Misplaced opposition to the Grand Ethiopian Renaissance Dam

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The 1929 Nile water allocation agreement that was signed by Egypt and the United Kingdom (which excluded Ethiopia and nearly all other upper basin countries) allocated 48 billion (65%) cubic meters of water per year to Egypt and 4 billion to the Sudan. The 1959 agreement between Egypt and the Sudan raised the share to 55.5 (75%) billion and 18.5 billion cubic meters to Egypt and the Sudan, respectively. This agreement also excluded all the other upper Nile riparian nations. Egypt wants to keep the colonial-era agreements and the 1959 accord. This unfair allocation of the Nile water enabled Egypt to construct the Aswan Dam and the two countries never cared to consult the upper riparian nations. As argued by Badr Abdelatty, a spokesman for Egypt's Foreign Ministry, 1 Egypt wants to keep the status quo because it needs all the "assigned 55 billion cubic meters a year for vital use such as drinking, washing and sanitation needs" by 2020. This clearly indicates Egypt's desire to secure its own Nile water-related benefits intact while at the same time denying other (Sub-Saharan) Nile riparian countries from using their own waters for alleviating poverty and enhancing sustainable development. Contrary to the Nile Basin Initiative (NBI) that was formalized in 1999² that Egypt was a party to, it is now saying that any change to the colonial era agreement would be tantamount to affecting its strategic interests and repeatedly threatens to use all means available if Ethiopia continues to build the Great Ethiopian Renaissance Dam (GERD). Egypt continues to escalate the confrontation despite Ethiopia's claim that the dam would have no appreciable negative impact on Egypt. Ethiopia, along with the other upper Nile riparian countries object the privileges that Egypt gave itself and consider Egyptian monopoly over the Nile waters as a violation of their sovereignty. In accordance to the 2010 Entebbe Agreement by the upstream countries, which included Ethiopia, Kenya, Uganda, Rwanda

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and Tanzania, and now effectively Sudan and South Sudan), Ethiopia, therefore, insists on adhering to its plan and is forging ahead on constructing the dam.

In what follows, we use an amalgam of economics, history, law, security and environment factors to examine the Egyptian opposition to the construction of the Grand Ethiopian Renaissance Dam (GERD). We try to triangulate these factors hoping to contribute to the debate and gain insight into the current tension between Egypt and Ethiopia. We attempt to make a dispassionate analysis of the water sharing problem between upstream and downstream countries. Consistent with theory and real life cases, we surmise that water has been and continues to be the cause for conflict in a number of regions in the world³ and, unfortunately, water wars tend to be irrational, unsustainable and economically and socially destructive. Trans-boundary water sharing and pollution (environmental-ecological) problems are never resolved through hegemonies, militarism and ultra-nationalism.

Dissenting voices against mega projects such as GERD are not new⁴- the criticisms ranging from cost and scheduling overruns (as a recent study by Ansar, Flyvbjerg, Budzier and Lunn of Oxford University shows⁵), to their impacts on population dislocation, corruption, transparency in awarding of contracts, the manner in which such projects are financed, social and environmental impacts in upstream and downstream countries and water security concerns. Hence, Ethiopians may legitimately ask questions and raise concerns about the manner in which the Government of Ethiopia is handling the project. In this article, however, we focus on transboundary environmental problems, the fair use of the Nile water and address Egyptian concerns. This is important because the construction of GERD has reignited the long standing explosive issue of the equitable use of Nile waters. We also believe the recent (counterproductive) Egyptian threats of war and various forms of diplomatic offensives require the attentions of scholars of substance and policy makers.

Egyptian worries and aspirations over the Nile River system however is historical and goes back to the days before the formation of the Egyptian nation/state even though the issue began to dominate the country's political landscape with the generation of militarism and ultra-nationalism (from Gamal Abel Nasser to the late President Sadat's 1979 threat of war and to the current leaders of Egypt vowing not to lose a "drop of water)." The recent political instability in Egypt must have made the trans-boundary water sharing problem a point of political opportunism. Reports indicate that Egypt may indeed be laying the ground work to "destroy the dam before Ethiopia starts filling

it with water or risk flooding Sudan's flat eastern territories upon its destruction." A WikiLeaks report is also known to have revealed that Egypt, in collaboration with Sudan, had plans "to build an airstrip for bombing a dam in the Blue Nile River Gorge in Ethiopia." In its June 2013 analysis of Egypt's military options, Straighter, a global intelligence organization indicated that the country does have military options against Ethiopia's dam, but noted that distance will heavily constrain Egypt's ability to demolish the work. The options, however, may include air attack from bases in the Sudan, Djibouti and Eritrea and/or sponsoring present day local "militants" to frustrate the construction of the dam. Obviously, Ethiopia is aware of the Egyptian options and its age-old aspiration to control the sources of the Nile River system. For example, on April 17, 2014, amid reports that Egypt was trying to woo South Sudan towards its dispute over Nile waters the Voice of America reported that the President of South Sudan assured the Ethiopian authorities that the recently signed military and economic cooperation between Egypt and South Sudan would not allow Egypt to attack Ethiopia or allow subversive activities.

