling rate.
- Ethiopian repeated postponements of negotiations aimed at buying time while wasting the opportunity for Egypt to adopt other options.
- The ambiguity of the situation in Sudan, especially with the new transitional arrangements that provides Sudanese transitional government an excuse of being unable to consider renaissance dam issue as a priority.

- The accelerated US withdrawal from the Horn of Africa, as a result of its increasing reliance on Middle Eastern agents to impose relative stability, reducing the chances of US intervention to play an effective role in renaissance dam crisis.

In the face of all these important developments, Renaissance Dam crisis calls for urgent efforts in determining practical alternatives available to Egypt at the present time, and the optimal mechanisms to implement them, as well as paving the way to consider new non-traditional alternatives.



GERD: Bogged Down Negotiations and Alternatives

Gen. Mohamed Ibrahim Eldewery

Advisory Board Member at the Egyptian Center for Strategic Studies

The Grand Ethiopian Renaissance Dam (GERD) is in the limelight due to the failure of negotiations with Ethiopia and Sudan after five years of talks and the inability of the committees formed to solve the crisis to reach a breakthrough. This has driven Egypt to announce the futility of negotiations and the search for alternatives.

Before discussing the failure of negotiations and the available alternatives, three factors should be pointed out. Firstly, the GERD issue is an Egyptian national security matter. The Egyptian state is acting according to calculated moves and within the framework of international charters.

Secondly, the GERD has become an imposed reality and we have to deal with it as such to reach accepted solutions to preserve our right to water from the Nile that provides Egypt with 95 percent of its water needs.

Thirdly, Egypt has never objected to the construction of the GERD or any other dam that can help Ethiopia in its economic development, but on the condition that Egypt's Nile water share is not harmed. Egypt's Nile water rights are protected by international laws on the use and management of international rivers and agreements Ethiopia is trying to ignore.

Egypt's Reservations

Egypt expressed a number of reservations about the standards Ethiopia announced for the building of the dam. Without going into technical and procedural details, the most important reservation has to do with the filling of the GERD reservoir and its operation.

Egypt is demanding the GERD reservoir be filled in seven years, instead of three or four years like Ethiopia wants. If Ethiopia fills the reservoir in three or four years, the shortage in Egypt's Nile water will reach somewhere between nine and 15 billion cubic meters annually. Egypt's share of Nile water currently stands at 55 billion cubic meters annually.

The shortage in Egypt's share of Nile water will carry negative repercussions on electricity generation and agriculture.

Egypt also expressed reservations about a few technicalities related to the safety of the dam. Ethiopia didn't cooperate on the demands of the international experts committee concerning this issue.

It is important to point out that Ethiopia started building the GERD right after Egypt's 25 January 2011 Revolution. The Ethiopian prime minister laid the foundation stone of the GERD in April 2011. Which was why, after the 30 June 2013 Revolution, Egypt prioritized the GERD issue after the state regained its strength and order, and embarked on negotiations with Ethiopia to resolve the issue.

Egypt, under President Abdel-Fattah Al-Sisi, entered in serious negotiations with Ethiopia based on its solid position according to international law. In addition, Egypt adopted the principles of transparency, honesty, trust and good faith based on the concept that the negotiations were aimed at reaching acceptable solutions to both parties that achieved the interests of Egypt and Ethiopia.

The negotiations resulted in the Declaration of Principles, signed by Egypt, Ethiopia and Sudan in Khartoum in March 2015. The declaration was meant to usher in a new era for the three countries to achieve prosperity and development and establish the foundation for a phase of cooperation, understanding and coordination to achieve mutual interests and end conflicts.

It is noteworthy to mention that the Declaration of Principles comprised 10 points perfectly suitable to end the problem altogether. The principles, in their entirety, revolved around mutual interests, cooperation, good faith, exchange of information, and understanding the water needs of the downstream countries of Egypt and Sudan.

One of the items of the Declaration of Principles is binding to Ethiopia to continue implementing the recommendations of the international experts committee on the safety of the dam. It is important to point out that the declaration is binding, since its preamble states that the three countries have committed themselves to the 10 principles of the declaration.

With the signing of the Declaration of Principles, the practical phase, based on the mutual interests agreed by all parties, began. But Ethiopia remained intransigent, ignoring the binding principles, and showing no flexibility in the negotiations ongoing since 2015, resulting in a deadlock, particularly concerning the filling of the reservoir and operation of the dam.

