



# ORSAM WATER BULLETIN

Weekly Bulletin by ORSAM Water Research Programme

Events-News-Politics-Projects-Environment-ClimateChange-Neighbourhoods-Cooperation-Disputes-Scarcity and more



**ORSAM WATER BULLETIN**

**10 June 2013 – 16 June 2013**

- ❖ Iraqi environmentalists learn from Arundel counterpart
- ❖ Reasons for water problems
- ❖ Egypt Map Shows Why Ethiopia's Grand Renaissance Dam Is Such A Big Deal
- ❖ Ethiopia: Uganda joins Sudan in support of Grand Ethiopian Renaissance Dam
- ❖ Israel Schemes for a Stake in the Nile
- ❖ Egypt warns all options open for Ethiopia Nile dam
- ❖ Yes, There Is A Solution To Egypt's Water Crisis With Ethiopia
- ❖ Wars over water will be everywhere in Africa
- ❖ Hot issues including the Nile River saga By Robele Ababya
- ❖ Egypt-Ethiopia tension over Nile waters
- ❖ Ethiopia threatens Egypt water supply with dam on the Nile
- ❖ UN chief asks Egypt, Ethiopia to dialogue on dam row
- ❖ Egypt's foreign minister will seek 'win-win' on Ethiopia's grand dam: PM Qandil
- ❖ Ethiopia defies threats from Egypt, ratifies the Nile treaty
- ❖ Egypt talks war over Nile dam
- ❖ Ethiopia approves Nile water deal opposed by Egypt, Sudan
- ❖ Egypt, Ethiopia and Blue Nile
- ❖ South Sudan Urges Egypt, Ethiopia to Cooperate On Nile
- ❖ South Sudan backs Ethiopia's Nile dam
- ❖ Ethiopia ratifies Nile accord opposed by Egypt
- ❖ Museveni dismisses Egypt's claims over Ethiopia's Nile dam threat
- ❖ Egypt: 'Water War' Over the Nile River Won't Happen
- ❖ Ethiopia will not accept any proposal to delay construction of Renaissance Dam:  
Foreign ministry

- ❖ The dam is beyond the combat radius of all aircraft staging from Egyptian airfields
- ❖ Ethiopian parliament votes to strip Egypt of rights to majority of Nile water
- ❖ Reflections on the Grand Ethiopian Renaissance Dam
- ❖ Egypt frets, fumes over Ethiopia's Nile plan
- ❖ Nile dam dispute 'not yet military'
- ❖ Why a 'water war' over the Nile River won't happen
- ❖ Cairo: Cabinet Minister Talks of War with US, Israel
- ❖ Law Professor Urges Ethiopia to Take Nile Issue to International Court
- ❖ There will be no drinking water in Gaza in 2017
- ❖ City of Palestine wastewater treatment plant to see upgrades
- ❖ "Agro cooperation to define Indo-Israel ties"
- ❖ Green 'Freedom Machine' empowers apartments in Jordan
- ❖ Meeting the challenge of climate change in Yemen
- ❖ River be damned
- ❖ Laos, financial institutions working on hydro project development laws



## ❖ Iraqi environmentalists learn from Arundel counterpart

### **South Riverkeeper trains Upper Tigris Riverkeeper in water quality testing**

Thousands of miles away in northern Iraq, the Upper Tigris River is fouled by a litany of problems: trash dumped in the river, raw sewage flowing into the water, streams diverted by gravel mining, dams that block fish passage.

If the Upper Tigris Riverkeeper, Nwenar Fatih, has any chance at improving the health of the river, he needs solid scientific data. So after attending a Waterkeeper Alliance conference in Georgia over the weekend, Fatih and two colleagues spent Monday on the South River in Anne Arundel County, learning to use a \$12,000 water quality meter.

Fatih joined Diana Muller, riverkeeper for the South River Federation, in dipping a long, cylindrical device called a YSI hydrolab into the water and watching readings for salinity, oxygen, temperature, algae and more pop up on a Pasasonic Toughbook laptop computer.

Muller explained how she uses water quality data from 22 locations to create an annual river health report card to share with local residents and elected officials the scope of the problems in the South River, which flows into the Chesapeake Bay south of Annapolis.

"It ends up being a communications tool," she said.

For the fledgling Upper Tigris Riverkeeper program — part of a larger nonprofit group called Nature Iraq — the hands-on training was valuable, Fatih said.

When he heads back to Iraq on Wednesday, he'll bring new ideas gleaned from Muller and the other riverkeepers he met during his trip to the United States. He learned that although waterkeepers work in vastly different areas, many of the problems are the same.

"We all have problems with garbage. We all have problems with wastewater," Fatih said.

But Fatih has challenges that Western waterkeepers don't face. There's little understanding about actions that are bad for the river. Suing polluters is out of the question because courts are unreliable. Fatih and his colleagues, including Bwar Khalid and Jantine van Herwijnen, who were part of the South River trip, rely on cooperation and education to get people to voluntarily take actions to help the river, such as not throwing trash in the water.

"We do a lot of outreach," Fatih said.

Waterkeepers — also called riverkeepers, coastkeepers, baykeepers and harborkeepers — are full-time advocates for waterways, usually employed by local nonprofit organizations. The Waterkeeper Alliance has its roots in 1983, when the job of Hudson Riverkeeper was created in New York. Today, there are more than 200 waterkeepers around the world, although Fatih is the sole riverkeeper not only in Iraq, but in the entire Middle East.

A 23-year-old former journalist, Fatih said that one day, he'd like to expand the riverkeeper organization to include four tributaries that flow into the Upper Tigris River. He'd also like to see a riverkeeper for Iraq's other major river, the Euphrates.

"The dream is to expand it in Iraq," he said.

Muller said she was glad to offer some tips to her colleagues from Iraq. In addition to taking readings at stations in the river, she showed them where one of the devices was attached to a homeowner's dock on a creek, where it takes readings every 30 minutes.

Upstream from the dock, the South River Federation is planning a major stream restoration project. The goal is to reduce sediment and other pollutants that flush into the water from the eroded, degraded stream, and Muller hopes the device's "before" and "after" data will show how well the project works.

The Tigris River is more than 1,000 miles long — it flows from Turkey through Iraq and meets the Euphrates before emptying into the Persian Gulf — so setting up remote stations would be a good idea for the Iraqi riverkeeper, she said.

"Then you have great data, which would be perfect for your group," Muller said.

Muller got involved with Nature Iraq after meeting program manager Anna Bachmann at a conference. She helped Bachmann set up technical standards for testing water in Iraq.

Muller also has worked with riverkeepers in Mexico, Ecuador, Bolivia, England and China. A few have visited the South River, but most of the collaboration has been done online.

"Through email and texting — a lot of them text me — and through Google Earth, it makes the world very small," she said.

"Iraqi environmentalists learn from Arundel counterpart", 10/06/2013, online at: [http://articles.baltimoresun.com/2013-06-10/news/bs-md-ar-iraq-riverkeeper-20130610\\_1\\_south-river-federation-water-quality-waterkeepers](http://articles.baltimoresun.com/2013-06-10/news/bs-md-ar-iraq-riverkeeper-20130610_1_south-river-federation-water-quality-waterkeepers)

**BACK TO TOP**

## ❖ Reasons for water problems

Until the end of the 19th century, the utilization of rivers was restricted to transportation, fishing and small-scale irrigation and apart from navigation, did not create much problems between states.

In addition to the lack of intensive agricultural irrigation or industrial use, the political structure of that period is the biggest factor why rivers did not create problems. The empires that disintegrated as a result of independence movements that started after World War I and reached their climax following World War II left behind many states. In the basins that were managed under a single administration earlier, many national states subsequently emerged, causing problems between these new countries over the utilization of transboundary or border setting rivers.

Another development that coincided with this process was the improvement and spread of water storage techniques. Upstream countries -- countries that benefited due to their geographical position at the head of rivers -- had the opportunity to utilize a river first. Depending on agricultural and industrial utilization, decreasing the amount of water or changing its properties caused upstream-downstream conflicts. Apart from these conflicts, a problem can also arise between a state that starts utilizing the waters much earlier and a state that starts utilizing them later.

At a time when the gap between water supply and demand is shrinking, disagreements over transboundary, or border setting, waters generally emerge when implementing a project that could affect another basin country or countries beside the predominant country of a basin. New agricultural policies are the main factor causing riparian countries to use high volumes of water. Moreover, disagreements within water systems are more likely to arise when there is a natural fluctuation in water flows.

Apart from water problems, other existing tensions between riparian countries cause the countries to attach increasing importance to security in general and to food security in particular. The concept of food security, by causing the concept of “water security” to emerge, has caused tensions to further increase between countries.

Just as political changes in basin countries can positively contribute to settlements of conflicts, they can also have a negative effect. Although in the 1950s, when Sudan gained its independence and a

pro-Egypt coup took place in the country, negotiations between Egypt and Sudan had not developed much. But both sides eased their approaches following the coup and a treaty was signed on Nov. 8, 1959. However, again in the Nile basin, tension between Egypt and a new government in Ethiopia that came to power as a result of a Marxist coup increased.

Parties sometimes adopt a stance that is far from flexible but which is later accepted by the public, forcing decision makers to bow to the public's wishes. This situation also makes it difficult to reach a negotiation. In the disagreement concerning the Ganges River, India and Bangladesh acted in this manner and entered a deadlock.

Another factor causing water disagreements is the political divisions that caused riparian countries to emerge. As experienced in the basins of the Ganges, the Indus and the Nile, with the dominant power being eliminated and new states emerging, disagreements arise in the basins that fall under the dominance of more than one country. Existing border problems in riparian countries can cause conflicts to become more complex.

Among the factors that also affect water disagreements, the number of parties to the conflict is also significant. Reconciling the interests of riparian countries of the River Nile, whose numbers have increased to 11, is more difficult than the disagreements over the Rio Grande and the Sarda (Mahakali) rivers, with only two riparian countries each.

The importance that a nation attaches to water resources could be listed among the factors that determine the intensity of disagreements. In terms of its national history, the waters of a river being considered the life resource of the nation will also cause that state to adopt a stance that is more irreconcilable and harsh in water disagreements. Furthermore, the importance attached to water and food security on a political basis determines countries' approaches to transboundary and boundary forming waters. The size of agriculture within the national economy increases the importance that countries give to waters and can also cause them to adopt more irreconcilable approaches in disagreements.

Among the obstacles facing negotiations conducted by basin countries for a resolution to conflicts is parties' desire to actually settle the conflict through cooperation. The existence of other problems

between riparian countries is also another important obstacle to the settlement of conflicts. Riparian countries are able to address water conflicts in negotiations on their own. Although it could be thought that reconciliation can be reached more easily this way, it can also create negative consequences in some situations. Addressing water problems on their own carries the risk of preventing mutual concessions that could be beneficial to both sides and could also prevent the actual settlement of the conflict over water resources.

In conclusion, it can be seen that just as with other problems between countries, disagreements concerning transboundary or border setting rivers between riparian countries are settled in a manner proportional to their powers. International law, in terms of its structure, lacks sanction power. In addition, the novelty and insufficiency of the law concerning transboundary or border setting waters causes each riparian to easily find an allegation that shows their water utilization as just and the opposite side's utilization as unjust in the subsidiary sources of international law. This situation makes it impossible to link the settlement of transboundary water conflicts to certain rules, and such conflicts can only be resolved on political platforms.

“Reasons for water problems”, 16/06/2013, online at: <http://www.todayszaman.com/news-318369-reasons-for-water-problems.html>

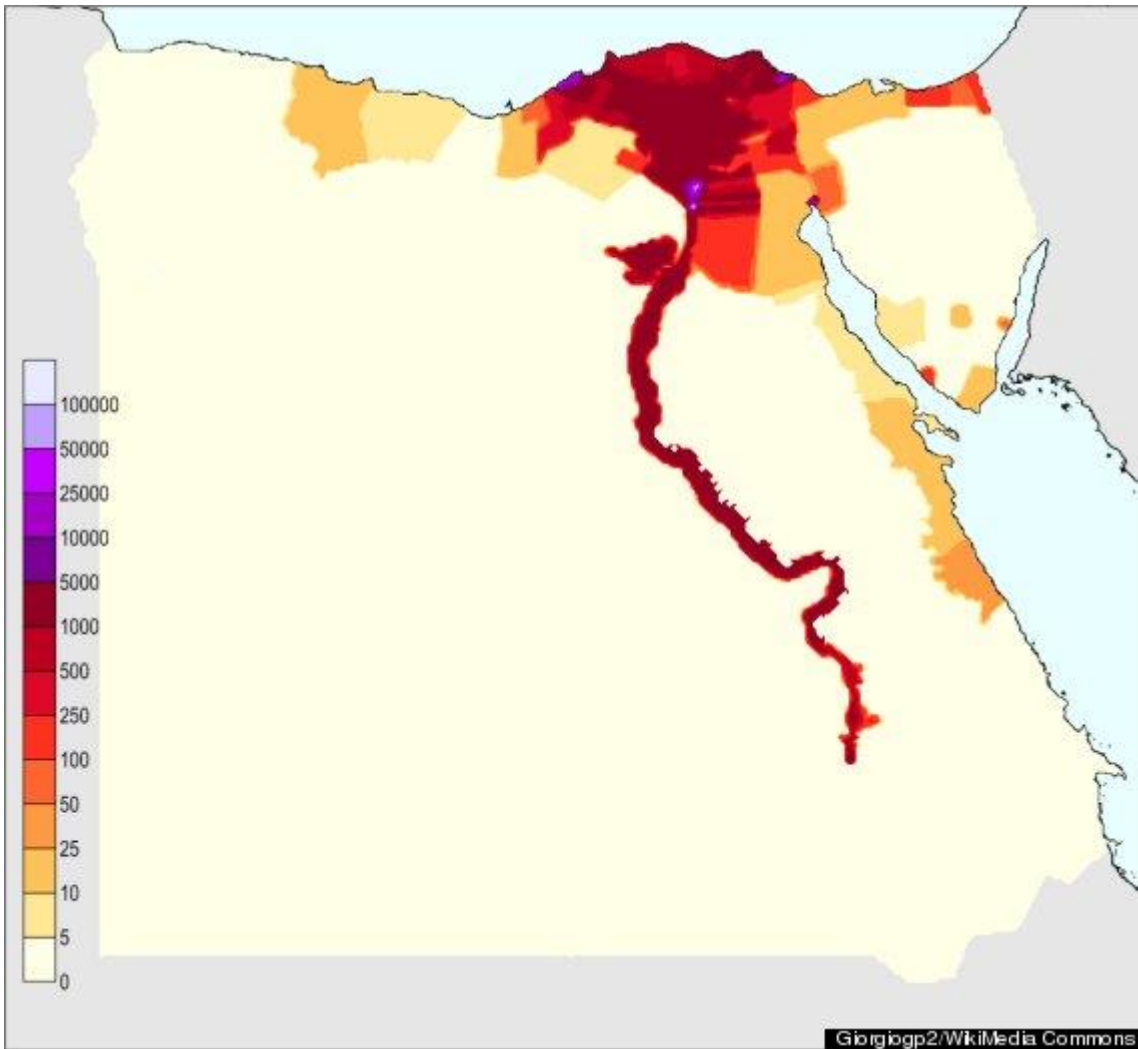
**BACK TO TOP**

[WWW.ORSAM.ORG.TR](http://WWW.ORSAM.ORG.TR)



### ❖ Egypt Map Shows Why Ethiopia's Grand Renaissance Dam Is Such A Big Deal

The Associated Press reports that Ethiopia has [ratified a landmark accord](#) with five other African countries concerning the shared use of the Nile River and its tributaries. The agreement is seen as a step forward in Ethiopia's plans to build a massive, hydroelectric dam on the Blue Nile River, which feeds the Nile. Egypt is neither a signatory of the new agreement nor a supporter of the dam, and Egyptian politicians have recently been caught [suggesting that the dam be sabotaged](#), according to AP. If you are wondering why Egypt cares so much about the construction of a dam along the Blue Nile [1,400 miles away](#), look no further than the following map:



Created by [Wikipedia user Giorgiopl2](#), this map depicts the population density of Egypt in 2010, measured in persons per kilometer squared, with the deeper shades having higher density. Data was taken from [Columbia University's Socioeconomic Data and Applications Center](#).

The fight for control of the Nile is a complex and long-running issue involving factors such as British colonial policies, economics, and massive environmental questions. Organizations

like [GlobalPost](#), [Reuters](#), and [The Economist](#) have terrific in-depth stories explaining these concerns. But ultimately, Egypt's commitment to preserving its control of the river is very easy to explain: the Nile is Egypt, and Egypt is the Nile.

Egypt is the most populous country in the Middle East -- the government estimates a population of close to [84.6 million people](#) -- yet 97 percent of the country is [barren desert](#). According to the Food and Agriculture Organization, [99 percent of the Egyptian population](#) lives on that remaining 3 percent, most of which is the Nile River valley and delta, as the population density map shows. Though Egypt is yet to actually threaten military action to halt the Grand Ethiopian Renaissance Dam, President Mohamed Morsi has stated that [all options are on the table](#). What is clear to Morsi was clear to every ruler of Egypt reaching back to the Pharaohs: without the Nile, there is nothing.

“Egypt Map Shows Why Ethiopia's Grand Renaissance Dam Is Such A Big Deal”, 14/06/2013, online at: [http://www.huffingtonpost.com/2013/06/14/egypt-map-ethiopia-grand-renaissance-dam\\_n\\_3437528.html](http://www.huffingtonpost.com/2013/06/14/egypt-map-ethiopia-grand-renaissance-dam_n_3437528.html)

**BACK TO TOP**

### ❖ Ethiopia: Uganda joins Sudan in support of Grand Ethiopian Renaissance Dam

Ugandan President Yoweri Museveni has backed Ethiopia's construction of a new \$4.7 billion hydro power plant along the river Nile. President Museveni said in a national address that Ethiopia as well as other African nations need such power plants to spur their economies, and protect the environment from peasant farmers, who continue to cut forests for bio mass fuel. Mr. Museveni's remarks came on the same day the Ethiopian parliament ratified a treaty stripping Egypt of its right to use the bulk of the Nile River's waters for domestic purposes.

"It is advisable that chauvinistic statements coming out of Egypt are restrained and through the Nile Valley Organization rational discussions take place," Mr. Museveni said. "No African wants to hurt Egypt; however, Egypt cannot continue to hurt black Africa and the countries of the tropics of Africa."

"Ethiopia: Uganda joins Sudan in support of Grand Ethiopian Renaissance Dam", 13/06/2013, online at:  
<http://nazret.com/blog/index.php/2013/06/13/ethiopia-uganda-joins-sudan-in-support-of-grand-ethiopian-renaissance-dam>

BACK TO TOP

## ❖ Israel Schemes for a Stake in the Nile

**Cairo** – High-level Egyptian sources shared details with *Al-Akhbar* on Ethiopia's plans for its "Grand Renaissance Dam" on the Blue Nile, revealing that Israel is attempting to acquire a stake in the river.

Egypt has initiated legal action to counter the Ethiopian dam project based on the Nile Water Agreement of 1929, which prohibits tampering with the quotas of the riparian countries of the Nile, or building dams without the consent of those countries. Egypt has formed a national committee to follow up on the crisis with Ethiopia.

*Al-Akhbar*'s sources said that eight months ago Ethiopia issued bonds to finance the construction of the Renaissance Dam. A large proportion of these bonds were offered through the country's embassy in Tel Aviv, with Israeli parties acquiring a significant number of these bonds.

According to the same sources, the Egyptian president knew of Ethiopia's dealings with Israel at the time, but took no action. This, the sources said, stirred up tension in Egyptian diplomatic circles and the armed forces.

Further information points to regional and international attempts, with a key role played by Israel, to revive and push for the ratification of the UN Watercourses Convention, a "global framework agreement that would give countries in the region the right to share water resources, and redistribute quotas accordingly."

According to the sources, if Israel is officially designated as a country of the Middle East, it "would give Israel rights to the waters of the Nile."

The sources pointed out that Israel is already collaborating in sectors like water and agriculture with several African nations, including Ethiopia, Zambia, Zimbabwe, Malawi, Botswana, and Mozambique.

"There are Israeli experts living in those countries," they said, "as well as Israeli military installations in the Red Sea, including a base in the Eritrean Dahlak Archipelago, which Israel had acquired when Eritrea was part of Ethiopia." The sources added that after Eritrea's takeover of the Hanish Islands, it also allowed Israel to establish facilities of an "unknown nature." These sources said that Israel established an advanced intelligence station run by Mossad in mountains near the border with Sudan.

The sources maintained that in the late 1990s, direct talks took place between Ethiopia and Israel. Egypt was offered a higher share in the Nile waters in return for selling water to Israel. Cairo rejected the deal at the time.

Furthermore, they added, a US-Egyptian strategic dialogue saw some fundamental disagreements erupt between Cairo and Washington over the Nile Basin issue and South Sudan.



In one meeting between then-US secretary of state Madeleine Albright and her Egyptian counterpart Amr Moussa, Albright refused to acknowledge Egyptian interests in Sudan. According to the minutes of that meeting, Albright told Moussa that “Egypt must forget its hegemony over Sudan, but must not forget that there is only one player in the region, namely, Washington.”

During the secret talks, Albright outlined the US vision, which was based on the following: The East African nations form a single bloc; Sudan is a key source of foodstuffs and crops; and South Sudan floats above a lake of oil.

Egypt’s current approach to the crisis over the Nile maintains that the river will not be subject to any multilateral negotiations, and must not be linked to the status of other rivers in the Middle East. The Nile treaties in place are stable, and Egypt’s legal rights are clear regionally and internationally. Finally, Egypt will categorically reject any talk of redistributing water quotas in the Nile Basin or the Middle East.

“Israel Schemes for a Stake in the Nile”, 14/06/2013, online at: <http://english.al-akhbar.com/node/16115/>

**BACK TO TOP**

### ❖ Egypt warns all options open for Ethiopia Nile dam

Egypt's president on Monday hardened his stance against Ethiopia and its construction of a Nile dam, warning that "all options are open" in dealing with the project that threatens to leave Egypt with a dangerous water shortage.

Speaking in a live televised speech before hundreds of supporters, Mohammed Morsi said Egypt is not calling for war, but it is willing to confront any threats to its water security.

"If it loses one drop, our blood is the alternative," he said to a raucous crowd of largely Islamist supporters that erupted into a standing ovation.

Ethiopia's \$4.2 billion hydroelectric dam, which would be Africa's largest, challenges a colonial-era agreement that had given Egypt and Sudan the lion's share of rights to Nile water. Experts estimate that Egypt could lose as much as 20 percent of its Nile water in the three to five years needed for Ethiopia to fill a massive reservoir.

"If Egypt is the Nile's gift, then the Nile is a gift to Egypt," Morsi said in his opening remarks.

The president's speech reflected the importance of the Nile River to Egypt. It provides almost all of the fresh water to a country that is otherwise largely parched desert. As much as 85 percent of the Nile's water comes from Ethiopia.

"We are not calling for war, but we will not allow, at all, threats against our water security," Morsi said before adding, "all options are open."

Morsi appeared to be using concern about Ethiopia's megaproject to whip up nationalistic fervor ahead of protests planned against him later this month.

In the conference hall where Morsi delivered his speech, some of his supporters chanted slogans against Israel and accused it of colluding with Ethiopia to harm Egypt. Blaming Israel for Egypt's problems is common here. Israel denied any connection to the construction of the dam.

Morsi said he would be willing to approach opposition groups in order to unite Egyptians around a common position with regard to the dam. This came after two prominent opposition parties declined an invitation to meet Morsi last week, citing a lack of transparency in dealing with national issues and a failure to listen to them.

"The great Nile is that which all our lives are connected to. The lives of the Egyptians are connected around it ... as one great people," Morsi told the crowd.

Shifting his tone later in the speech, Morsi said that Egypt considers Ethiopia a "friend" and noted he has visited the country twice since taking office. He said his administration is in continuous dialogue with Ethiopia and Sudan to discuss water rights.

Earlier in the day, angry Egyptian lawmakers accused Morsi's premier of doing nothing to prevent Ethiopia from building the dam. Prime Minister Hesham Kandil had just finished addressing parliament about how the government planned to work diplomatically, legally and technically with Ethiopia over the dam when the session heated up.

Kandil called the dam's construction an "act of defiance," but then hurriedly left the chamber despite calls for clarification over how to handle the situation if Ethiopia rejects overtures.

"Egypt will turn to a graveyard" if the dam is completed, Egyptian lawmaker Khaled Ouda, a geologist, shouted to parliament. "The prime minister didn't provide anything."

Abdullah Badr, who leads the ultraconservative Islamist Salafi caucus in parliament, held up a blank notebook after Kandil's speech and said: "I have been taking notes and the page for solutions is blank."

"Where are the studies? Where are the solutions? This is about water security and there are enemies outside and inside \_ what is the role of the government and what did it do?" he said.

The crisis plays into a wider feeling of malaise in Egypt.

A diverse spectrum of the population is growing increasingly impatient with Morsi's handling of the country's instability, including a security breakdown and a struggling economy, more than two years after an uprising toppled longtime President Hosni Mubarak.

Opposition activists are hoping to harness the frustration of Egyptians into mass protests planned on the anniversary of Morsi's taking office June 30.

Suggestions last week by some political leaders to aid rebels against the Ethiopian government or even sabotage the dam itself also heightened concerns in Egypt. Ethiopia has demanded an official explanation.

Egypt faces the prospect of its current water shortage worsening when the Grand Ethiopian Renaissance Dam is completed.

The crisis started last month when Ethiopia diverted the flow of the Blue Nile, one of the Nile's sources, to make way for the dam \_ before a 10-member panel of experts from Egypt, Sudan, Ethiopia and other countries released a study on the dam's impact. The move took the Egyptian government by surprise.

Ethiopia's unilateral action appeared to ignore the 10-nation Nile Basin Initiative, a regional partnership formed in 1999 that seeks to develop the river in a cooperative manner.

Egypt complained that the 10-member panel did not give concrete answers to the impact of the dam, because Ethiopia failed to provide enough updated data to the panel. Ethiopia said the report assured that the dam will not harm Egypt. It was not possible to obtain a copy of the report to independently examine its conclusions.

“Egypt warns all options open for Ethiopia Nile dam”, 11/06/2013, online at:

[http://www.ellwoodcityledger.com/news/world/middle-east/egypt-warns-all-options-open-for-ethiopia-nile-dam/article\\_16fb0659-4c72-540b-bc01-9f7c24c262d9.html](http://www.ellwoodcityledger.com/news/world/middle-east/egypt-warns-all-options-open-for-ethiopia-nile-dam/article_16fb0659-4c72-540b-bc01-9f7c24c262d9.html)

**BACK TO TOP**

[WWW.ORSAM.ORG.TR](http://WWW.ORSAM.ORG.TR)



## ❖ Yes, There Is A Solution To Egypt's Water Crisis With Ethiopia

**Water:** Egypt is beating the war drums against Ethiopia over its plan to build a giant dam on the Nile, affecting a quarter of Egypt's water supply. Given both countries' needs, it's a tough problem to solve. But it can be done.

It's fairly shocking to think that with all the turmoil going on in the Middle East, a new — and surprisingly dangerous — problem has emerged in the water dispute between Egypt and Ethiopia. But senior Egyptian officials have literally threatened war over Ethiopia's \$4.7 billion Great Ethiopian Renaissance Dam, which Egypt believes will significantly cut its water supply as the giant reservoir is filled.

Last Monday, President Mohammed Morsi declared Egypt would keep "all options open" (including military ones) on the dam, one week after Egyptian politicians discussed attacking Ethiopia on Egyptian TV.

Meanwhile, Ethiopia added fuel to the fire on Thursday, when its parliament voted to increase its use of Blue Nile water. This contradicted the country's official claim its dam won't affect Egypt's supplies because its sole purpose is to generate 6,000 megawatts of power.

Each side has a case. Egypt's 8,000-year-old civilization owes its existence to the uninterrupted flow of the Nile to Cairo and the delta. And it can produce a 1929 British colonial-era treaty that entitles it to 80% of the Nile supply — 80% of which originates in Ethiopia.

Ethiopia, meanwhile, believes it has a right to the water, and it doesn't recognize the 1929 treaty because it didn't sign it. With 87 million people, more than Egypt's 85 million, it is desperate for development.

The New York Times chalks the whole dispute up to the eye-glazing Malthusian tropes of "global warming" and "overpopulation," and sees no solution. But there is a solution — right from a neighbor that's the world's leader for efficient use and generation of water: Israel.

Ten years ago, Israel and its neighbors had water shortages that were seen as likely to lead to inevitable conflict. Today, there's no water crisis, because Israel has solved its shortages through free-market innovation. It now exports its expertise across the globe — from China to the U.S. Rocky Mountain states.

Politics aside, Egypt and Ethiopia should be pounding down the doors of Israel's companies for a solution that will permanently secure their nations' water needs.

Israel could show Egypt and Ethiopia two things: how to make water use efficient so that very little is wasted, and how to turn waste water into potable water, both of which would mean enough water for everyone.

“Yes, There Is A Solution To Egypt's Water Crisis With Ethiopia”, 14/06/2013, online at: <http://news.investors.com/ibd-editorials/061413-660079-israel-can-help-solve-egyptian-water-crisis-with-ethiopia.htm>

**BACK TO TOP**

### ❖ Wars over water will be everywhere in Africa

Anwar Sadat was precise in predicting what would force Egypt to go to war again. Way back in 1979, while signing the Egypt-Israel peace treaty, the former Egyptian president said, "The only matter that would take Egypt to war again is water." And water indeed will be for which Egypt will fight its next war. At least three nations in Nile Basin, Egypt, Sudan and Ethiopia, are at loggerheads. The bone of contention among them is water of the Nile. Prospect of a war in the region is increasingly becoming threatening vindicating Mark Twain's prophecy: "... is for drinking; water is for fighting over."

In Africa, water has not only been elixir of life but also the source of diseases. It has now become the cause of conflicts that will suck in most of the continent into a vortex of violence. Possibilities of wars over water are equally growing in Niger, Volta and Zambezi basins as well. By 2025 at least 12 more African nations will join the 13 nations of the continent which are already affected by serious water scarcity. Everyone will be fighting everyone to gain access to water and control the resource.

The world is apprehensive of the escalating crisis. Many fear that the situation may snowball into a long-drawn war if Ethiopia remains stubborn with its plan to divert Blue Nile. Ethiopia has already announced to divert the river once its Grand Ethiopian Renaissance Dam is ready by the end of 2014. Both Sudan and Egypt will be hard hit — the Nile may dry up in next 15 or 20 years.

"A 1959 agreement between Egypt and Sudan guarantees Egypt 70 per cent and Sudan 30 per cent of the Nile's water flow." But, upon completion of the Grand Ethiopian Renaissance Dam and diversion of Blue Nile the water share of both Egypt and Sudan will deplete by at least half. Lester Brown, head of environmental research institute Worldwatch says, "There is already little water left when the Nile reaches the sea."

The Nile is critical to the survival of both Egypt and Sudan. The river is the only source of their drinking water, irrigation and even electricity. If Blue Nile is diverted thirst will grow, agriculture will be affected and power will be in short supply in both Egypt and Sudan.

Wayne Madsen, American author and journalist, feels that hydropolitics (politics over water) will lead Africa towards further balkanisation. The Nile Basin is seeing record fragmentation of nation-states by secessionist and other rebel movements, some backed by the United States and its Western allies and others backed by Egypt and some powerful players from the Arabian Gulf. Yet, other secessionist groups are backed by regional rivals such as Ethiopia, Eritrea, Uganda, and others.

Creation of South Sudan has further complicated an already muddled scene. World's newest nation has opened the floodgates of balkanisation of Africa. Khartoum is facing further "Western- and Israeli-backed breakaway movements in Darfur and north-eastern Sudan." South Sudan has already turned into an Israeli client state enabling the zionists to control flow of water from White Nile into the Nile in Egypt and Sudan.

Wars over water may not break in immediately in Africa but a more dangerous game of throwing counterweights or proxy wars have already started to bleed the continent, especially in its northern and central regions. Egypt has been silently extending its support to the insurgents and secessionists in Ethiopia and Somalia in a bid to keep Addis Ababa and its military preoccupied with domestic problems and collapsing neighbour.

To support these secessionists is an existential need for Egypt. Unlike the United States and its Western Allies, Cairo is not interested in regime change in Ethiopia but is keen on keeping the country unstable and in creating liberated pockets controlled by secessionists where Egyptian writs will be large. Cairo is keen on not letting Addis Ababa divert Blue Nile.

Southern Africa isn't in any better situation. With water increasingly becoming a catalyst for regional conflicts across the continent perceptible sparks of mounting tension are emitting from Botswana, Namibia and Angola. "The River Cuito which begins in Angola before heading through the Caprivi strip in Namibia and ending in the marshlands of the Okavango Delta in Botswana runs through an area that is no stranger to tensions and conflict between neighbours."

All of them, Botswana, Namibia and Angola, are in a race to grab more and control the river.



With every passing day the risks of wars breaking up are gaining momentum across Africa. By 2030 demand for water in the continent will outstrip supply by at least 40 per cent. And as thirst will grow and lands keep parching due to global warming threats of war will become more real. Between 2025 and 2040 there shall be at least a dozen wars over water in Africa alone.

Of them the bloodiest and most destructive will be the one between Egypt and Ethiopia. In 1989, former Egyptian president Hosni Mubarak had threatened to send his army to pull down the Grand Ethiopian Renaissance Dam. Mohamed Morsi may not be putting his predecessor's threat into practice soon but some Egyptian president in future will certainly be desperate enough to do so.

And once this happens there shall be no stopping for others. Sudan may join Egypt and in Africa wars for water will then be everywhere.

“Wars over water will be everywhere in Africa”, 15/06/2013, online at: <http://www.timesofoman.com/Columns/Article-1166.aspx>

**BACK TO TOP**

❖ **Hot issues including the Nile River saga By Robele Ababya**

The heroic decision by the Blue Party in planning, organizing and brilliantly implementing the demonstration of 25 May 2013 was a phenomenal act of courage to which all freedom loving Ethiopians should pay tribute regardless of their affiliation to entities in the opposition camps or civic organizations. To this end MJFD (Ginbot 7) had set an excellent example under its editorial title:

“□ □ □□ □ □ □ □ □ □ □ □ □ □ □ □” dated 06 June 2013.

The holy act of courage of the leaders of the Party and the hundreds of thousands of participants that took part in the inspiring demonstration has torn down the dark curtain of despair ushering in a beacon of hope and reaffirmation that individuals united in action are in the final analysis masters of their common desire to live in freedom, dignity, and prosperity in a truly democratic and compassionate society governed by the rule of law of their own making. The demonstration has been an epic success story heralding the inevitable victory of the Ethiopian people and the vanishing of ethnicity-based political entities that are lagging behind with empty promises to change into a national stature by shedding off their tribal garb. The demonstration is a grand topic of the moment.

**Legacy of Zenawi**

The late tyrant Meles Zenawi left behind a series of time bombs ready to explode and destabilize the region to the utter disadvantage of Ethiopia which has no credible ally except the almighty God and her people as I always say. The decision by the communist TPLF warlords and their puppet Prime Minister Hailemariam Desalegn to implement the legacy intact is solid proof that draconian problems are waiting to be overcome.

All the incendiaries are in place to ignite and unleash havoc to regional stability, inter alia: gross violations of human rights of citizens contrary to UN Declaration on Human Rights and the TPLF constitution; divisive ethnic policy; balkanization into nine ethnic-based federal states; Endemic corruption perpetrated by top TPLF warlords still untouched; give-away of fertile Ethiopian land (Emperor Theodros II has graphically illustrated that a spec of our fertile soil is vital to our national security); the Renaissance Dam: extensive and in-depth cost-benefit analysis including national and regional security; irrigation to grow food is priority for Ethiopia ; the ongoing Badme saga

All of the above and many other atrocious legacies of Zenawi have been debated upon sufficiently by several scholars and activists before. Therefore, I would like to expound briefly just on the above listed incendiaries, which signal the advent of diplomatic war leading to military engagements on a scale unfavorable to Ethiopia and her environ.

Items 1, 2, 3, and 4 signify internal weaknesses that would embolden extremist separatist movements (like OLF-old) and external enemies pursuing their objectives vigorously, the former seeking: (a) symbiotic advantage in the success of foreign enemies or (b) engaging in acts of sabotage harmful to Ethiopia; and the latter as always promoting the fragmentation of motherland Ethiopia into several innocuous units to its hold on power.

Items 5 and 6 are hot issues pitching Ethiopia against Egypt and Eritrea.

### **Contribution to the thorny debate over the Blue Nile River**

God created the Nile River before Adam and Eve. Therefore it is not the fault of the past and present generations of Ethiopians and Egyptians to find themselves at the source and receiving ends of the River, respectively.

It is needless to mention that it took centuries to realize the scarcity of waters of the River. The Imperialist inspired treaties of the 1929 and 1959 that contemptuously disregarded Ethiopia allocated a lion's portion of the waters of the River to the Sudan and Egypt. Therefore, Ethiopia has every right to declare the above said past treaties, to which she was not a signatory party, as null and void in the strongest terms while calling for a new transparent and fair agreement. The secret Accord of the 1993 between Zenawi and Mubarak concluded behind the back of the Ethiopian people is also null and void.

The real overriding priority now for Ethiopians is to remove the TPLF warlords that have been misruling our beloved country as an occupying power for the last 22 years. It is nonsense to brainwash our youth and deploy them into a war of mutual destruction with Egypt. Sensational slogans by extremist Egyptian leaders such as paying by 'blood' for a cup of the Nile water or the genocidal TPLF warlords insisting on construction of the RD with our 'blood' are cruel and laughable. Sabre rattling on both sides is a cover-up for their internal failures in good governance, which must be replaced by genuine democratic dispensation conducive to strategic cooperation.

I had written before that “The Blue Nile River is a natural bond of indispensable significance to Egypt and Sudan. Ibrahim Nasreddin of Cairo University’s Institute for African Studies said that “a 20-year-old feasibility study, a cooperative venture between some of the Nile’s source countries and donor states, to build 50 dams on the River Nile over 50 years has not seen any headway due to the high cost of these dams”. He added that “the projects would cost in excess of \$40 billion. According to Nasredin, “none of the African states can afford this. They won’t be able to repay loans of such an amount.” Source: Article by Reem Leila, Al-Ahram Weekly January 5, 2011.” The present site of the RD with its site size reduced can be one of the networks of dams that could be built along the Blue Nile rivers and its tributaries in the Amhara and Oromia regions, as I had argued in my previous articles.