Egypt's political leadership had no choice but to search for other alternatives to preserve its water rights.

International Mediation

President Al-Sisi took the GERD case to the international community. During his speech at the 74th round of the United Nations General Assembly in September, President Al-Sisi said the GERD negotiations reached a deadlock, announcing it was time for international mediation to pressure the other parties to forego their intransigent positions. He stressed that to Egypt water was a matter of life and existence.

More recently, after the failure of the tripartite meeting of water ministers held in Khartoum, President Al-Sisi ascertained that Egypt was going to adopt the political procedures necessary, within the framework of international law, to preserve its Nile water rights, adding that the River Nile would remain the geographical and historical link between the south and the north.

It is noteworthy to mention that the positions President Al-Sisi announced focused on international law and political actions to preserve Egypt's national water security. This proves that the Egyptian

political leadership is still adopting in its foreign policy the principles of good neighbourliness, mutual cooperation and common interests to avert futile conflicts.

Egypt's chairmanship of the African Union in its current round was a turning point for the union. President Al-Sisi is focussed on resolving conflicts between African countries, pushing the continent towards peace and development, and demanding the support of the international community towards this cause.

Balanced US position

The US gave a quick and positive response to the Egyptian demands concerning international mediation on the GERD crisis. The White House released a statement supporting negotiations on the GERD and demanding the parties reach an agreement on the filling and operation of the dam in a way that achieves the common interests of the three countries, preserves their rights to development and respects the other parties' rights to water.

In my opinion, the US statement is balanced because it expresses the same position Egypt adopts, which is achieving common interests and water rights.

The long period of time Egypt gave to the negotiations on the GERD is proof of its good intentions and its desire to reach a political solution acceptable to all parties involved. However, since the negotiations reached a deadlock, Egypt had to move in another political direction, seeking international mediation, which is also one form of negotiation but with the introduction of an additional party that can present new, accepted solutions and that can play a more positive role that leads to finally ending the problem, taking it from a phase of conflicts to a phase of achieving mutual interests. This is the stance Egypt still adopts while insisting that the Nile water is a matter of life and existence.

It is expected the coming period will witness a new mechanism for negotiation with international mediation. All the parties have to enter this phase with transparency, openness and positivity, particularly Ethiopia, so that resolving the GERD issue becomes a successful African model for cooperation between Egypt and Ethiopia and achieves their common interests without taking away any of their rights.

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)

Preamble

Mindful of the rising demand of the Arab Republic of Egypt, the Federal Democratic Republic of Ethiopia and the Republic of Sudan on their transboundary water resources, and cognizant of the significance of the River Nile as the source of livelihood and the significant resource to the development of the people of Egypt, Ethiopia and Sudan, the three countries have committed to the following principles on the GERD:

1. Principle of Cooperation

- To cooperate based on common understanding, mutual benefit, good faith, win-win, and principles of international law.
- To cooperate in understanding upstream and downstream water needs in its various aspects.

2. Principle of Development, Regional Integration and Sustainability;

The purpose of GERD is for power generation, to contribute to economic development, promotion of transboundary cooperation and regional integration through generation of sustainable and reliable clean energy supply.

3. Principle Not to Cause Significant Harm

- The Three Countries shall take all appropriate measures to prevent the causing of significant harm in utilizing the Blue/Main Nile.
- Where significant harm nevertheless is caused to one of the countries, the state whose use causes such harm shall, in the absence of agreement to such use, take all appropriate measures in consultations with the affected state to eliminate or mitigate such harm and, where appropriate, to discuss the question of compensation.

4. Principle of Equitable and Reasonable Utilization

- The three countries shall utilize their shared water resources in their respective territories in an equitable and reasonable manner.
- In ensuring their equitable and reasonable utilization, the three countries will take into account all the relevant guiding factors listed below, but not limited to the following outlined:
 - a. Geographic, hydrographic, hydrological, climatic, ecological and other factors of a natural character;



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EGYPTIAN CENTER FOR STRATEGIC STUDIES

100 Al-Merghani St, Heliopolis, Cairo
Tel: 226905862-226905863 -226905861
Email: Info@Ecsstudies.com
www.ecsstudies.com