The Egyptian people and scholars should know that the Nile River would be insignificant without its tributaries from the Amhara and Oromia regions, which are in dire need for irrigation and electric power generation. In the interest of strategic cooperation in the development of the Nile Basin, democratic citizens of Egypt should be on the side of Ethiopians bent on changing the regime which has lost trust of the masses. And the Ethiopian people should do likewise in reciprocity. In this way costly war between two countries mostly victimizing the youth can be avoided. Egypt is expert at ‘war of attrition’

As the legendary Professor Mesfin Woldemariam succinctly substantiated in his article based on reliable source, Egypt’s military stature is formidable. But it will not need to go into a conventional war because it would prefer the method of economic sabotage, subversive propaganda, misinformation, direct and indirect assistance to dissidents struggling to cede from Ethiopia, espionage, and diplomacy, among others. These could combine to badly weaken and gradually fragment Ethiopia, which is situated in a hostile environment in many respects and misruled by the TPLF warlords behaving like an occupying regime bent on the sellout of her vital national interests.

In the senseless Ethiopia-Eritrea war of 1998 -2000 over a small barren land of Badme close to 100 thousand combatants on both sides lost their precious lives most of them arguably young. Tigre commanders gave the marching order to the Ethiopian combatants to walk or crawl over the mine field. Our young and able-bodied patriotic soldiers sacrificed their precious lives but their surviving compatriots were denied victory by order of the traitor of Meles Zenawi halting their advance on Asmara.



Professor Mesfin is a stalwart living scholar with incomparable experience on burning issues pertaining to borders and geography of Ethiopia as well as in unleashing his disarming critique on Ethiopian policies including land reforms. I have enjoyed reading his numerous writings and talking to him in person. I am a living witness to his developing a military science curriculum for the former Imperial Ethiopia Air Force (IEAF) and lecturing the subject to not only to the Cadets for several years but also to other military institutions of Ethiopia.

Professor Mesfin is a national hero who has demonstrated his courage to express his scholarly views on burning national issues for decades and continues to do so without fear or favors. He abhors ignorance and rescues its innocent victims willing to be cured through reading his writings. I know that the fearless Professor was highly esteemed by the Cadets of the IEAF.

The Professor is undoubtedly well versed in military maxim that gathering intelligence and in-depth analysis of the strength and weaknesses of potential adversaries is of supreme importance to national security at all times. He is a proud Ethiopian who defined “Ethiopiawinet”. He is a formidable life-time fighter for human rights and independence from his home-base in Ethiopia, which is occupied and turned into hell by the brutal TPLF warlords. So the young generation is well-advised to take him seriously as a trusted friend.

## **Conclusion**

The governments of Egypt and Ethiopia are hijackers of revolutions brewing in their respective countries. Both are birds of the same feather desperate to fend off popular wrath. They are in a secret pact to use the sensitive Nile issue to divert attention from their mortal predicament. Therefore the first priority is to dethrone the corrupt, inept, and genocidal TPLF warlords preferably peacefully followed by an-all inclusive method in self-defense.

The immediate and unconditional release all political prisoners including Andualem Aragie, Eskinder Nega, Bekele Gerba, Reeyot Alemu, Leaders of the Ethiopian Muslims et al is paramount! No previous government in the history of Ethiopia has recognized or acceded to the treaties of 1929 and 1959. Therefore the Entebbe water agreement between six River Nile Basin states recently ‘ratified’ by the puppet TPLF parliament does not make sense coming as it did for political reasons after the misrule of 22 years by the troubled TPLF regime. Does the ‘ratified’ agreement give veto power to Ethiopia, which contributes 85% of the waters of the Nile to Sudan and Egypt?

We need inner strength and harmony to defend our country. I like the revolutionary song “□ □ □ □ □ □ □ □ □ □” (It is for you Ethiopia) just as much as I adore “Tenesa Teramed” even now!

“Hot issues including the Nile River saga By Robele Ababya”, 16/06/2013, online at:  
<http://www.abugidainfo.com/index.php/21403/>

**BACK TO TOP**

[WWW.ORSAM.ORG.TR](http://WWW.ORSAM.ORG.TR)

## ❖ Egypt-Ethiopia tension over Nile waters

Ethiopian weekly focuses on Egypt-Ethiopia tension over Nile waters - “Clouds over the Nile waters have become denser,” Ethiopia’s weekly Fortune wrote this week, referring to renewed military threats by Egypt in its opposition to the construction of the Great Ethiopian Renaissance Dam (GERD) on the Blue Nile River.

Egypt has persistently expressed its disapproval of the project since the Ethiopian government, under late Prime Minister Meles Zenawi, announced plans to construct a mega dam to generate 6,000 megawatts of power at a cost of over US\$4.2 billion.

“For a nation that has for a long time been living under a ‘loser’s mindset’, benefiting less from a river that originates in its own highlands, the announcement was a rare signal of national resurgence,” said the weekly.

According to the paper, Ethiopians of all colour supported the project with full commitment.

“They took it as a symbol of their nationalism. And it remains a project that transcends all lines of local differences,” wrote

Fortune, but admitting that there were still small segments of society who considered the GERD as “an improper and untimely investment”.

The Blue Nile, known as Abay in Ethiopia, waters the economies of Egypt, Sudan and the country of its origin, and the three riparian nations account for a gross domestic product of US\$721.3 billion.

Looking beyond the Nile water, Fortune noted that there were enough ingredients for the three economies to integrate into a regional economic bloc.

The weekly suggested that governments of the three countries should, therefore, focus on economic cooperation and integration as the best solution, but they cannot achieve that goal without mutual

trust.

The Egyptian economy is very much dependent on the Nile, with the Blue Nile providing about 85 per cent of the water flow to the North African country.

Ethiopian officials are optimistic about the potential for collaborative development of the water resources, and they have stated time and time again that the waters were enough for all riparian nations.

At the 50th anniversary of the Organisation of African Unity and the African Union celebrations in Addis Ababa in May 2013, Ethiopian Prime Minister Hailemariam Dessalegn met with Egyptian President Mohammed Morsi and reassured him that the grand project would not harm his country's interests nor those of Sudan.

"What seems to be at stake," Fortune said, "is the attempt to explore all available evidence, evaluate it with a rational mind and arrive at a workable consensus which can bring a win-win situation on the use of the common resource for economic development."

"Egypt-Ethiopia tension over Nile waters", 15/06/2013, online at: <http://www.afriquejet.com/news/8014-egypt-ethiopia-tension-over-nile-waters.html>

**BACK TO TOP**

## ❖ Ethiopia threatens Egypt water supply with dam on the Nile

**CAIRO**, June 15, 2013 — “Egypt is the gift of the Nile” said Herodotus, the father of history, more than 2000 years ago when he visited the desert country in which the river is its main vein of life. Unfortunately today, Egypt’s Nile is threatened by a new Ethiopian-built dam.

Last week, Ethiopia, the source of one of the two tributaries of the Nile, started diverting the water flow of the river to build its \$42 billion hydroelectric power project, known as the Grand Renaissance Dam.

Egypt’s main concern is that the dam will diminish its share of the water from the river. With the dam, the water supply would decrease by at least 20 per cent and hydroelectric power would decrease by 40 per cent, according to a report submitted by a committee of water, agriculture and irrigation experts in Egypt.

Moreover, Egyptian experts say the safety coefficient of the dam might be as low as 1.5. The Aswan Dam in Egypt has a safety coefficient of 8. Experts believe it could collapse within 25 years of its inauguration. The reservoir behind the dam will hold 74 billion cubic metres of water which means that a collapse would flood major African cities, among them Khartoum in Sudan as well as cities in Egypt.

The Egyptian government has expressed its strong opposition to the dam. President Morsi said, “if our share of Nile water decreases, our blood will be the alternative” at a conference to discuss the situation. The conference was organized by Islamist political parties to discuss the project and its effect on Egypt’s share of Nile water.

The Ethiopian Ministry of Foreign Affairs said it has met twice with the Egyptian Ambassador in Addis Ababa after Egypt’s bellicose statements, and they also requested a clarification from the Egyptian government. Ethiopia has extended its appreciation to Sudan which has agreed on the construction of the Dam. Ethiopia announced that it had an unshakable belief in “friendship, cooperation and mutual benefit as the underlying principles of its relations with all friendly states including Egypt.”

However, Ethiopia said it will also not consider Egyptian requests to delay construction of the dam. On Wednesday, June 12, President Morsi held a meeting at the presidential palace with Egypt’s National Security Council to discuss the impact of the construction of the dam on Egypt’s water.



Egyptian politicians remain divided over the dam. Some conservative Salafis politicians, like Shabaan Abdel Alim, believe the “intense tone is must; it’s a matter of life or death.” Other secular politicians, like Hany Raslan, Head of the Sudan and Nile Basin Unit at Al Ahram Centre for political studies, considers President’s Morsi’s speech an “unjustified escalation.”

Raslan added that the Morsi is making the dam issue a political issue, potentially to avert attention from opposition protests scheduled for June 30<sup>th</sup>, 2013 which coincides with the first presidential anniversary. A campaign known as Tamaroud, or Rebel, which demands that Morsi step down and hold early elections has gained considerable attention in Egypt.

“Ethiopia threatens Egypt water supply with dam on the Nile”, 15/06/2013, online at:

<http://communities.washingtontimes.com/neighborhood/tahir-square-ales-egypt/2013/jun/15/ethiopia-threatens-egypt-water-supply-dam-nile/>

**BACK TO TOP**

### ❖ UN chief asks Egypt, Ethiopia to dialogue on dam row

UN Secretary-General Ban Ki-Moon personally requests Egyptian president Morsi and Ethiopian Prime Minister Desalegn to dialogue to resolve grievances over the disputed Renaissance dam

UN Secretary-General Ban Ki-Moon had phoned Egyptian president Mohamed Morsi as well as Ethiopian premier Hailemariam Desalegn on Thursday and Friday respectively, a spokesman for Ki-Moon announced, to recommend the two governments to hold talks over the disputed Renaissance dam project

The UN chief "spoke with both leaders about the proposed dam project on the Nile River and expressed his desire that they engage in dialogue to resolve differences on that matter," Ki-Moon's spokesman Martin Nesirky added.

Ethiopia began diverting Blue Nile water on 28 May, paving the way for the construction of the \$4.2 billion (3.2 billion euro) Grand Renaissance Dam, set to become Africa's biggest hydroelectric dam when completed.

Ethiopian plans have raised concerns in Egypt and Sudan, both dependent on the world's longest river for their water supply.

Earlier in June, Egypt summoned Ethiopian Ambassador Mahmoud Dardir to express his country's displeasure with Ethiopia's diversion of part of the Blue Nile as part of the preparations for the dam's construction.

The dressing down came amid harsh Egyptian criticisms of Ethiopia's decision to go ahead with the project without taking the technical committee's recommendations into account.

The Blue Nile provides Egypt with the lion's share of its annual allotment of 55 billion cubic metres of river water.

Ethiopian officials, meanwhile, have attempted to dispel fears regarding the dam's potential impact, stressing the project would ultimately benefit all the riparian states.

"UN chief asks Egypt, Ethiopia to dialogue on dam row", 15/06/2013, online at:

<http://english.ahram.org.eg/NewsContent/1/64/74018/Egypt/Politics-/UN-chief-asks-Egypt,-Ethiopia-to-dialogue-on-dam-r.aspx>

**BACK TO TOP**

❖ **Egypt's foreign minister will seek 'win-win' on Ethiopia's grand dam: PM Qandil**

Egypt's foreign minister will discuss with Ethiopian government ways to make the Renaissance Dam project beneficial for both countries, says Premier Hisham Qandil

Prime Minister Hisham Qandil has said that Foreign Minister Mohamed Kamel will visit Ethiopia by the end of June in a bid to make the latter's Renaissance Dam project a "win-win" situation for both countries, according to Al-Ahram Arabic language news website.

The prime minister explained, in interview with CNN, that the tripartite commission on the Grand Ethiopian Dam project did not receive adequate studies and statistics from the Ethiopian side guaranteeing that the project will not negatively impact Egypt's share of Nile River water.

"Egypt is one of the most drought-threatened countries, in the case that the River Nile is [taken] from us, and I repeat this is not regional, but worldwide. We rely on the River Nile for 98 percent of our water demands," Qandil explained.

Egypt has been locked in a dispute with Ethiopia in recent weeks over the latter's construction of a dam on the Blue Nile aimed at generating electricity. Many Egyptian politicians have cited concerns that the new dam could interfere with the volume of Nile water that reaches Egypt.

"The Ethiopian prime minister said in 2011 that Egypt's share will not diminish by one cup of water. We want to see studies and plans to confirm that," Qandil explained.

"We understand the rights of developmental projects for the Nile, and there is always a way out that both parties can win," he added.

Earlier Wednesday, Sherif Mohamady, representative of Egypt's irrigation minister, said that scientific studies have proven that there may be problems in the future for Egypt if the Renaissance Dam, currently under construction on the Blue Nile in Ethiopia, is completed.

"This is because there are huge problems in its design, since the Ethiopians' technical approach is very weak," he said Wednesday according to state news agency MENA, warning that one consequence could be the collapse of the dam.

Mohamady also said that Egypt had not received a report on safety measures relative to the dam.

"In case of its collapse, there will be lots of negative consequences for both Egypt and Sudan,"

Mohamady added at a symposium organised by the Egyptian-European Council to discuss the dam deadlock.

"Egypt's foreign minister will seek 'win-win' on Ethiopia's grand dam: PM Qandil", 13/06/2013, online at:

<http://english.ahram.org.eg/NewsContent/1/64/73891/Egypt/Politics-/Egypts-foreign-minister-will-see-winwin-on-Ethiop.aspx>

**BACK TO TOP**

[WWW.ORSAM.ORG.TR](http://WWW.ORSAM.ORG.TR)

## ❖ Ethiopia defies threats from Egypt, ratifies the Nile treaty

Ethiopia's Parliament unanimously ratified a treaty that strips Egypt of its right to the lion's share of the River Nile waters.

The move raises the political temperature in a dispute between Cairo and Addis Ababa over construction of a dam along the river.

The Parliament's move yesterday, follows days of irate exchanges between two nations over Ethiopia's new hydroelectric plant, which Egypt fears will reduce a water supply vital for its 84 million people. Egyptian President Mohamed Mursi said on Monday he did not want "war" but would keep "all options open."

This prompted Ethiopia to say it was ready to defend its \$4.7 billion Great Renaissance Dam near the border with Sudan.

Six Nile basin countries including Ethiopia have signed a deal effectively stripping Cairo of its veto, which is based on colonial-era treaties, over dam projects on the Nile, source of nearly all Egypt's water. Ethiopia's late leader Meles Zenawi had delayed parliamentary ratification until Egypt elected a new government. "Most of the upstream countries have approved it through their parliaments. We delayed it as a gesture of goodwill to the people of Egypt until a formal elected government was in place," Ethiopian government spokesman Bereket Simon said.

"We have a principled stance on the construction of dams. We are determined to see our projects brought to completion."

Another government spokesman, Shimeles Kemal, said Ethiopia's 547-seat legislature had voted to "incorporate the treaty into domestic law".

Egyptian Foreign Minister Mohamed Kamel Amr is expected to travel to Addis Ababa on Sunday for talks about the dam, though Ethiopia's foreign ministry has said there can be no question of suspending construction.



An Ethiopian foreign ministry spokesman has said the talks with Egypt are “in the spirit of Ethiopian interests”.

“Ethiopia defies threats from Egypt, ratifies the Nile treaty”, 15/06/2013, online at:  
<http://horseedmedia.net/2013/06/15/ethiopia-defies-threats-from-egypt-ratifies-the-nile-treaty/>

**BACK TO TOP**

**WWW.ORSAM.ORG.TR**

## ❖ Egypt talks war over Nile dam

**SINCE becoming Egypt's President a year ago, Mohammed Morsi has been so awash with problems - economic, political, constitutional - that he has paid scant attention to the biggest problem of all coming down the river - the level of the River Nile.**

Two weeks ago, Ethiopia announced that it had begun to divert the Blue Nile, the major source of Egypt's water, in the process of building a giant dam.

Alarmed, Mr Morsi summoned senior political and religious leaders to discuss Egypt's options the next day. Unknown to the participants, their heated discussion was broadcast live on national television by mistake.

Some were heard calling for Egyptian warplanes to overfly the Ethiopian capital, Addis Ababa, as a warning. Others called for supporting anti-government rebels in Ethiopia if the project proceeded or even dispatching special forces to destroy the dam.

Mr Morsi himself stipulated that "all options are open". In a clear warning that this included the option of war, he said: "If a single drop of the Nile is lost, our blood will be the alternative.

When Ethiopia demanded an explanation for these overheard remarks, a senior aide to Mr Morsi apologised for the "unintended embarrassment". The cabinet issued a statement calling for "good neighbourliness and the pursuit of joint interests without either party harming the other". But other government spokesmen in Cairo said that war was not an option "at this time".

The Nile, the longest river in the world at 6700km, has been Egypt's lifeline since time immemorial. Never has Egypt needed the river more than now when its population has reached 84 million, four times what it was 50 years ago. No less than 96 per cent of the Egyptian work force is engaged in agriculture, which consumes 88 per cent of the nation's water supply.

Egypt's view of any water diversion as potentially catastrophic is therefore understandable. Experts have said that filling the reservoir behind the dam will consume an amount equivalent to an entire year's flow into Egypt, but spread over several years. Also there will be an unspecified loss to evaporation at the reservoir.

Egypt's legal claim to the Nile's water rests on a 1929 document drawn up by Egypt and Britain, when it was the colonial power in the region. The agreement allocated 48 billion cubic metres of the Nile's waters per year to Egypt and four billion to neighbouring Sudan.

It made no allocation at all to Ethiopia and the other upstream countries through which the White Nile wends its way from Lake Victoria in central Africa to meet the Blue Nile in Sudan before continuing, merged, into Egypt.

Egypt was even granted the right to inspect remote tributaries of the Nile in these upriver lands to ensure that there was no significant diversion of water. Except for Ethiopia, none of the upriver countries was independent at the time.

In recent years Ethiopia has become increasingly outspoken about the 1929 arrangement, which it says is a colonial relic that has long since outlived its legitimacy, particularly since it was never a signatory to it.

Ethiopia's parliament yesterday raised the political temperature further by unanimously ratifying the the Co-operative Framework Agreement that strips Egypt of its right to the lion's share of the Nile river waters.

The deal allows upstream countries to implement irrigation and hydropower projects without first seeking Egypt's approval. In addition to Ethiopia, Burundi, Kenya, Rwanda, Tanzania and Uganda have all signed the CFA, while Democratic Republic of Congo and South Sudan have said they also intend to join.

Cairo said the move was not significant and did not change Egypt's official position rejecting the agreement.

Construction of the Grand Ethiopian Renaissance Dam, as it is called, was begun two years ago by an Italian firm, Salini Construction, about 40km from the Sudanese border. The \$4.8 billion project is scheduled for completion in July 2017.

The dam's principal purpose, say Ethiopian officials, is to generate much-needed electricity for domestic consumption and for neighbouring states. It would be the largest hydroelectric dam in Africa.

Chinese banks are reportedly financing the cost of the turbines but the Ethiopian government says it will finance the bulk of the project itself by issuing bonds. Transmission lines are to be built to Addis Ababa and Khartoum, Sudan's capital, both more than 400km distant.

Tariq Alhomayed, former editor of the prominent Arabic newspaper Al-Sharq Al-Awsat, wrote that Ethiopia would not have dared challenge Egypt were it not for Cairo's political disarray.

Egyptian Foreign Minister Mohammed Amr is due to arrive in Addis Ababa next week for discussions.

"Egypt talks war over Nile dam", 15/06/2013, online at: <http://www.theaustralian.com.au/news/world/egypt-talks-war-over-nile-dam/story-e6frg6so-1226664055572>

**BACK TO TOP**

### ❖ Ethiopia approves Nile water deal opposed by Egypt, Sudan

Ethiopia's parliament on Thursday approved the Nile River Cooperative Framework Agreement, replacing all colonial-era deals that granted Egypt and Sudan the majority of water rights to the world's longest river, Egyptian daily al-Yawm al-Sabea reported.

The parliament unanimously ratified the agreement, which is strongly opposed by Egypt and Sudan. The move comes amid tensions between Egypt and Ethiopia over the latter's decision to build the Renaissance Dam, which will divert Nile water.

Egypt strongly opposes the dam out of fear that it will cause a dangerous water shortage.

"All options are open" in dealing with the situation, Egyptian President Mohamed Mursi said on Monday, adding that his country is willing to confront any threats to its water security. Ethiopian Prime Minister Hailemariam Desalegn responded that a declaration of war by Egypt would be "tantamount to insanity."

Desalegn described statements by Egyptian politicians, particularly those from the Muslim Brotherhood, as "provocative."

He accused the Egyptian government of exploiting the issue of the dam "to confront its rivals and evade its local crises."

Desalegn said: "No one, no matter who he is, can prevent Ethiopia from establishing developmental projects on its land."

He added that the dam is "a national plan" that will lift the Ethiopian people out of poverty.

Desalegn emphasized his belief in "dialogue and negotiating in order to serve both countries' interests," adding that the dam will not harm Sudan or Egypt.

"Ethiopia approves Nile water deal opposed by Egypt, Sudan", 13/06/2013, online at:

<http://english.alarabiya.net/en/News/2013/06/13/Ethiopia-approves-Nile-water-deal-opposed-by-Egypt-Sudan.html>

**BACK TO TOP**

### ❖ Egypt, Ethiopia and Blue Nile

Regarding Blue Nile River, “Water Wars” has come to the agenda again as a result of the tension between Egypt and Ethiopia. The dependency ratio of Egypt to the waters of the Nile is at the incomparable level. In Egypt, where agriculture is impossible without irrigation, water security has been one of the most important issues for many years.

Egypt, in the period after the 1973 War with Israel, signed Camp David Peace Treaty in 1979 and, thus, gave up its dominant role in the Arab-Israeli dispute. In that period, the President of Egypt, Anwar Sadat, stated that “water is the only issue that could take Egypt to war” and this statement has often been mentioned in the hydropolitics literature. Similarly, in 1990, the Minister of Foreign Affairs of Egypt, Butros Gali, who will be then the Secretary General of the United Nations, stated that the national security of Egypt, which is located on the waters of Nile, is in the hands of the other countries and another war in the region will be because of water. Therefore, it can be argued that the predictions of water wars in the 1990s are mainly based on these explanations.

The Nile River is mainly composed of two tributaries. The White Nile emerges from Equatorial Lakes and merges with the Blue Nile, which emerges from Ethiopian Plateau, in the capital city of Sudan, Khartoum. After merging of the Blue and White Nile, the river gets only Atbara tributary and continues on its path towards the Mediterranean Sea. White Nile enters the Sudd swamps in the territory of South Sudan. In this region, the river loses of 34 billion cubic meters annually. The total flow of the Nile River in Aswan is 84 billion cubic meters annually. 85 percent of this flow, 72 billion cubic meters, is provided by Blue Nile which emerges from the Lake Tana in Ethiopia and Atbara tributary while the remaining amount, 12 billion cubic meters, is provided by the other six upstream countries.

Egypt benefits from the Nile River almost unilaterally and attributes this utilization to “historic rights”, which is not included in the international law, and this is not accepted by the other countries of the basin. In the colonial period Britain made some arrangements with the other European colonial powers in order to guarantee the flow of the river since the cotton production. However the basin countries after gaining their independence announced that they do not recognize those agreements. On the other hand, the treaty, which was signed between Egypt and Sudan in 1959 and assigns the waters of the Nile to two countries only, is not accepted by the other riparians. In May 2010, the “Cooperation Framework Treaty” was signed between upstream countries, namely Rwanda, Ethiopia, Uganda and Tanzania, since the Nile Basin initiative, which aims to eliminate discomforts of the upstream countries of the basin and began in the 1990s, was not successful. This treaty did not come into force but it is considered a threatening factor for the utilization of the Nile waters by Egypt and Sudan.

The Renaissance dam, which was built for the purpose of energy production and has a former name of Millennium, has escalated the tension regarding the Nile River between Egypt and Ethiopia. In addition, Ethiopia has begun the diversion phrase of the river water for the construction of dam and



this led to serious reactions in Egypt. The demonstrations held in front of the Ethiopian Embassy in Cairo demand a military intervention. A possible military intervention, however, should be evaluated in Egypt's internal political turmoil. It should be mentioned that Egypt does not have a direct border with Ethiopia. Therefore, Egypt benefits from the territories or airspace under the sovereignty of Sudan. In this case, it is clear that Sudan will have state responsibility since it is one of the most important rules of international law. From the perspective of Egypt, it seems to be difficult for Egypt to engage in such operation. There are many reasons for that. The president of Egypt, Mursi, does not want to be in an adventure which will increase the reputation of the army in the eyes of the public. On the other hand, it can also be argued that the army does not want to divide its power as a result of this kind of intervention given that it has a struggle with Salafi militants in the Sinai Peninsula. However it can be preferred by Egyptian officials to convert internal conflicts to a foreign state but, this will be a reflection of complex political problems that cannot be explained by "water wars" concept.

"Egypt, Ethiopia and Blue Nile", 07/06/2013, online at:

<http://www.orsam.org.tr/en/WaterResources/showAnalysisAgenda.aspx?ID=2326>

**BACK TO TOP**

[WWW.ORSAM.ORG.TR](http://WWW.ORSAM.ORG.TR)

### ❖ **South Sudan Urges Egypt, Ethiopia to Cooperate On Nile**

The construction of Ethiopia's dam on the Blue Nile River will benefit current and future generations of Egypt, Sudan, and Ethiopia, Pagan Amum, Chief Negotiator of South Sudan, has said.

The construction of the dam in Ethiopia would not affect adversely the interest of the other countries like Egypt or Sudan, said the official.

Amum told reporters on Thursday in Addis Ababa that South Sudan has followed with concern the development and statement from Egypt in relation to the construction of the dam in Ethiopia.

He said that countries in the Nile basin should cooperate on the management of the Nile waters to benefit their current and future generations, according to xinhua.

"Ethiopia has the right to use the Nile waters in terms of generation of electricity, in terms of irrigation, and the way we see this development is that it is not affecting the interest of Sudan or Egypt," Amum said.

"We call on the government of Egypt and the government of Ethiopia to engage and cooperate in all the developments that are going to be to the benefit all the people," he added.

Stating that South Sudan is a new state and member of the Nile Basin Countries, Amum said his country would work with governments and states in the Nile basin to reach agreement on the use and sustainable management of the Nile waters for the benefit of the people in the Nile basin.

"South Sudan Urges Egypt, Ethiopia to Cooperate On Nile", 14/06/2013, online at:  
<http://allafrica.com/stories/201306141255.html>

**BACK TO TOP**

## ❖ South Sudan backs Ethiopia's Nile dam

june 14, 2013 (ADDIS ABABA) – The Governments of South Sudan has voiced support to a Ethiopia's controversial Nile Dam project which the country is building along the Nile river, while Addis Ababa minimised Egyptian statements about war against Ethiopia.

South Sudanese chief negotiator expressed Thursday his country's position on the construction of the Giant power plant being built some 30-40 Kilometers from Sudan border.

Speaking to Reporters in Addis Ababa, Pagan Amum, said Ethiopia dam project will benefit not only to Ethiopia but also to the current and future generations of Sudan and Egypt.

Ethiopia is currently exporting hydropower processes cheap Electricity to Djibouti and Sudan.

"Ethiopia has the right to use the Nile water in terms of generation of electricity, in terms of irrigation, and the way we see this development is that it is not affecting the interest of Sudan or Egypt", Amum said.

Newly independent South Sudan which recently became a new member to Nile basin countries has called on Egypt and Ethiopia to cooperate and engage in a dialogue to resolve Nile water Dispute.

After Ethiopia recently diverted the course of the Nile River, Egyptian politicians are suggesting sabotage including military action and supporting local rebels to destroy the Dam project.

Ethiopia's communication Minister, Bereket Simon, said Friday that the threats from Egypt are only psychological feud that aimed to divert the Egyptians away from their internal political instability.

Simon Down played a potential of war with Egypt over Nile.

"Egypt doesn't have firm and justified reason to go to war with Ethiopia" he said adding "even if they have the willing the question is do they have the capacity?"

Bereket further stressed that military action will never solve disputes over Nile.

Last Wednesday Ugandan President Museveni in a national address at the parliament backed the construction of the Dam saying that African nations need such a hydro power plant to spur their economies and to generate clean energy as well as to curb deforestation practices aimed for fuel.

Museveni further warned Egypt to restrain from what he said was "the chauvinistic statements" coming out of Cairo in connection with Ethiopia's \$ 4.8 billion mega hydropower project which the north African nation fears could diminish its annual water share from Nile River.

"I have seen statements in the media coming out of the government of Egypt about the commendable work of Ethiopia. What Ethiopia is doing is what governments in Africa should do," he said.

Khartoum dissociated itself from Egypt and supported the Dam construction saying the three countries should work together to resolve minors problems mentioned in a report prepared by international experts including Egypt and Sudan.

## ETHIOPIA RATIFIES NILE PACT

Ethiopia's 547-member parliament on Thursday unanimously endorsed the new Nile River Cooperative Framework Agreement, making the horn of Africa's nation the first country to ratify the agreement reached in Uganda in 2010.

The move comes after days of fierce verbal exchanges between Cairo and Addis Ababa that escalated tensions rising fears to a possible military confrontation.

The Entebbe agreement which was signed by four Nile basins aims to reverse a colonial-era agreement that has granted Sudan and Egypt lions share to the Rivers water resources of which over 85 % of it originate in Ethiopia.

Rwanda, Tanzania, Uganda, Kenya and Burundi are also signatories to the Framework Agreement legislatures of the countries are similarly expected to endorse the cooperative agreement.

At least six riparian countries have to ratify the agreement to overthrow the colonial era treaty Ethiopia-led other riparian countries argue that it has abandoned their right to equitable utilization of the water resources.

South Sudan has in the past announced plans to sign the cooperative framework agreement.

“South Sudan backs Ethiopia's Nile dam”, 14/06/2013, online at: <http://www.sudantribune.com/spip.php?article46960>

**BACK TO TOP**

❖ **Ethiopia ratifies Nile accord opposed by Egypt**

**CAIRO: Ethiopia's parliament on Thursday ratified an accord that replaces colonial-era deals that awarded Egypt and Sudan the majority of the world's longest river.**

The vote comes amid a bout of verbal jousting between Ethiopia and Egypt after Ethiopia last month started to divert Nile waters for a massive \$4.2 billion hydro-electric dam dubbed the Grand Ethiopian Renaissance Dam.

Ethiopia's growing economy frequently suffers from power cuts and needs more electrical capacity. But Egypt fears the dam will mean a diminished share of the Nile, which provides almost all of the desert nation's water needs. Egyptian politicians have suggested attacks against Ethiopia to sabotage the dam, and Egyptian President Mohammed Morsi on Monday warned that "all options are open" to challenge Ethiopia's Nile project.

Ethiopian Prime Minister Hailemariam Desalegn responded Tuesday, forcefully vowing "nothing" and "no one" will stop the dam's construction. He downplayed the prospect of conflict, saying Egypt leaders won't go to war unless they "go mad." African Union head Nkosazana Dlamini Zuma on Wednesday urged dialogue and cooperation between Ethiopia, Egypt and Sudan.

A 10-person Egypt-Sudan-Ethiopia experts panel concluded that the dam will not "significantly affect" water flow to Egypt and Sudan, according to Ethiopian officials. Sudan said it accepts the outcome of the finding and this week announced that it supports Ethiopia's project. Ethiopia's 547-member parliament unanimously endorsed the new Nile River Cooperative Framework Agreement, an accord already signed by five other Nile River countries. The accord, sometimes referred to as the Entebbe Agreement, is the product of decade-long negotiations. It was conceived to replace the 1929 treaty written by Britain that awarded Egypt veto power over upstream countries' Nile projects. Sudan and Egypt signed a deal in 1959 splitting the Nile waters between them without giving other countries consideration.

The new cooperative agreement - signed by Ethiopia, Rwanda, Tanzania, Uganda, Kenya and Burundi - aims to establish a commission to oversee Nile projects. Congo and South Sudan, which succeeded from Sudan in 2011, have announced plans to join the new pact. Eritrea is participating as an observer in the 10-nation Nile Basin Initiative. Egypt has previously said that it accepts most of the new agreement. But it opposes a clause saying member countries would work to ensure "not to significantly affect the water security of any other Nile Basin State." Egypt wanted the clause to say

countries would not "adversely affect the water security and current uses and rights of any other Nile" states. Ethiopian Minister of Water and Energy Alemayehu Tegen told parliament that Ethiopia made two bold decisions concerning the dam. The first, he said, was to postpone ratification of the agreement by a year to accommodate Egypt's request for time until an elected government was in place. "The second one was to let experts, including from Egypt and Sudan, inspect our Renaissance Dam," he said. "No other country does this but we did it in cooperation and friendly spirit. But we are seeing how our good intentions are being responded to. We can no longer wait. We need to go ahead with the ratification." After ratifying the legislation, lawmakers called on the other five signatory countries to follow suit. Ethiopia's Renaissance Dam has been under construction for two years on the Blue Nile River in Ethiopia's Benishangul-Gumuz region near Sudan. **(Sapa-AP)**

"Ethiopia ratifies Nile accord opposed by Egypt", 14/06/2013, online at:  
<http://www.mmegi.bw/index.php?sid=1&aid=759&dir=2013/June/Friday14>

**BACK TO TOP**



### ❖ Museveni dismisses Egypt's claims over Ethiopia's Nile dam threat

Uganda President Yoweri Museveni has warned Egypt against repeating mistakes of past regimes by threatening neighbours over the use of River Nile water.

Museveni on Wednesday told the Ugandan parliament that the construction of a dam over the Nile River by Ethiopia would not destroy the water source as alleged by Egypt.

"Egypt should not repeat mistakes of past governments," he said.

"Egyptians think that there is a threat to the Nile by Ethiopia's building of a hydro power but in actual fact production of electricity saves the Nile."

Museveni said the production of electricity would see a decline in the number of people cutting down trees for firewood, hence the environment in the river's catchment areas will be preserved.

Tension between Egypt and Ethiopia has been rising over the Addis Ababa's plans to build dams along the Nile.

Ethiopia plans to construct a dam where 6 000 megawatts of electricity.

President Mohamed Morsi of Egypt's government has objected to the projects saying it will affect the River Nile's water levels.

Museveni said instead of threatening Ethiopia with war Egypt must open dialogue.

"Construction of dams in Ethiopia has led to her economy to grow," he said.

"It is advisable that chauvinistic statements coming out of Egypt are restrained and through the Nile Valley organization, rational discussions take place."

Museveni said due to lack of electricity in Uganda, 40 billion cubic meters of wood is used for domestic purposes.

"No African wants to hurt Egypt," he said. "However, Egypt cannot continue to hurt black Africa."

On Morsi said he did not want "war" with Ethiopia over the construction of the \$4.7 billion Renaissance Dam near the border with Sudan but said he would "keep all options open."

The Nile is the source of nearly all of Egypt's water.

Ethiopia and other Nile basin countries – Burundi, Kenya, Rwanda, Tanzania and Uganda - accuse Egypt of taking advantage of a colonial treaty to monopolise the Nile.

"Museveni dismisses Egypt's claims over Ethiopia's Nile dam threat", 14/06/2013, online at:

<http://www.theafricareport.com/North-Africa/museveni-dismisses-egypts-claims-over-ethiopias-nile-dam-threat.html>

**BACK TO TOP**

## ❖ Egypt: 'Water War' Over the Nile River Won't Happen

"It is high time for Egypt to appreciate that the Nile is not Egyptian, but an African river. Egypt should not issue empty threats of war, but endorse Ethiopia's dam programme and work together with Sudan and South Sudan to ensure its full potential is realised. More than any other gesture in international politics, this would mark a return of Egyptian statesmanship and pave the way for a future of resource abundance and regional peace after centuries of confrontation." This is an opinion posted on the AL JAZEERA ENGLISH website and written by Harry Verhoeven completed a doctorate at the University of Oxford.

It further read "Ethiopia is a key ally of the US in the fight against terrorism and piracy in the Horn of Africa and the Arabian Peninsula; for both Sudan and the US, Ethiopian diplomatic efforts are vital to ensure that Khartoum and Juba do not go to war again and cooperate over oil exports. The site of the Great Ethiopian Renaissance Dam is more than 1,000km from Egypt's southern border. That combination of diplomatic isolation and military obstacles - not to mention Egypt's domestic divisions and instability, which make war financially unaffordable - essentially mean that, despite Morsi's claims, not all options are on the table."

"What, then, is the alternative? Egypt, Ethiopia, Sudan and South Sudan have some of Africa's poorest populations and they face colossal challenges in reducing poverty, expanding public services and countering ecological degradation. As I outlined in a Chatham House report in 2011 regional integration would go a long way to help avoid the classic pitfalls of natural-resource development such as the resource curse." "Resource scarcity can trigger conflict, but it could also stimulate peaceful cooperation. Ethiopia, Egypt and Sudan have much to gain from incremental closer cooperation and a grand energy deal that would put Ethiopia's water resources at the disposal of the region. For all of Egypt's apocalyptic rhetoric about Ethiopian selfishness, the little publicised truth remains that it will be cheaper to send the thousands of megawatts that the Great Ethiopian Renaissance Dam will produce to Sudan and South Sudan (and possibly to Egypt) than it will be ready to transmit the electricity to the Ethiopian highlands."

"Ethiopia's big push on the Great Ethiopian Renaissance Dam is a logical consequence of a broader shift that has been underway for years and that a weakening Egypt has failed to stop. Construction of the dam began, not coincidentally, in April 2011, just two months after the overthrow of Mubarak, a watershed used by Meles Zenawi to symbolically usher in a new era of Nile Basin geopolitics. Wikileaks cables have since shown that Cairo had already threatened to bomb new hydro-infrastructure initiatives on the Blue Nile back in 2009-2010 but was told by Washington and Khartoum that this would be politically unacceptable, as well as logistically extremely challenging."

"Egypt: 'Water War' Over the Nile River Won't Happen", 13/06/2013, online at:  
<http://allafrica.com/stories/201306131392.html>

**BACK TO TOP**

❖ **Ethiopia will not accept any proposal to delay construction of Renaissance Dam:  
Foreign ministry**

Ethiopia's foreign ministry said on Wednesday the country has no intention of suspending construction of what would be the biggest hydro electric plant on the continent, a project Egypt says could cost it vital water supplies.

Egyptian Foreign Minister Mohamed Kamel Amr is expected to travel to Addis Ababa on Sunday for talks on a giant dam Ethiopia is building on the Nile, as the countries seek a diplomatic solution to an increasingly heated dispute.

Tensions have risen this week between two of Africa's most populous nations, after President Mohamed Mursi said Egypt did not want "war" but would keep "all options open" to avoid losing any water.

Some Egyptian politicians were also caught on camera last week talking of air strikes or backing Ethiopian rebels after the start of major new work on the \$4.7 billion Grand Renaissance Dam took Cairo by surprise.

Ethiopia has dismissed talk of military action as "psychological warfare".

"The minister of foreign affairs (of Egypt) probably will be arriving on the 16th of this month," Dina Mufti, spokesman at Ethiopia's foreign affairs ministry, told reporters.

"This is in the spirit of Ethiopian interest - Ethiopia has always been open and we've always been interested in discussions," he said, speaking in English.

Dina added "in the strongest possible terms" that Ethiopia would not accept any proposal to halt or delay construction.

The African Union urged both sides to hold talks to resolve the row.

"It would be important to just have discussions that are open, that look at how we can have a win-win situation in a new context, not in the context of the colonial powers, but in the context of pan-Africanism and African renaissance," the bloc's chairperson Nkosazana Dlamini-Zuma told a news conference.

"Ethiopia will not accept any proposal to delay construction of Renaissance Dam: Foreign ministry", 13/06/2013, online at: <http://english.ahram.org.eg/NewsContent/1/64/73880/Egypt/Politics/-/Ethiopia-will-not-accept-any-proposal-to-delay-co.aspx>

**BACK TO TOP**

❖ **The dam is beyond the combat radius of all aircraft staging from Egyptian airfields**

Ethiopia's initiation of a dam project on the Blue Nile has quickly drawn the ire of Egypt, which is critically dependent on it as a source of much of the country's freshwater needs. As Egyptian Foreign Minister Mohamed Kamel Amr said June 9 following Ethiopia's refusal to halt construction of the dam and ahead of his trip to Addis Ababa to discuss the project, Egypt will not give up a "single drop of water from the Nile." "No Nile, no Egypt," he said.

While Egypt has struggled to attract diplomatic intervention on its behalf to thwart Ethiopia's dam construction, tensions have reached the point where Egypt has suggested the use of force to keep the dam from potentially lowering the Nile's water levels downstream to unacceptable levels. There will be serious international pressure to keep the dispute over the dam in the realm of diplomacy, but there are also fairly significant constraints on the physical possibility of an Egyptian military solution.

It varies depending on the dimensions of the dam, but dams can be and usually are very tough targets to destroy. In World War II the British proved that it could be done despite considerable difficulties and were the first to seriously develop the art of dam busting. The British used delayed-action bouncing bombs from Lancaster bombers, but fortunately for the Egyptians, advancements in weapons technology would enable them to target the Ethiopian dam in a less risky way. The best way for Egypt to knock out a standing dam is to use retarded and delayed-action bombs deployed from very low altitudes, or even better, delayed-action joint direct attack munitions deployed at medium altitude. The difficulty is that the bomb needs to be deployed at the very base of the dam, underwater, where the concussive effect and pressure wave is greatly amplified. Preferably more than one bomb would be deployed in this manner, and the force would be sufficient to breach the dam.

To avoid the hassle of hitting a standing dam and creating major flooding downstream in Sudan and even potentially Egypt, Cairo would probably prefer to hit it while it is under construction. But it also has to be careful not to hit the dam too early, because then Ethiopia may not be fully deterred from restarting the project.

Distance is a major obstacle for the Egyptian military option. Ethiopia is simply too far from Egypt, and since Egypt has not invested in any sort of aerial refueling capability, it is beyond the combat radius of all Egyptian aircraft staging from Egyptian airfields. The only consolation for Egypt is that the dam is very close to the Sudanese border. Access to Sudanese airfields would place some of

Egypt's air force within range. However, operating from Sudanese territory could be politically complicated and would have international repercussions for Sudan along with Egypt. Sudan's proximity to Ethiopia would also leave it vulnerable to direct military retaliation.

Another option is the insertion of special operations forces into Sudan. From there, the forces could move across the border and either harass the construction of the dam or attempt to sabotage the structure under the guise of militants. This would allow Khartoum to realistically pledge that it had no idea there were "militants" there. The harassment tactic by special operations forces or militants would likely only delay the project, not arrest construction.

Special operations forces teams would face their own series of obstacles in trying to destroy the dam. Dams are critical infrastructure and routinely protected relatively well in most countries by dedicated military units. Ethiopia would be no exception, especially with all the contention already surrounding the project. So Egyptian special operations forces would need luck and skill to gain access to the dam successfully. There is also the problem that a small team of ground forces, no matter how elite, would likely be physically unable to carry enough ordnance to critically damage or destroy the dam.

Egypt does have military options, but distance will heavily constrain its ability to project the full force of its military. Any option Cairo chooses to exercise will be risky at best and will also come with severe international consequences.

"The dam is beyond the combat radius of all aircraft staging from Egyptian airfields", 14/06/2013, online at:

<http://www.awrambatimes.com/?p=8439>

**BACK TO TOP**

[WWW.ORSAM.ORG.TR](http://WWW.ORSAM.ORG.TR)

## ❖ Ethiopian parliament votes to strip Egypt of rights to majority of Nile water

Tensions rise between neighbours over £4.7bn Great Renaissance Dam project

Ethiopia's parliament has unanimously ratified a treaty that strips Egypt of its right to the lion's share of the Nile river waters, raising the political temperature in a dispute between Cairo and Addis Ababa over the construction of a dam.

The parliament's move follows days of irate exchanges between two of Africa's most populous nations over Ethiopia's new hydroelectric plant, which Egypt fears will reduce a water supply vital for its 84 million people.

Egyptian president Mohamed Mursi said on Monday he did not want "war" but would keep "all options open", prompting Ethiopia to say it was ready to defend its \$4.7bn Great Renaissance Dam near the border with Sudan.

Six Nile-basin countries including Ethiopia have signed a deal effectively stripping Cairo of its veto, which is based in colonial-era treaties, over dam projects on the Nile, the source of nearly all Egypt's water.

Ethiopia's late leader Meles Zenawi had delayed parliamentary ratification until Egypt elected a new government.

"Most of the upstream countries have approved it through their parliaments. We delayed it as a gesture of goodwill to the people of Egypt until a formal elected government was in place," Ethiopian government spokesman Bereket Simon told Reuters.

"We have a principled stance on the construction of dams. We are determined to see our projects brought to completion."

Another government spokesman, Shimeles Kemal, said Ethiopia's 547-seat legislature had voted to "incorporate the treaty into domestic law".

Egyptian foreign minister Mohamed Kamel Amr is expected to travel to Addis Ababa on Sunday for talks about the dam, though Ethiopia's foreign ministry has said there can be no question of suspending construction.

"Ethiopian parliament votes to strip Egypt of rights to majority of Nile water", 13/06/2013, online at:

<http://www.guardian.co.uk/world/2013/jun/13/ethiopia-egypt-nile-water-dam>

BACK TO TOP

[WWW.ORSAM.ORG.TR](http://WWW.ORSAM.ORG.TR)



## ❖ Reflections on the Grand Ethiopian Renaissance Dam

(OPride) – On a recent Sunday morning a friend called and asked me to tune-in to an online discussion forum on one of the Ethiopian Paltalk forums. 500 attendants, the maximum allowed per room, packed the voice chatting room. After several attempts, I was able to join the room, which was managed by a postmaster named Aba Mela whose civil tone was pleasing.

The Internet is serving Ethiopia's version of First Amendment, with unfiltered abuses and insults written as footnotes of the busy site so much that I couldn't keep up reading and listening in tandem. The anonymity afforded by pseudonyms favors excessive diatribe. The topic that captivated so much emotions and interests among Ethiopians of diaspora was the construction of the hydroelectric dam on the Blue Nile River, the Grand Ethiopian Renaissance Dam (GERD).

The outpouring of emotions was triggered by comments made by Egyptian opposition party leaders during a meeting called by Egypt's president Dr. Mohamed Morsi to review the impact of Ethiopia's controversial dam to their country. Unaware that the discussion was transmitted live on Egyptian TV, some of the politicians warmly proposed sabotaging Ethiopia's plan to build the dam. One party leader suggested helping the Oromo Liberation Front while another surmised spreading rumors about purchase of a refueling airplane to fake preparation of attacking the dam. A gentler politician cautioned that this 'dangerous' act neglects the fact that Israel and America are Egypt's real enemies, not Ethiopia – a trajectory which may be more comforting to Ethiopia but less to Israel and the U.S. Another suggested keeping the discussions confidential; at which time they were told that the event was being transmitted live on Egyptian TV. Laughter followed.

President Morsi's comment came precipitously after he knew the discussion is certainly headed for an international consumption. He interjected that Egypt will not engage in any aggressive act out of respect for Ethiopia and its people. But he also stated that Egypt would not allow loss of a drop of Nile's water. A drop will certainly be lost. Unintended exposure of this diplomatic tittle-tattle might have thwarted a real conflict. The coercion could no more intimidate once it was self-exposed, and Ethiopia capitalized on the idle talk summoning the Egyptian Ambassador to Ethiopia and asking for

clarification.

Many in the audience at the packed chat room implied that since the Ethiopian government abuses human rights, arrests journalists, distributes land to international corporations, promotes ethnic favoritism, etc., they therefore oppose construction of the dam. Ironically, a journalist named Muluken Tesfaw was detained on May 4 for reporting on the return of thousands of farmers who had been forced from their lands in the Benishangul-Gumuz region – the same region where Ethiopia is construction the multibillion dam. Another journalist was tried for terrorism and sentenced to two years jail for reporting on alleged coercion to force government employees to contribute to the construction of the dam. One can chronicle these facts and set them as conditions that need to be resolved before a dam of this magnitude is built if one believes freedom and construction of the dam are tightly linked.

The reader may indeed decide to object construction of the dam solely based on the regime's totalitarian governance. I am sympathetic to those who say issues of freedom and human rights shall remain at the forefront of the Ethiopian political discourse, and the rights of the oppressed people must be respected before launching a grand project such as this. Strictly political objections valid but put aside, those who opposed construction of the dam based on its engineering merit did not make their cases. My purpose here is not to debate the political consequences, or speculate on emotional reactions in Egypt or Ethiopia objecting or favoring the project.

I am circumventing altogether issues such as Ethiopian unity, self-determination of the Oromo, warfare in the Ogaden, etc. These are far more important issues than the dam itself, but I prefer not piggy-bagging them with this topic. Instead, I will focus only on the engineering and environmental aspects of the dam to the extent possible, hopefully without the technical jargons, so that the reader will make an informed decision based on facts and a range of views.

### **Why hydroelectric dam?**

Hydroelectric dams are increasingly popular in water-rich countries of Sub-Saharan Africa, especially those less endowed with oil. For example, a 250 MW dam was recently completed on the Nile in Uganda. A 300 MW dam was also built by China and completed in 2009 on the Tekeze River

in Ethiopia. A smaller, 120 MW dam was recently completed on the Wele River in Equatorial Guinea, to mention a few.

As a background to any large hydroelectric dam, one has to take into account the growing global energy demand and weigh this demand with sharply increasing fuel prices and air pollution that causes climate change. The global Carbon dioxide (CO<sub>2</sub>) content of the air in February 2013 was 397 ppm (parts per million by volume), compared to 280 ppm of the preindustrial level. There is an immutable need to slowdown or reverse the global CO<sub>2</sub> generation to abate negative consequences of climate change. On the other hand, facing this sharp increase in CO<sub>2</sub> concentration which is threatening the human existence, is a well-established knowledge that social development is strictly tied to energy and electricity supply. A well-respected autonomous intergovernmental organization, the International Energy Agency (IEA) produces annual reports on climate change related issues.

The 2003 report discusses the link between energy use and economic welfare measured in gross domestic product (GDP). This well-sited research paper states that above \$3,000 per capita GDP (1995), energy demand explodes as industrialization and personal mobility accelerate. But when GDP reaches \$15,000, energy demand grows more slowly as services begin to dominate. After \$25,000, economic growth can continue without significant increases in energy use. Countries like S. Korea, Malaysia, and China are following this path. In fact, China's CO<sub>2</sub> emissions from power plants and transportation surpassed that of the USA's emissions in 2006 by 8%. Ethiopia, (with a skeptically received rate of growth that resulted in GDP of \$1200 by 2012) or any other country is no exception. Recognizing the fact that large hydro dam is less of a threat than nuclear energy, an option cordially discussed recently in countries like Kenya, and also acknowledging the fact that hydroelectric dams have near zero emissions, the World Bank, after years of refusal, has now started funding large dam projects.

The critical question that seems to overwhelm all development strategists seems to be 'how can a country develop without adding significant air pollution?' The international mood of the day is such that, this strategic question will be given priority over the next several decades while other environmental concerns such as population displacement or wildlife damage will certainly be reviewed but as secondary. There is no completely benign method of power production; it is a matter

of negotiating and accepting adequate penalties of development, and identifying the ones where negative impacts can possibly be mitigated.

In my opinion, hydroelectric dams of any size are better than nuclear power or fossil fuel power plants. The political challenge to build internationally agreeable share of resources is vital, but it is a political matter to be settled by governments that share the resources. But in the end, at least in the case of sub-Saharan Africa, news of building a dam is certainly far better than news of a vexing barren poverty that leads a barely walking skeletal child to death, again and again for decades. The talk of a microclimate change or environmental impact as a result of a hydroelectric dam is a luxury that Ethiopian politicians would relish, the international community would cherish, and most in Ethiopia would ignore.

### **Challenges and benefits of a large hydro project:**

Generally large hydroelectric dams such as the GERD are not considered renewable. An energy resource is considered to be renewable when its impact on the environment is negligible. Wind and solar energy are regarded renewable despite some arguments that these resources also inflict some damage to the environment. For example, wind turbines are blamed for killing migratory birds, and the Altamont Pass Wind Farm in California is shut down for several weeks every winter just for this reason. Noise from the turbines is another issue that keeps their installation away from populated areas. This in turn necessitates laying transmission lines to transport the power to cities where the demand for electricity is abundant. Solar energy too has its share of complains.

In 2011, environmental groups brought a string of lawsuits to stop construction of large solar plants in the Mohave Desert of California, a region said to have demonstrated extreme vulnerability to climate change. Desert that Africans try to wet is protected here. There is a growing objection to interfering with the desert climate, and increasing voices to protect the ambience of flora and fauna of these arid regions. Thus, there is no perfect system that leaves no trace in the environment to recover energy. And energy is a key component of development. The option to build a hydroelectric dam for the development of a society is therefore inherently controversial. The dams displace people and animals, kill vegetation, and may change the microclimate of the region. Most critics of large hydro favor many smaller dam instead, a concept known as distributed generation. Distributed generation

may or may not be better for the environment; - the sum of overtaken land and people can be more or less scattered than those overtaken by the mega projects.

Small-scale hydro, which is promoted by many journalistic scholars, requires more trained cadres to man each site. More importantly, it requires construction of extensive transmission networks to pull the lines into urban areas where demand is guaranteed. Electrification of rural areas is a very expensive business since the houses are often scattered, and the farmer may not afford to pay for the installation cost. This can be done with government subsidy in the economy allows, as is the case in several Latin America countries. The telephone industry is an excellent example of failure of infrastructure to network in African rural. In the developing countries, even after several decades, land-based phone lines simply did not penetrate into the rural areas. Phones are today more accessible in rural Africa simply because landlines are made obsolete by wireless technologies.

**Cost:** Cost and return on investment are critical components of power generation. On installed capacity basis, wind energy costs \$2100 per kW, whereas energy from solar – large Photovoltaic (PV) costs about \$7000 (2010 California price), more than three times higher. The price of PV cells is dropping gradually, but it will likely remain inaccessible to most African countries for years to come. Besides, solar energy is available only during half of the day, requiring expensive and often-unsafe storage systems. Construction cost of hydroelectric dam on a per kW basis, according to the U.S. Department of Energy, varies from \$735 to \$4,778, whereas the average capital cost is estimated at about \$2,000 per kW. The construction cost of GERD is about \$800, which is the result of dividing the \$4.7 billion cost by 6000 MW output. For the engineer reader, I realize that comparison based on kW-hr would have been more useful.

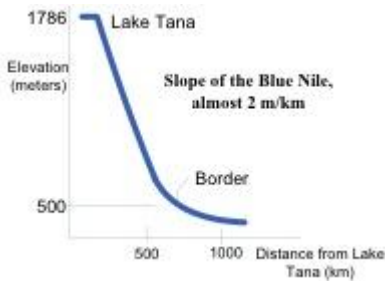
The intermittent nature of wind also requires a large backup to cover the base load when wind is not available. This will drive the cost higher. European countries as well as the USA have large base-power supplies from nuclear, natural gas, and coal to mitigate supply discrepancies in the power industry. In fact, the power supply deviation as a result of wind energy is negligible on the US power industry. However, a country such as Denmark that relies on wind for up to 25% of its electricity has to import as much from neighboring countries when the wind dies. The decision to import power is often made as abruptly as the wind disappears, making it vulnerable to on-the-spot market

volatilities.

Hydroelectric dams may also be susceptible to seasonal water levels and drought, but the daily or even weekly variation is suppressed by the reservoir, which to some extent serves as mass as well as energy storage. The seasonal variation also gives more time than wind to prepare. Nonetheless, seasonal water level ups and downs are very important parameters in hydroelectric economy. For example, the world's largest dam, the Three Gorge, has a capacity of 24 GW. The second largest, the Itaipu is 14 GW – just over half of Three Gorge's capacity. On an annual basis however, Three Gorge produces only about 85 billion kW-hr, whereas Itaipu, with a more consistent water flow, produces about 94 billion kW-hr. Despite such variations, the life cycle of hydroelectric dam is generally assumed to be 100 years, i.e., they remain one of the most stable, and eventually very affordable forms of energy supply. I have visited the Itaipu dam, the Three Gorge dam, as well as the Hoover dam, and I am always impressed by these breathtaking engineering accomplishments.

Searching for published materials, I came across an interesting research paper entitled “Integrated Management of the Blue Nile Basin in Ethiopia” published in 2007 by The International Food Policy Research Institute through University of Colorado Ethiopia. The study indicates that the project would typically produce benefit-cost ratios (the ratio of the benefits of the project relative to its costs, both expressed in monetary terms) from 1.2 - 1.8 under historical climate regimes. The economists may expand on the quality of this numbers.

### Selection of the GERD site



Selection of the site was one of the highly debated topics during my visit to the Paltalk site. I too didn't understand why such a large dam is placed almost on the border. So, I investigated the 2013 Google map attempting to identify why this location was selected. The detailed review of the map



(Google allowed reading within a hundreds of meters scale) shows that the dam is between two narrow hills rising to 1200 meters on the far northern bank, and 600 meters on the southern.

The 600-meter southern bank elevation stretches far inland up to the Dabus River, close to 100 km west. The Northern bank also drops to 600 meters quickly and expands to the immediate north where the reservoir will likely extend, and then rejoins the riverbank narrowing the strip as far inland as Western Shewa. Despite its proximity to the border, the reservoir will therefore be contained within Ethiopia, and will not expel over the 600-meter high banks that escorts it for several dozen km inland.

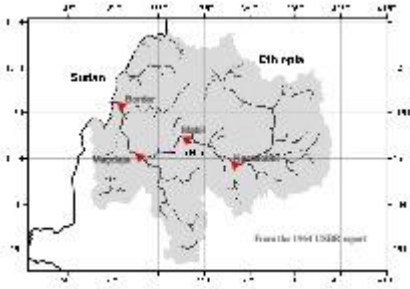
Average slope of the Blue Nile inside Ethiopia drops about 2 meters for every kilometer distance, a huge drop by all accounts. This drop is sure to exert tremendous pressure on the dam. The typical slope of the Nile in Egypt, for example, is about 8 centimeters per km. The location of the dam has to take into account several such factors including the possibility to contain the new reservoir.



I have come across few fairly informative papers related to exploitation of Blue Nile. However, the United States Bureau of Reclamation (USBR) at the request of the Ethiopian government conducted the most comprehensive early study in 1964. This event coincided construction of the Aswan Dam, and also the Fincha dam in Western Wollega. USBR conducted a thorough study of the hydrology of the upper Blue Nile basin with a simple feasibility study that listed some latent projects.

The study recommended four major hydroelectric dam sites along the Blue Nile with accompanying preliminary designs for irrigation and hydroelectric power along the Blue Nile and the Atbara Rivers. The four sites were 1) the Karadobi Dam located just upstream of the Guder River confluence, 2) The Mabil Dam on the Birr River, 3) The Mendaia dam 175 km from the Sudan border, and the 4) the near-border site which is the current location. Of the four sites, only the Mandaja and the near border

sites offer some potential for irrigation because of relatively easy access to flat land and lower escarpments than upstream.



Escarpments rising well over 1200 meters that fortify Karadobbi and Mabil sites rendered the two sites less useful for irrigation purposes. Thus, the choice of the current site is legitimate if the parallel development of irrigation and power generation are taken as criteria. The California experience makes it obvious that withdrawals of water from deep reservoirs involve significant pumping costs.

### **Can it be maintained?**

Any mechanical machine requires maintenance, and this is a highly neglected factor of the design process even here in industrialized nations. Soil deposition must be removed continuously, and the turbines need about yearly preventive maintenance. This can be built into the design process. The Itaipu dam, for example, has 12 turbines, producing 2 GW each. At least one turbine is under maintenance most of the time – reducing power output by 2 MW. However, The Three Gorge dam has 32 generators, - about 700 MW each. The preventive maintenance at Three Gorge is less disruption to the power output because it will drop only 700 MW for each turbine under maintenance. An Internet site mentions that the GRED will contain 16 x 350 MW generators; a number that positively suggests the system is designed for maintenance.

### **Why is Egypt worried?**

One of the issues that concern down-stream countries, especially Egypt, is the amount of water that will be trapped to fill the 150 meters high dam. Opening the bypass gates, which will allow more water to pass through, can easily regulate the length of time it takes to fill a dam. If for example,

more water is needed to supply the downstream countries because of the drop in the flow rate during the Ethiopian dry season, more water can be released to ensure supply. This will drop the reservoir level, and also the power output. Such mode of operation is common for the Hoover dam where a drop in water level is strongly contested by Mexico, although the Colorado water level is impacted more by irrigation than the reservoir for power production. In fact, the US government has a desalination plant near the border with Mexico to clean runoff and waste water, and replenish the Colorado River to supply the minimum amount to Mexico as agreed bilaterally.

The Yangtze river of the Three Gorge dam has a winter flow rate of about 345 million (cubic meters per day jumping to well over 3000 cubic meter per day in summer, less than 9 times the seasonal swell. Iguazu has a swell of just over 7. The water level in China's Three Gorges dam reached full capacity in October 2010. It began generating power in 2008. Thus, it took merely **two years** to fill Three Gorge compared to the 17 years it took to fill Lake Meade on Hoover dam of the Colorado River. The Nile River swell is among the highest in the world from about 50-60 million cubic meters per day in April-May, to over 700 million in September, a more than 10 times swell. Countries along the Nile expect a large and destructively excessive flow in the rainy season, the excess of which will also fill the reservoir fairly quickly. Rate of evaporation in the reservoir will probably be less of a concern than that of the existing dams in the Sudan and Egypt.

### **Legal, Environmental and local use Issues**

**Legality:** The 1959 Agreement allotted 55.5 and 18.5 billion cubic meters to Egypt and the Sudan, respectively, through the Blue and Atbara Rivers. Ethiopia has limited rights to use these resources. In May 2010, upstream states of the Nile signed a Cooperative Framework Agreement pronouncing the 1959 Agreement no longer valid and claiming rights to more water from the River Nile while Egypt and Sudan refused to sign. Thus, there is no mutually accepted water treaty between upstream and downstream countries. Flourishing irrigation projects and dam constructions in the Sudan and Egypt, while these same countries object the use of Nile by upstream countries, will have little convincing power in Africa and the rest of the world, even if it can't convince Arab countries whose firm solidarity remains with the Sudan.

**Environmental impact study:** as stated above like any major project of its kind, the GRED should have had environmental impact study to address costs and benefits of the project. Perhaps the greatest weakness of this project is that no environmental study was conducted, or if it was conducted, it was not made public. In the USA, no such project would be allowed without environmental impact analyses. As such, the project was kept highly confidential (code named Project X) perhaps to avoid adverse and premature reactions from Egypt before the dam is started.

In my opinion, the resolution wouldn't have been much different even if the process was made transparent and the community was involved opening the matter for public debate. In a country where the in-house expertise is very poor - to the extent that even simple model analysis was outsourced to the University of Denver, the tangled petty politics would only render the project another bogus venture of perpetual talk. The 1250 MW dam in the Sudan overtook parts of the historic sites of Merowe, displaced 15,000 families, and flooded a 174 km of fertile land; and the project was not slowed down by these obvious shortcomings. The Bui Gorge dam in Ghana was known to create a reservoir that will flood a quarter of the Bui National Park, but the dam was built anyway. All the talks of looming disasters of the Three Gorge dam that saturated the cyber waves dissipated once the dam became operational. Scary talks of imminent environmental disasters never stopped any of the hydro projects in a developing country.

In fairness, the above-mentioned paper entitled “Integrated Management of the Blue Nile Basin in Ethiopia” covers at least briefly some aspects of environmental study as an impact analysis. The study developed hydrological models to assess transient stages of large-scale reservoirs, relevant flow retention policies and associated downstream ramifications, and the implications of stochastic modeling of variable climate and climate change. Climate change scenarios including historical frequency of El Niño events are included.

**Domestic use of the power:** The Internet debate also raised several issues. One speaker was concerned that the power will not be used for domestic development. In light of significant talks of power purchase agreements with neighboring countries, there is a legitimate concern that the project is meant for cash than for the people. Ethiopia has set up the ‘Eastern African Power Pool’, an intergovernmental authority promoting the transmission of power across the region. The line links

Ethiopia to Kenya, Tanzania, Eritrea, Uganda, and the Sudan. A high-voltage link between Ethiopia and Kenya funded by the World Bank is expected to wind up by 2019. Such decisions are temporal by nature, and future governments can change them, preferably based on the will of the people. They are valid concerns nonetheless.

**Lack of transparency:** The GERD is being built by Salini Costruttori, the third Italian General Contractor group with turnover cash of € 1.1 billion (FY 2010) and total budget of € 15.7 billion. It has about 14,000 employees worldwide. It is one of the foremost players in the construction of hydroelectric power plants. It has completed a number of projects in Ethiopia, including the Chida Sodo Road Project, the Emergency Dire Dam, parts of Gilgel Gibe I, Gilgel Gibe II, Gibe III, and the Beles Multipurpose Project. At least Gilgel Gibe II and the Nile dam contracts were awarded with non-competitive bidding. Lack of transparency has triggered a lot of opposition to the project, its fundraising aspect in particular. Will the money that is collected be used for the dam? Will corrupt officials pocket some of the fund? Can Ethiopia by itself fund the \$4.7 billion dollar project? These are questions that remain to be answered.

‘Reflections on the Grand Ethiopian Renaissance Dam’, 14062013, online at: <http://www.opride.com/oromsis/news/horn-of-africa/3664-reflections-on-the-grand-ethiopian-renaissance-dam>

**BACK TO TOP**

## ❖ Egypt frets, fumes over Ethiopia's Nile plan

GIZA, EGYPT — Since long before the Pyramids towered above the rich soil of this riverside town, Egyptians have given thanks to the muddy waters of the Nile.

“Plants, animals, humans,” said Ibrahim Abdel Aziz, a 45-year-old farmer, “we all come from this river.”

But trace the Nile about 1,400 miles upstream and there's a rising colossus that threatens to upset a millennia-old balance. There, in the Ethiopian highlands, one of the world's largest dams is taking shape.

For Ethiopia, the dam promises abundant energy and an escape from a seemingly permanent spot in the lowest rungs of the world's human development index. But for Egypt, the consequences could be dire: a nationwide water shortage in as little as two years that causes crop failures, power cuts and instability resonating far beyond even the extraordinary tumult of the recent past.

For a country facing daily domestic crises in the aftermath of its 2011 revolution, the dam is a foreign threat that Egypt can ill afford. And that may be the point. Analysts say Ethiopia is seizing on Egypt's distraction and relative fragility to plunge ahead with plans that have long been on the drawing board but have always been thwarted by Egyptian resistance.

To Egyptians accustomed to thinking of their country as a powerhouse of the Arab world, the idea of bowing to a historically weaker African rival has been a sobering reminder of their nation's diminished clout. It has also been an early test for the year-old government of President Mohamed Morsi — one that critics say he has badly mishandled.

“Now the options are very few,” said Talaat Mosallam, a retired major general in Egypt's army. Diplomacy is the first, but Cairo's leverage is “at rock bottom,” he said, and if talks fail, Egyptian military commanders may decide that “it is better to die in battle than to die in thirst.”



Indeed, the prospect of a water war has become a regular feature of Egyptian newscasts and front pages in recent weeks, ever since Ethiopia announced that it was diverting the river's course immediately after a meeting between Ethiopian Prime Minister Hailemariam Desalegn and Morsi in late May.

The announcement, which marked a milestone in the dam's progress, was seen here as a humiliating slap and an indication that Ethiopia has no intention to negotiate over the dam's construction.

Morsi responded last week by convening an emergency meeting of leaders from across Egypt's political spectrum, a move that backfired wildly when the presidency decided to broadcast the session live on television without telling most of the participants.

Thinking that they were conspiring in secret, the politicians hatched plans to arm Ethiopian rebels, launch a whispering campaign about Egypt's military might and send fighter jets to knock out the dam with one swift shot.

Morsi has not been so explicit, but he warned in a Monday night speech that "all options are open" in protecting the river, which accounts for 95 percent of Egypt's water needs. The country, he told a crowd of cheering supporters, is ready to sacrifice blood to ensure that "not one drop" of the Nile is lost.

In an interview with state media on Tuesday, Hailemariam dismissed that as warmongering meant to distract from Egypt's domestic issues.

"I don't think they will take that option unless they go mad," he said. The same day, the Ethiopian Foreign Ministry said in a statement that the nation "will not even for a second" stop the dam's construction.

### **'A disaster for Egypt'**

The standoff reflects the critical importance of controlling the region's water resources at a time of rapidly rising populations. Egypt and Ethiopia each have more than 80 million people, double the

population that existed just 30 years ago. By 2050, the combined population of the two countries is expected to rise by 100 million, even as climate change could reduce the supply of water.

Nonetheless, Ethiopia has said repeatedly that the Grand Renaissance Dam won't cause a problem for Egypt. Ethiopian officials say the dam will be used to generate electricity, not to irrigate fields, meaning that all the water will eventually make its way downstream to Egypt.

Those officials see the dam as a chance to make right a colonial-era wrong that has preserved most of the Nile's water for Egypt while leaving little benefit for upstream countries.

Egypt may be the gift of the Nile, as the Greek historian Herodotus once remarked, but the Nile is not Egypt's alone. Eleven countries share the basin of the world's longest river, which winds through much of East Africa before emptying into the Mediterranean in northern Egypt.

Ethiopia has won the majority of those countries to its side with the promise of electricity exports for a region that desperately needs new sources of energy. It has even offered to sell some of the dam's 6,000 megawatts to Egypt.

Far from being soothed by Ethiopia's promises, however, Egyptians have become increasingly panicked. And with good reason, according to former Egyptian water minister Mohamed Nasr Allam.

Allam said that if Ethiopia goes ahead with its plans to build the dam on the Blue Nile — which accounts for the majority of the Nile's flow after converging with the White Nile in Sudan — Egypt could lose a quarter of its water.

"It will be a disaster for Egypt," Allam said. "Large areas of the country will be simply taken out of production."

Experts see the greatest peril for Egypt when Ethiopia fills the massive reservoir behind its dam, a process that could begin in 2015 and last as long as six years. Even afterward, however, the creation of the dam will mean that Egypt no longer has direct control over its primary water source, a

troubling prospect for a country that receives negligible rainfall and is considered the world's largest oasis.

Allam said Egypt should try to persuade Ethiopia to lower the 550-foot height of the dam, which would mitigate the effect. Ultimately, he said, international powers, including the United States, may be called in to help mediate.

### **A regional power struggle**

The U.S. State Department has said that Egypt and Ethiopia, both American allies, should resolve the dispute through dialogue. But that dialogue would come at a time when Ethiopia's influence in the region appears to be rising and Egypt's is waning.

Hani Raslan, who heads the Nile Basin studies department at Cairo's al-Ahram Center for Political and Strategic Studies, said it is no coincidence that Ethiopia announced plans to massively expand the dam and forge ahead with its construction just weeks after Egyptian President Hosni Mubarak was ousted in early 2011.

"Ethiopia has aspirations to be a regional power at Egypt's expense," Raslan said. "It is taking advantage of the instability after the revolution, especially now that there's a weak Muslim Brotherhood president with no experience whatsoever who is not in sync with the institutions of the state."

That's a common sentiment on the streets of Egypt, and on the Nile, where fishermen, farmers and boat operators remember the country's pre-revolutionary history with a heavy dose of nostalgia.

"When Mubarak was running the country, we didn't hear about electric outages or fuel shortages. And no one would dare say that they would cut the water of Egypt," said Abdel Arabi, 39, who sat on a tour boat watching sundown's rays glint off the Nile as birds swooped in for the evening's final catch.

For Abdel Aziz, the 45-year-old farmer, Ethiopia's plans mean that his extended family of 28, which supports itself on a quarter-acre of corn, okra and eggplant fields, may go hungry.

"The water goes down, and it goes up," he said. "But now it may go lower and never come back again."

If it does, he said, there's no question of the outcome: "An even bigger revolution, worse than the last one."

"Egypt frets, fumes over Ethiopia's Nile plan", 13/06/2013, online at:

[http://www.washingtonpost.com/world/middle\\_east/egypt-frets-fumes-over-ethiopias-nile-plan/2013/06/12/d3ab3f4a-d1e1-11e2-9577-df9f1c3348f5\\_story.html](http://www.washingtonpost.com/world/middle_east/egypt-frets-fumes-over-ethiopias-nile-plan/2013/06/12/d3ab3f4a-d1e1-11e2-9577-df9f1c3348f5_story.html)

**BACK TO TOP**

[WWW.ORSAM.ORG.TR](http://WWW.ORSAM.ORG.TR)

### ❖ Nile dam dispute ‘not yet military’

CAIRO/ADDIS ABABA - Egypt's armed forces are not yet involved in a dispute with Ethiopia over a giant dam on the Nile, a spokesman for the general staff said on Wednesday, playing down bellicose rhetoric between Cairo and Addis Ababa.

“This is not a military issue at this stage,” Ahmed Mohamed Ali told Reuters after days of irate exchanges between Africa's second and third most populous nations over a new hydroelectric plant that Egypt fears will reduce its vital water supply.

On Monday, Egyptian President Mohamed Mursi said he did not want “war” but would keep “all options open”, prompting Ethiopia to say it was ready to defend the Great Renaissance Dam.

Egypt's previous military rulers had warned against such projects in the past and last week Egyptian politicians were caught on camera discussing air strikes or offering support to Ethiopian rebels.

“It's too early to involve the army in this problem at the moment,” Ali said.

Earlier on Wednesday, the commander-in-chief of Egypt's armed forces issued a statement saying that the military was “ready and able to protect the nation and preserve its sacred sites”.

General Abdel Fattah al-Sisi, who is also the defense minister, made the comments during a training exercise that included special forces paratroopers, according to a statement on his Facebook page.

The spokesman said Sisi's words were aimed at giving soldiers at the training exercise “a message about their role in defending the interests of Egypt”. Analysts said Sisi's comments appeared directed more at groups planning street protests for and against Mursi's administration at the end of this month.

Ethiopia has dismissed talk of military action as “psychological warfare”.

### NO DELAY

Egyptian Foreign Minister Mohamed Kamel Amr is expected to travel to Addis Ababa on Sunday for talks about the dam, but Ethiopia's foreign ministry said on Wednesday the country had no intention of suspending construction.

Dina Mufti, spokesman at Ethiopia's foreign affairs ministry, told reporters that talks with Egypt were “in the spirit of Ethiopian interest”.

“Ethiopia has always been open and we've always been interested in discussions,” he said, speaking in English.

Dina added “in the strongest possible terms” that Ethiopia would not accept any proposal to halt or delay construction.

The African Union urged both sides to hold talks to resolve the row.

“It would be important to just have discussions that are open, that look at how we can have a win-win situation in a new context, not in the context of the colonial powers, but in the context of pan-Africanism and African renaissance,” the bloc's Nkosazana Dlamini-Zuma told a news conference.

With its 84-million population dependent on the Nile, Egypt cites colonial-era treaties guaranteeing it the lion's share of the water.

Ethiopia and other upstream neighbours, including Kenya, Uganda and Sudan, say those claims are outdated. - Reuters

“Nile dam dispute ‘not yet military’”, 12/06/2013, online at: [http://www.iol.co.za/news/africa/nile-dam-dispute-not-yet-military-1.1531509#.Ub4BIeee\\_PZ](http://www.iol.co.za/news/africa/nile-dam-dispute-not-yet-military-1.1531509#.Ub4BIeee_PZ)

**BACK TO TOP**



### ❖ Why a 'water war' over the Nile River won't happen

Instead of issuing harsh rhetoric, Egypt should work together with Ethiopia and endorse its dam-building programme.

Is northeastern Africa heading for a bloody "water war" between its two most important countries, Egypt and Ethiopia? Judging by the rhetoric of the past two weeks, one could be forgiven for thinking so.

Ethiopia's plans to build a multibillion dollar dam on the Nile River spurred Egyptian President Mohamed Morsi - whose country lies downstream from Ethiopia - to vow to protect Egypt's water security at all costs. "As president of the republic, I confirm to you that all options are open," he said on Monday. "If Egypt is the Nile's gift, then the Nile is a gift to Egypt... If it diminishes by one drop, then our blood is the alternative."

The following day Dina Mufti, Ethiopia's foreign ministry spokesman, said that Ethiopia was "not intimidated by Egypt's psychological warfare and won't halt the dam's construction, even for seconds".

Morsi's bellicose warnings followed the suggestions of leading Egyptian politicians on television last week that Cairo should prepare airstrikes and send special forces to uphold its God-given right to the lion's share of Nile waters. The Ethiopian government of Prime Minister Hailemariam Desalegn has signalled that it is not impressed and that it will carry on with work on the multibillion dollar Great Ethiopian Renaissance Dam - a move seen by some as raising temperatures further, possibly triggering the "water wars" that pessimists have long predicted will characterise the geopolitics of the 21st century.

The war of words between Cairo and Addis Ababa is only the latest episode in a long history of confrontation between the two. About 60 percent of the Nile's waters flow downstream from Lake Tana in Ethiopia, through Sudan, to Egypt. The building of the modern Egyptian state in the 19th century was closely connected to the idea of an Egyptian agricultural and industrial revolution; the Nile was to be controlled and harnessed for economic development through large-scale irrigation works, canals and dams so that Egypt could export cotton and other strategic crops to global markets.

The notion of establishing maximum control over the Nile and consolidating regional hegemony more broadly pushed Egypt to invade Sudan in 1821 and to occupy eastern Ethiopia in 1875.

### **Zero-sum mentality**

The zero-sum mentality of that era - that others cannot be trusted with the waters of the Nile, and Cairo must at all times control its own water destiny directly - endures to this day. Both the construction of the controversial High Dam at Aswan and the 1929 and 1959 Nile Waters Agreements were guided by the same paradigm.

The latter allocated 55.5 billion cubic metres of water to Gamal Abdel Nasser's Egypt and 18.5 billion cubic metres to Sudan, while the government of Haile Selassie was shut out of the negotiations: all water was essentially given to the downstream states at the expense of Ethiopia and other upstream countries including Uganda, Kenya and Tanzania. While Aswan ended Egypt's dependence on the erratic Nile flood and the 1959 treaty locked in Egyptian hydro-hegemony, it infuriated Addis Ababa.

Thus, rather than definitively resolving Cairo's existential angst about its extreme dependency on the river (97 percent of renewable water resources in Egypt come from the Nile), Aswan and the 1959 agreement created permanent tensions between upstream and downstream riparians that have destabilised the basin for decades. [Proxy wars](#) (pp 104-107), which claimed the lives of millions of people between the 1960s and 2000s in and around Sudan and Ethiopia had several complex causes, but the struggle between Cairo and Addis Ababa for primacy in the Nile Basin was an important one.

In the last 15 years, however, Egypt's hydro-hegemony has progressively unravelled due to a combination of factors. First, Cairo's neglect of Africa in its foreign policy under Hosni Mubarak cost it dearly. Its alliance with Khartoum has turned into a permanently uncomfortable relationship since Sudan's military-Islamist revolution in 1989; Egypt was historically the greatest opponent of self-determination for Southern Sudanese, but was unable to get the referendum clause removed from the Comprehensive Peace Agreement that allowed South Sudan to become an independent state in July 2011. Once respected and admired around the continent, Mubarak's systematic disinterest in the African Union diminished Egyptian influence in the Nile Basin and outside it.

Second, while unemployment, inequality and corruption have soared in Egypt in the last 15 years - ultimately culminating in the 2011 revolution that ousted Mubarak - upstream countries have transformed themselves. The late Meles Zenawi turned Ethiopia from an international object of pity into a regional power to be reckoned with through spectacular economic growth and a masterful foreign policy.

Third, the arrival of China on the African scene has given upstream countries financial and technical options that were simply unavailable during the 20th century. For decades, Egypt, through its alliance with Washington, was able to stop any funding by the international financial institutions for upstream hydro-infrastructure projects with the argument that it would be politically destabilising. Chinese bankers and engineers have been less receptive to such arguments and have enthusiastically helped Sudan and Ethiopia to implement their incredibly ambitious dam programmes, which are supposed to transform the regional political economy. Addis Ababa and Khartoum combined have built, are building or are planning more than 25 big hydro-electric dams to improve water security, bolster food production and generate electricity for industrialisation.

In other words, Ethiopia's big push on the Great Ethiopian Renaissance Dam is a logical consequence of a broader shift that has been underway for years and that a weakening Egypt has failed to stop. Construction of the dam began, not coincidentally, in April 2011, just two months after the overthrow of Mubarak, a watershed used by Meles Zenawi to symbolically usher in a new era of Nile Basin geopolitics. Wikileaks cables have since shown that Cairo had already threatened to bomb new hydro-infrastructure initiatives on the Blue Nile back in 2009-2010 but was told by Washington and Khartoum that this would be politically unacceptable, as well as logistically extremely challenging.

Ethiopia is a key ally of the US in the fight against terrorism and piracy in the Horn of Africa and the Arabian Peninsula; for both Sudan and the US, Ethiopian diplomatic efforts are vital to ensure that Khartoum and Juba do not go to war again and cooperate over oil exports. The site of the Great Ethiopian Renaissance Dam is more than 1,000km from Egypt's southern border. That combination of diplomatic isolation and military obstacles - not to mention Egypt's domestic divisions and instability, which make war financially unaffordable - essentially mean that, despite Morsi's claims, not all options are on the table.

## Regional integration needed

What, then, is the alternative? Egypt, Ethiopia, Sudan and South Sudan have some of Africa's poorest populations and they face colossal challenges in reducing poverty, expanding public services and countering ecological degradation. As I outlined in a [Chatham House report in 2011](#), regional integration would go a long way to help avoid the classic pitfalls of natural-resource development such as the resource curse.

Resource scarcity can trigger conflict, but it could also stimulate peaceful cooperation. Ethiopia, Egypt and Sudan have much to gain from incremental closer cooperation and a grand energy deal that would put Ethiopia's water resources at the disposal of the region. For all of Egypt's apocalyptic rhetoric about Ethiopian selfishness, the little publicised truth remains that it will be cheaper to send the thousands of megawatts that the Great Ethiopian Renaissance Dam will produce to Sudan and South Sudan (and possibly to Egypt) than it will be ready to transmit the electricity to the Ethiopian highlands.

The very design of the Great Ethiopian Renaissance Dam demands regional integration: Addis Ababa is desperate to sell much of its estimated hydropower potential (40,000-45,000 megawatts) to its neighbours to raise much-needed cash, to extend its diplomatic influence, and to develop more balanced trade relations with the outside world.

With the majority of those in the region still not connected to national grids, the Nile Basin sorely needs cheap power to improve living standards, to boost economic growth, to make industries more competitive and to modernise agriculture so that food security crises can be addressed more effectively.

The Ethiopian government must provide more technical details about the Great Ethiopian Renaissance Dam and other hydro-infrastructure projects to assuage fears over cutting off Nile flows to Sudan and Egypt; it must understand that Egypt's difficult domestic transition makes reform in the foreign policy arena [particularly tricky](#).

At the same time, the onus is clearly on Cairo to bite the bullet and reverse its zero-sum water paradigm. It is high time for it to appreciate that the Nile is not Egyptian, but an African river. Egypt

should not issue empty threats of war, but endorse Ethiopia's dam programme and work together with Sudan and South Sudan to ensure its full potential is realised. More than any other gesture in international politics, this would mark a return of Egyptian statesmanship and pave the way for a future of resource abundance and regional peace after centuries of confrontation.

“Why a 'water war' over the Nile River won't happen”, 13/06/2013, online at:  
<http://www.aljazeera.com/indepth/opinion/2013/06/2013612105849332912.html>

**BACK TO TOP**

### ❖ **Cairo: Cabinet Minister Talks of War with US, Israel**

JERUSALEM, Israel -- An Egyptian official spoke about war with the United States and Israel during a cabinet meeting officiated by President Mohammed Morsi.

Morsi gathered his ministers to discuss a response to Ethiopia's plan to build a dam on the Nile River.

According to media reports, ministers were unaware the discussion was being aired live on Egyptian television. Later, the Middle East Research Institute (MEMRI) provided a video of the meeting with English subtitles.

Ministers spoke of ways to protect Egypt's water supply, with some suggesting destabilizing the Ethiopian government. One minister alleged Israel and the United States are involved in Ethiopia's plan to build a dam.

Magdi Hussein, chairman of the Islamic Labor Party, said the conflict over the Nile River included Egypt's enemies, Israel and the United States. Hussein told ministers they should swear themselves to secrecy as they develop a "popular plan for popular national security."

"The principles behind what I'm saying are not really secret," Hussein said after someone handed him a note. "Our war is with America and Israel, not with Ethiopia."

When Morsi reminded ministers the meeting was being broadcast live, Hussein continued along the same lines.

"Imagine what this people would do if its water were turned off -- what 80 million of us would do to Israel and the United States," he said.

Before it concluded, Morsi told the viewing audience Egypt is "not about to start aggression with anyone whatsoever or affront anyone whatsoever."

"Cairo: Cabinet Minister Talks of War with US, Israel", 12/06/2013, online at:

<http://www.cbn.com/cbnnews/insideisrael/2013/June/Cairo-Cabinet-Minister-Talks-of-War-with-US-Israel/>

**BACK TO TOP**



### ❖ Law Professor Urges Ethiopia to Take Nile Issue to International Court

**New York (TADIAS)** – In the late 1990s, long before the Egyptian cabinet got caught on live television discussing to sabotage Ethiopia’s \$4.7 billion Grand Renaissance hydroelectric dam project, a law professor and his students at Stanford University were quietly researching the legal case that could assist Ethiopia in the event that the inter-country conflict ended up at the International Court of Justice for resolution.

“I was very happy when I learned Ethiopia was going ahead with the Blue Nile Gorge project; and then very concerned when the Egyptian cabinet meeting conversation leaked, referring to Egypt’s going to war against Ethiopia,” said former Congressman Tom Campbell who is currently the Dean of Chapman University School of Law in Orange, California. “What totally irresponsible statements.”

In a recent interview with Tadias Magazine, Mr. Campbell recalled that two of his Stanford law students, Paul Epstein and Ken Fleuriet, had prepared a draft brief that dealt with just these questions.

“International law requires upstream and downstream users to engage in equitable use of a river’s water,” he said.

Egypt, which operates its own multiple dams built on the Nile, is vigorously opposing Ethiopia on the basis of a colonial era agreement that served only the interest of Egypt and Sudan. In a review article entitled “Who Owns the Nile? Egypt, Sudan and Ethiopia’s History-Changing Dam” published at Ohio State University, Andrew Carlson notes that “After achieving its independence in 1922, Egypt negotiated the Nile Waters Agreement of 1929 with the East African British colonies. This accord established Egypt’s right to 48 billion cubic meters of water flow, all dry season waters, and veto-power over any upriver water management projects.” Despite that over 85% percent of the waters flowing to Egypt came from the Blue Nile originating in Ethiopia, Carlson states that Ethiopia’s emperor Haile Selassie “was not consulted.” An additional colonial-era agreement between Egypt and Sudan, which Egypt claims should be followed today also left out five other upriver countries from fair use.

“Does Ethiopia have the legal right to dam the Nile?” we asked. The answer, Mr. Campbell gave is a resounding “Yes.”

“Unquestionably Ethiopia has the legal right to build the dam,” he replied. “The issue had been one of funding: the U.S. had supported Egypt at the World Bank, and the World Bank had not funded the project. I believe Ethiopia found alternative funding from China.”

Mr. Campbell added. “While Egypt wants more of the Nile to be diverted to new settlements in the Sinai, Ethiopia wants water to prevent the devastating drought that occurs every seven years. This

favors Ethiopia. Further, Ethiopia's storage of water in the Blue Nile gorge will result in far less evaporation per cubic meter of water than Egypt's storage in Lake Nasser, a shallow lake with huge loss to evaporation."

Mr. Campbell emphasized that this essentially means sharing the river, based on traditional uses, and the value of the proposed new use. "The International Court of Justice exists for just this kind of dispute resolution," he argued.

In their brief Epstein and Fleuriet asked: "Beyond the broad notions of fairness and justness embodied in the concept, just what are the particulars of 'equitable utilization?' In very large measure the modern doctrine of equitable utilization is nothing more than a compromise between the two extreme positions. Equitable utilization recognizes a right of upper riparians to develop and exploit their water resources, but also imposes upon them a burden to take the needs of their downstream neighbors into account."

"My advice is for Ethiopia to commence a legal process in the International Court of Justice." Campbell urged. "The sooner this goes to the ICJ the better, as any military threat would, on top of being highly irresponsible, then be perceived by the world community as an attempt to short cut the process of the ICJ."

"Law Professor Urges Ethiopia to Take Nile Issue to International Court", 11/06/2013, online at: <http://www.tadias.com/06/11/2013/law-professor-urges-ethiopia-to-take-nile-issue-to-international-court/>

**BACK TO TOP**

[WWW.ORSAM.ORG.TR](http://WWW.ORSAM.ORG.TR)

❖ **There will be no drinking water in Gaza in 2017**

**Head of the Palestinian Water Authority said there will be no drinking water in Gaza in 2017.**

Shaddad Al-Attili, head of the Palestinian Water Authority (PWA), said the Israeli government uses water "as weapon" to drive Palestinians out of the West Bank.

Attili told the Anadolu Agency that the West Bank and the [Gaza](#) Strip suffered from water shortage because of Israeli policies saying, "the problems over the water issue between Israel and Palestine were not solved despite the Oslo Agreement. Israel uses water from the Agvar region in the West Bank as a weapon."

Attili noted that the Palestinians had a right to the waters of the West Bank river in the west, east and south but highlighted that Israel prevented Palestinians' access to it.

"Israel did not increase the water volume since 1993, although the Palestinian population have increased. One-third of the water which is given to 2.5 million Palestinian is reserved for 9,000 Israeli citizens in the Agvar region," Attili said.

"In 2017, there will be no drinking water in [Gaza](#). In 2020 [Gaza](#) will be an uninhabited place and the international institutions confirm this."

"There will be no drinking water in Gaza in 2017", 13/06/2013, online at:  
<http://www.worldbulletin.net/?aType=haber&ArticleID=111044>

BACK TO TOP

[WWW.ORSAM.ORG.TR](http://WWW.ORSAM.ORG.TR)

### ❖ City of Palestine wastewater treatment plant to see upgrades

PALESTINE — Palestine city officials are working to keep the city’s wastewater treatment facility from “running downhill.”

This week, council members approved an agreement with Jones & Carter Inc. to design and construct several upgrades at the city’s wastewater treatment plant.

Improvements include new rotor pump motors, a new electrical system for the raw water pump station and a redesign that would allow the use of non-treated water in the wastewater treatment process.

“All of these improvements will allow the city to decrease its expense in the treatment process,” City Manager Mike Ohrt said.

Two of the city’s four rotor pump motors were upgraded recently and Ohrt said the last two will be upgraded during this project as well. The rotors help move the solid waste along the treatment plant and also help oxygenate the wastewater as it is treated.

“Upgrading these rotors and pumps will accomplish a couple things,” Ohrt said. “We’ll see increased efficiency with the new equipment so we’ll see fewer breakdowns, which in turn helps improve the life span of the system.”

The second part of the facility’s improvements includes installing a new water intake structure to allow the city to use water pulled directly from the Neches River to process wastewater, rather than clean, treated water bought from the city’s drinking water supply.

“Obviously this will save us a lot of expense in the long run,” Ohrt said. “We’re not using clean, treated drinking water we have to pay for to help treat our wastewater.”

The treatment system will also get a much-needed electrical systems upgrade as well.

“It’s getting challenging to find qualified electricians to work on our current system,” Ohrt said. “The voltage system we use is outdated. We’re looking at redesigning and rebuilding those four pumps to use a more common voltage.

“It’ll not only increase the plant’s efficiency, it’ll be easier and less expensive to maintain as well.

We want to try to keep up with the newest technology available.”

After the city treats its wastewater, the water is expelled back into the Trinity River. Ohrt said the city's treatment facility continues to exceed the state's standards and mandates concerning the treatment of wastewater.

The city's wastewater treatment facility treats an estimated 3 million gallons of wastewater a day — 7 million during peak summertime usage.

“Our forefathers were very wise in the planning our water infrastructure,” Ohrt said. “We’ve not needed to ration water at all, and won’t need to in the future. We’re extremely blessed.” –

“City of Palestine wastewater treatment plant to see upgrades”, 15/06/2013, online at:

<http://palestineherald.com/local/x493352325/City-of-Palestine-wastewater-treatment-plant-to-see-upgrades>

**BACK TO TOP**

### ❖ "Agro cooperation to define Indo-Israel ties"

Kolkata, June 13 (IBNS): Ambassador of Israel to India Alon Ushpiz on Thursday said that cooperation in agriculture could be the strategic backbone for greater synergies and deeper cooperation between the two countries.

Speaking at a congregation organised by the Confederation of Indian Industry (CII) Eastern Region in Kolkata, Ushpiz said, "It is existential relations which are not just about buying and selling, but a pledge to do things together that will define Indo-Israeli ties."

"Sectors such as water, healthcare, renewable energies, IT and agriculture could be game-changers [for Indo-Israel ties]," he said, adding that the two countries are inching closer to signing a free-trade agreement (FTA).

"I am confident the bilateral trade volume will jump from the current US\$ 5 billion to US\$10-15 billion in a few years time. In fact, FTA will change the composition of trade. The minute we have the FTA in place, the intensity of interactions will be on a much higher level," he said.

Ambassador Ushpiz also announced that a high-tech centre of excellence on agriculture will be set up in Hooghly district in West Bengal. "This is something that will materialise by next year," he said.

"We will also set up a Business Development Office soon in Kolkata to explore strategic business partnership between Israel and the states in the Eastern Region," he said.

Harshavardhan Neotia, Past Chairman, CII Eastern Region, expressed hope that Ambassador Ushpiz's visit to Kolkata will deepen bonds between India and Israel.

Neotia also appealed to the Ambassador to organise Israeli business delegations to West Bengal. "Pursuing such activities will benefit the region as a whole," said Neotia who is also the Honorary Consul General, Consulate General of Israel, in Kolkata.

"Agro cooperation to define Indo-Israel ties", 13/06/2013, online at:  
<http://www.indiablooms.com/BusinessDetailsPage/2013/businessDetails140613c.php>

**BACK TO TOP**



### ❖ **Green 'Freedom Machine' empowers apartments in Jordan**

The rooftops of the dense urban landscape of Amman, Jordan, may not be a likely setting for a green revolution, but if Bashar Humeid and his "freedom machine" have their way, they soon will be.

They will not only produce food, collect water, save energy and take people off the power grid, but are also geared to create an embryo for what Bashar calls "infrastructure to freedom".

He hopes to transform residents from consumers into producers of their own food and energy.

The Food and Agricultural Organisation (FAO) reported in the State of Food Insecurity in the World Report (2011) that the urban poor are particularly vulnerable to current global increases in food prices. With 80 per cent of people in Jordan concentrated in urban centres and around 40 per cent of the overall population residing in Amman, Bashar's idea has its own distinct appeal.

His invention, a humble greenhouse made of recycled materials and built on a rooftop, consists of a flourishing ecosystem. Inside the greenhouse, little fish swim in a tank surrounded by beds of mint, strawberry and lettuce. What we are seeing, says Bashar, is the key to creating a year-round source of fresh, local food in Amman and other cities in the Arabia.

The system used in the greenhouse is called aquaponics, which is a combination of aquaculture (fish farming) and hydroponics. It encourages growing plants in a solution of water and nutrients, sans soil.

In aquaponics, fish waste provides a food source for the plants and they in turn provide a natural filter for the fish. This creates a mini ecosystem where both plants and fish thrive. Wastewater from the fish serves as organic fertiliser for the plants, while the plants clean the water of fish faeces and urine. One of the many advantages of the system is the significant reduction in added nutrients such as fossil fertilisers and also the fact that the system can be run without pesticides. Additionally, since the environment is spacious and clean, it can do without antibiotics.

It is the huge reduction of up to 90 per cent in freshwater use compared with conventional soil farming; however, that is the main attraction for the system in a region that is suffering from chronic water shortages. According to the Arab Development Challenges Report 2011 by the United Nations Development Programme, available renewable fresh water resources per capita in the Arab world is among the lowest worldwide and the scarcity of water is becoming a constraint on development. High population growth, the depletion of groundwater reserves and the impact of climate change are likely to further aggravate this situation.

Not only does the "freedom machine" system drastically reduce the usage of water, but it also works as a rainwater collector. The roof of the greenhouse harvests rainwater through a piping system. Water is then stored in a big tank and used to irrigate the aquaponics system.

Jordan relies heavily on imported energy and last year fuel costs rose by more than 40 per cent. The government lifted its fuel subsidy in an attempt to reduce the budget deficit in order to secure a US\$2 billion (Dh7.3bn) loan from the International Monetary Fund. The price of gas, used for cooking and heating, rose from 6.5 Jordanian dinars (Dh34) per cylinder to 10 (Dh52). As a result, many poor families now cannot afford to heat their homes.

Bashar's "freedom machine" promises to alleviate the suffering of such families. The winters in Jordan are very cold, but with a lot of sunshine the greenhouse receives more solar heat energy than is needed to grow plants, he says. The excess heat is captured and transported to the lower floors through a ventilation system.

During last winter, we cut down on our gas bills by utilising the excess energy to heat the rooms underneath the freedom machine," he says. The greenhouse also protects the rooftop during the summer months thus cooling it and cutting down air-conditioning costs. "The roof of the greenhouse has a revolving cover that shades the plants from the scorching sun and naturally, the roof also gets shade and that keeps the house cool," he says.

Bashar became interested in sustainable development and green living after working for eight years as a journalist at DW (Germany's international broadcaster) and ECSSR. Chasing what may have

sounded like a quixotic idea, he later left his job as an editor specialised in energy and environmental issues at the Emirates Center for Strategic Studies and Research to start a non-profit enterprise.

Named Meezan, the organisation developed low-tech methods for building, farming and energy/water saving. The freedom machine is one of its inventions. According to Bashar, "Meezan seeks to become a contact point for local communities for matters related to sustainable urban farming and water and energy saving methods. Meezan's aim is to convert all rooftops of Jordan and the region into productive spaces."

The idea of the freedom machine started after Bashar started questioning the modern economic policies of consumerism.

"In the Arab world, nowadays, we have economic experts drumming into our heads that we should grow our economies by not only bringing in more foreign investments but also that through consumerism we can have democracy and freedom. But how can we be free if we depend on others for everything, our energy, our water, our food? In my opinion, the definition of freedom is when we live in harmony with our planet, like in earth ships, and become producers, not consumers."

However, he realised that he faced a challenge with building an "earthship", which are houses built of recycled materials and are self-sufficient in energy, without using fossil fuels.

"The earthship needs vast spaces to be built, which is not realistic in our densely populated areas with scarce land. My team and I found a solution, which we called the 'Urban Ship', where we modify our houses to represent the functions of an earthship. We also take the main component of the earthship, which is the glasshouse, and transform it into the freedom machine, which has multiple uses and is installed on the roof."

According to Bashar, the cost of a freedom machine is between 1,000 to 4,000 Jordanian dinars (Dh5,184 to Dh10,368) depending on the materials used. "We keep the costs low as we do not need any imported materials or expensive foreign expertise. And we start reaping the benefits immediately

with a 25 per cent savings on heating bills during the winter and 400 dinars' worth of harvest from the fish and vegetables."

The freedom machine is unique, according to Bashar, because it is a local solution that is created to suit the local environment. "A lot of environmental solutions in the region fail because they are imported from other environments that is different to ours," he points out.

Currently, there are seven machines that have been installed in different parts of Jordan and one in a university in Switzerland.

Bashar believes that the world is on the cusp of a new revolution.

"My dream is for us in the Arab world to work together to transform our region into the centre of this new revolution and become a new economic and political model to the whole world," he says. Only time will tell if he and the freedom machine have lived up to their promise.

"Green 'Freedom Machine' empowers apartments in Jordan", 15/06/2013, online at: <http://www.thenational.ae/arts-culture/green-freedom-machine-empowers-apartments-in-jordan>

**BACK TO TOP**

### ❖ Meeting the challenge of climate change in Yemen

In addition to significant development challenges, Yemen is particularly vulnerable to climate change. Apart from frequent flash-floods and droughts, climate change is impacting already scarce water supplies – making them even scarcer.

Urban centers are under severe water constraints, and livelihoods of the large rural population, heavily dependent on agriculture, are also under threat.

In view of the challenge it faces from climate change, Yemen was selected as one of nine single-pilot countries around the world to participate in the Pilot Program for Climate Resilience (PPCR). Supported by the Climate Investment Funds, the program aims to help countries manage the risks and opportunities posed by climate variability and change, particularly taking into account those most vulnerable to such risks.

The PPCR is a complicated but thorough process that proceeds from strategy to implementation through a two-year stakeholder consultation process.

Yemen has seized the opportunity and embraced the program. An Inter-Ministerial Committee on Climate Change was formed, and they are pushing ahead with implementation.

The PPCR will support three major areas of investment in Yemen: establishing a robust climate information system and guaranteeing the coordination of all agencies involved in the PPCR; integrated coastal zone management; and building the resilience of rural communities.

Action on the first investment is underway, moved along by a five-day consultation in Cairo this past July. The meeting was held overseas to avoid any potential delays due to the restrictions on travel to Yemen that existed at the time. In a sign of their enthusiasm and dedication, an extensive cross section of Yemeni government representatives attended. The delegation was led by the Environment Protection Authority and included representatives from the Ministry of Agriculture and Irrigation, the Ministry of Planning and International Cooperation, the Agricultural Research and Extension Authority, the Civil Aviation and Meteorological Authority and the National Water Resources

Authority. The head of the Yemen Meteorological Service said it was the first time he had left the country in five years, despite numerous invitations.

Each will have a unique role to play in implementing the investment, and its success will depend on their ongoing cooperation and joint commitment.

The meeting was a chance to work with international experts from the World Bank and the World Meteorological Organization, to further fine-tune which capacities needed strengthening and what activities would deliver the best results. The head of the Yemen Meteorological Service testified to the importance of effective climate monitoring, and the ability to forecast extreme events. There was universal agreement that it was a vital capacity, allowing both the government and citizens to prepare for adverse consequences, as well as a critical public resource for industries such as agriculture. The group pledged to work together to ensure the best available weather and climate models were used, and to strengthen the ability to forecast and measure critical, climatic changes.

There was also a lively discussion on the roles of each institution in both fine tuning and implementing the investment. The level of cooperation among the various agencies was a novel experience, and a further pledge was made to continue and deepen it. Climate change will affect multiple social and economic spheres and it has to be met with a united front. The Environment Protection Authority will guide overall implementation, with the Meteorological Service overseeing the development of technical tools and resources, in close partnership with all the institutions present, and in close cooperation with civil society and the international community.

More recently, I was part of a mission that travelled to Yemen for an on-the-ground assessment of the capacity of Yemen Meteorological Service. It was also another opportunity to reach out to other stakeholders. Meetings were held with civil society organizations, which will have an equally crucial role to play. There was unanimous recognition of the need for action, and enthusiasm for an inclusive plan that embraced all levels of society.

Similar levels of enthusiasm were expressed at a follow up meeting of the Inter-Ministerial Committee on Climate Change. They were as determined as ever to move forward with the next



phases of the PCPR. The Minister of Water and Environment, Abdo Razzaz Saleh Khaled accepted an invitation to attend the launch this week of the World Bank's report on climate change in the Arab World at the UN Climate Conference in Doha, Qatar. He added Yemen's voice to the critical, global debate on the way forward, and showed what is possible with ongoing commitment and cooperation.

By making the environment a national priority and factoring it into the multiple challenges they face, Yemen is demonstrating that development and action on climate change are not mutually exclusive. They each require inclusive policies and share the same goal of promoting the wellbeing of all citizens.

"Meeting the challenge of climate change in Yemen", 09/06/2013, online at:

<http://www.english.globalarabnetwork.com/2013060913153/Economics/meeting-the-challenge-of-climate-change-in-yemen.html>

**BACK TO TOP**

## ❖ River be damned

The mighty Mekong, the lifeblood of many Asian nations, and holiday destination for an increasing number of Australians, is being heavily dammed. Can the river, and the people who depend on it, survive?

As the narrow longtail boat glides downstream from the dusty hamlet of Nong Kiew towards the golden temples of Luang Prabang, mirror images of jungle, vertical limestone cliffs and impossibly steep mountains shimmer in the waters of the Nam Ou River, a tributary of the mighty Mekong. Endangered Asian elephants and Indochinese tigers still roam the upper reaches of the river within Phou Den Din National Protected Area, one of 20 national parks in Laos. This is the beauty that tourists, many Australians among them, come so far to see.

Yet this undeveloped region in northern Laos is about to be jolted into the industrial age. Three hours downriver from Nong Kiew, a scar of ochre-coloured dirt and rock stretches for kilometres: construction of the Nam Ou 2 Dam is steamrolling ahead.

"We started early this year and we'll be finished in three years," boasts a Chinese engineer dwarfed by a colossal concrete dam wall. Conversation is brought to an abrupt halt when his superior arrives. "You have to leave," he says. "We don't want pictures of this posted on Weibo [the Chinese version of Twitter]."

Advertisement

The 450 kilometre-long Nam Ou, one of the few Lao rivers traversable by boat for its entire length, will soon be severed seven times over by a 350-kilometre stretch of hydropower dams built and maintained by Chinese giant Sinohydro.

The Nam Ou 2 belongs to the first phase of the \$1.95 billion project, which is expected to be operational by 2018. Details surrounding the project are scant. Even the final destination for the proposed 1146 megawatts of hydropower is unclear, although the Lao government claims the first three dams, Nam Ou 2, 5 and 6, will provide electricity for domestic consumption.

Details of the other dams have not been made public. Ultimately, the Phou Den Din National Protected Area will be partially inundated by the two northernmost dams, the Nam Ou 6 and 7, in

violation of Sinohydro's own environmental policy against development inside national parks. A pristine waterway and one of the last intact ecosystems in the region will change forever. Despite concerns of environmentalists and objections by neighbouring Thailand, Cambodia and Vietnam, the tiny, landlocked nation of Laos is following China's lead in its exploitation of the Mekong River and its tributaries.

China already has five hydropower dams operating and three more are planned for the upper reaches of the Mekong, the river that begins in the Tibetan Plateau and continues through China and five south-east Asian nations on its way to the South China Sea. Questions remain as to whether the river and those who depend on it for their livelihoods can survive.

"The government tells us that this will develop Laos," says 65-year-old fisherman Thongsai Chanthalangsy, speaking at his village half an hour downstream from the Nam Ou 2 construction site. "It's not for the people," he continues, "the power will mostly be sold overseas. We can't talk to the government. We have to follow what they say."

Chanthalangsy has been advised that his home, which falls within the catchment of the planned Nam Ou 1 dam, will not be submerged, yet many other homes in his village will be.

"They will build more dams and the problems will get worse. When it's finished there might not be enough water for our gardens and not enough fish to catch. There won't be compensation. We'll have to move."

The Mekong and its tributaries are the front line of a massive development drive by Laos' communist, one-party leadership to lift the nation from the ranks of Asia's poorest countries.

Although hydroelectric power will bring much-needed revenue to the impoverished country, many fear that dams will cost dearly Laos, and all those for whom the Mekong is a lifeblood. In Laos, Thailand, Cambodia and Vietnam, more than 60 million people depend on the Mekong for food, income and transportation.

Ground zero for the Mekong is the gargantuan Xayaburi Dam, a project led by Thai construction firm Ch Karnchang. Dynamite and heavy machinery have already blasted, gouged and scraped away entire mountainsides above both banks of the swift-flowing waters about 30 kilometres from the provincial town of Xayabury.

Steep, winding, unmade roads carry a constant procession of trucks, earth movers, workers and occasionally armed soldiers to the expansive site. The \$3.4 billion price tag of 810-metre-long and 32-metre-high Laos-Thai mega dam is being footed by a conglomerate of six Thai banks.

On its completion in 2019, around 95 per cent of the hydropower dam's 1260 megawatts will be exported to Thailand. This is almost a third of the power generated by the 16 major dams of Australia's Snowy Mountains Scheme, built over a period of 25 years to generate around 3700 megawatts.

Along with the immediate environmental impact of a project of such magnitude, hundreds of villagers have been resettled to make way for the dam.

At the new village, Natornatoryai, close to the construction site, teacher Khao Thevongsa, 28, is dissatisfied with the location, with its steep hills of barely arable land and the constant stream of traffic to the site.

She hopes that the dam may become a tourist attraction in its own right. "We have to start from zero," she says, "but when the dam is finished maybe tourists will come here to see it and we can earn more money." Almost every answer to a question begins with, "We don't have a choice."

About 300 were first shifted to Natornatoryai, which is about 35 kilometres from the river. "The old people didn't want to move here," says 63-year-old Khamkeo Daovong as her daughter-in-law and child play on her concrete floor. "I was born near the river and so were my parents. Many people cried when they saw their new homes."

Daovong complains that her house was unfinished when she moved in. The mismatched cinder-block and terracotta bricks were paid for out of her own pocket to keep out the dust and wind.

Compensation in the form of rice and about \$16.40 in cash per month dried up after one year instead of the promised three.

"I was given pigs and ducks to raise, but it's very difficult to make money. I used to pan for gold, but now I just do nothing."

According to non-government organisation International Rivers, about 25 families have already left the village to return to the river to fish, tend their river bank gardens and pan for gold.

For those who live in Laos, open opposition to the dam is unthinkable. The Lao regime has a history of ruthlessly silencing dissent.

On December 15 last year, Sombath Somphone, 62, a prominent campaigner for the environment and the rural poor, and a champion for sustainable development, was abducted from a police roadblock by two unidentified men in the nation's capital, Vientiane.

Somphone, the 2005 recipient of the Ramon Magsaysay prize, often referred to as Asia's Nobel prize, has not been seen or heard from since. The Laos government denies any involvement. The official

explanation for his disappearance was a "business dispute", although the activist has no business interests.

The incident brought rare international attention to Laos, as then US Secretary of State Hillary Clinton and her successor, John Kerry, led calls for a thorough and transparent investigation into Somphone's whereabouts and wellbeing.

International calls to the Laos government for action and information on Somphone remain unheeded. In a recent statement by New York-based watchdog Human Rights Watch, Asia director Brad Adams accused the Lao government of direct involvement in the activist's disappearance.

"Lao authorities have not answered the simplest questions, such as why, if Sombath was kidnapped, did the police at the scene do nothing to protect him," Adams said. "The absence of any real investigation points to the government's responsibility."

The reasons for the activist's disappearance are unclear. But Somphone's abduction has worsened an already fearful climate in Laos' environmental grassroots organisations.

Land rights and enforced disappearances aside, dams on the Mekong have serious ramifications far beyond the borders of Laos. The Xayaburi Dam is the first of 11 dams planned for the Lower Mekong River, nine of which are in Laos. Environmentalists have already blamed China's five Mekong dams, as well as drought, for some of the lowest water levels seen on the river in 50 years. China denies it is responsible.

On top of providing crucial sediment for arable land downstream, the Mekong sustains the world's largest inland fishery, with 877 species. According to conservation group Great Rivers Partnership, this supplies an industry worth between \$3.84 billion and \$6.89 billion.

Fish are a foundation of regional food security. In Cambodia, 80 per cent of the nation's animal protein is provided by freshwater fisheries. Alarming, a study of the proposed 11 Lower Mekong hydropower dams by the International Centre of Environmental Management concluded that the dams would reduce fish numbers by 26 per cent to 42 per cent.

Regional famine is a worst-case scenario. Claims by the Lao government and Xayaburi dam officials that fish ladders will allow safe passage for migratory Mekong fish species have been met with great scepticism.

Organised dissent to the Xayaburi Dam has mainly come from Thailand. A flotilla of Thai fishermen and villagers who worked the Mekong travelled to Vientiane to protest during the Asia-Europe Meeting.

In April, delegates from eight Thai provinces on the Mekong were joined by protesters from Cambodia as they occupied the entrance to the headquarters of the dam's construction company, Cr Karnchang, one of the dam's financiers.

Although limited at present, opposition to dams on the Mekong may be about to rise rapidly as more dams are built and their impact becomes apparent. Beyond street and river protests, there are rumblings at the highest levels of government that threaten to become a diplomatic stoush. Should the worst fears of environmentalists materialise, countries downstream from the dams stand to bear the brunt of any damage to the Mekong's ecosystem. Although Vietnam and Cambodia have plans for their own hydropower projects, they have already objected to the Xayaburi Dam through the Mekong River Commission, of which Thailand and Laos are also members.

Both countries have argued that work on the Xayaburi Dam breaks an agreement forged in December 2010 that no dams would be built until studies on negative trans-boundary environmental impacts were completed.

Vietnam has called for a 10-year moratorium on all Mekong dams. Such concerns have been brushed aside by Lao Deputy Minister for Energy and Mines, Viraphonh Viravonghas, who claimed the extensive construction is merely "preparatory work".

"Laos has simply ignored the requests repeatedly made by Cambodia and Vietnam to study the trans-boundary impacts of the dam," says Ame Trandem, south-east Asia program director at International Rivers.

"The Mekong is becoming the testing grounds for new technologies, which may prove to have disastrous effects. The entire future of the river's ecosystem is at stake. The Xayaburi Dam is just the tip of the iceberg."

"River be damned", 14/06/2013, online at: <http://www.smh.com.au/world/river-be-damned-20130613-2o6r4.html>

**BACK TO TOP**

[WWW.ORSAM.ORG.TR](http://WWW.ORSAM.ORG.TR)



### ❖ Laos, financial institutions working on hydro project development laws

The International Finance Corporation (IFC) has announced its plan to work with the Laotian government in developing draft laws that would help govern hydroelectric power development.

According to IFC, [Laos](#) is one of the poorest nations in southeast Asia, but is amongst the richest in terms of natural resources.

Through the past decade, investments have led to the development of about 20 hydropower projects, with up to 50 expected to be operational by 2025.

This boom in hydro construction has been essential in boosting the country's socioeconomic growth, IFC said, though it also increases competition among water users, making revisions to Laos' 17-year old water laws essential.

Currently, hydropower developers are granted water rights through concession agreements. Under the revised law, rights would be granted using a formal, long-term, permit-based system that would be easier to enforce.

"This law provides principles and measures necessary for the management, exploitation, use, development and protection of water resources, aiming to promote legal rights to use water resources that ensure balance and sustainability of socio-economic development and environmental protection," the draft law said.

The Laos government, with IFC and [World Bank](#) support, is in the process of holding public consultations about the draft laws, with stakeholders in all sectors being invited to give their feedback.

IFC said its most recent consultation, which took place in Vientiane last month, drew representatives from 13 hydropower companies and law firms, which discussed issues including dam safety, coordinated water releases and flow management.

"I think the proposed introduction of water permits would be very beneficial for hydropower companies," said Theun Hincoun Power Company ([THPC](#)) general manager Robert Allen, Jr. "Water permits would help us resolve conflicts with other water users and ensure that we have access to the resources our business depends on."

The first version of the draft water law is [available on the Laos Department of Water Resources' website here](#). The agency said it will continue soliciting comments about the proposal through the

coming months, with a final revision to be submitted to the Laotian National Assembly by the end of the year.

“Laos, financial institutions working on hydro project development laws”, 11/06/2013, online at:

<http://www.hydroworld.com/articles/2013/06/laos--financial-institutions-working-on-hydro-project-developmen.html>

**BACK TO TOP**