Egypt's policy towards upstream countries is primarily driven by its interest on the water which aims at thriving at the misery of downstream countries, apparently without any form of substantive reciprocity. In contrast to the present day relationship between Egypt and Ethiopia, their ancestors, despite their limited knowledge of geography and hydrology, had a better understanding of the economics of water sharing. As the renowned historian Richard Pankhurst documented, the Turkish Sultan who ruled Egypt before the British, had "paid the ruler of Ethiopia an annual tax of 50,000 gold coins" lest the latter diverts the Nile. 11 Nowadays, and not surprisingly, even the Egyptian Minister of Antiquities is against the GERD. 12 In fact, institutional memories and abundant documents of the last sixty years indicate not only just the inconsistency, but also an immense level of damage that Egyptian foreign policy has done to Ethiopia and the Sudan. Egyptian interference in the two countries' internal affairs has been largely driven by the Ethiopian and the Sudanese 13 use of the Nile waters. For instance, Egypt objected the independence movement in South Sudan but promoted the separation of Eritrea and the creation of one of the most densely populated landlocked countries in the world. The international community is not unaware of these facts but Egypt's strategic location and its pivotal role in the politics of the Middle East did not allow the powers to be to call a spade a spade. As of late, intergovernmental organizations like the African Union which were once mute about the behaviors of successive military rulers of Egypt, who often controlled political and economic power under

the cover of phony elections and revolutions, have started to recognize the problems of the Nile River system. Ethiopia's and the other upstream riparian countries' rights to equitably share the waters of Nile is now an African agenda though key members of the Arab League continue to support the position taken by Egypt.¹⁴

Ethiopia's right to use the water that originates within itself would have included (and, in our view, should include), in addition to power-generating purposes, irrigation, water recreation and navigational services, flood control as well as water storage and supply. It is obvious, therefore, that dams provide valuable economic benefits. Just like any mega project, dams also involve several side-effects, which could be summarized as environmental and ecological, social (forced relocation of locals), economic and even political. Other concerns may include evaluating and managing the risks associated with dam construction as well as asking questions whether the product (GERD in our case) would provide the desired and needed benefits to stakeholders such as access to electricity. A reasonable framework of concern about dam construction, therefore, would include a thorough benefit-cost analysis, not just one-sided focus on the costs. This is our major concern in regards to environmentalists and some of their Ethiopian supporters who campaign against the 6000 MW dam.

The environmentalists refer to the GERD as a "white elephant," 15 despite the fact that the project's leaked document, alleged to be prepared by International Panel of Experts (IPE) showing favorable financial and social benefits to Ethiopia and the Sudan. Environmentalists such as the International Rivers Network (IRN) 16 need to, therefore, quantify the magnitude of the side effects of the project and should not rely on "covert" and "secondary" data. More importantly, rather than being the butterflies of potential conflict in the Eastern Nile region, they need to: (i) acknowledge Ethiopia's sovereign rights to use its own resources in accordance to international law and without hurting downstream countries; (ii) identify mitigation strategies so that genuine concerns are addressed before the construction is finalized; and (iii) propose how the mitigation strategies are going to be financed. In April 2014, the California based environmental pressure group which is against any form of large dam that is proposed to be built in Africa and Asia leaked the 48 pages long confidential document that was prepared by International Panel of Experts (IPE) on Ethiopian Grand Renaissance Dam. 17 Now that the confidential report is in the public domain, it allows everyone to put to test the concerns of both the friends and foes of the GERD.

The key features of the IPE's report could be summarized as follows:- (i) unlike the options of smaller dams which would have included potential irrigation projects, GERD is an energy production project and any fear of large and permanent reduction in the flow of freshwater to downstream countries is unfounded; (ii) the filling up of the dam is planned, to be done in stages by taking into account rainfall patterns and the catchment area; (iii) both the financial and social cost-benefit preliminary analysis of the project on upstream and downstream countries are favorable and the expected damages on downstream countries are not insurmountable; (iv) the preliminary findings about the project's side effects on Egypt is not sufficient and hence there is an information (hydrological) void, and much of the current allegations and threats are based on unfounded Egyptian fears; (v) work has progressed to the extent that, at the time of writing this article, the project has reached a degree of completion rate of 31% and the water diversion has been successfully carried out; (vi) the expected loss of water due to evaporation for the new project is not worse than what Egypt is currently losing from its environmentally unfriendly projects and poor water management; ¹⁸ (vii) recent geological and hydrological studies have documented an abundant level of ground water in the Nile basin countries 19 and hence downstream countries will not be thirsty if upstream countries build dams that generate electricity. It is clear, therefore, that Egypt's no dam policy or stance against large energy producing dams in upstream countries is a misplaced opposition and therefore calls for a new thinking in Cairo.

As Professor Aaron Wolf of Oregon State University observes, there are about 261 transboundary rivers across the world and unless carefully handled a significant proportion of these rivers could be causes of conflict. Wolf documented that water has been the cause of political tensions between a number of countries, including but not limited to Arabs and Israelis; Indians and Bangladeshis; Americans and Mexicans, the Chinese and other downstream countries, Brazilians and Paraguayans and all the ten riparian states of the Nile River system. He observes that "war over water seems neither strategically rational, nor hydrographically effective nor economically viable." ²⁰ In other words, there is little reason for a "water war" between Egypt and Ethiopia. The two countries can also learn from inter-basin development projects that are successful, such as the Colorado River Basin allocation between the US riparian states and Mexico, the Columbia River Agreement between the US and Canada and the numerous European

collaborative projects and integrated river basin managements of the River Rhine. In particular, Egypt and Ethiopia could learn a lot from South Africa paying²¹ Lesotho to quench its increasing thirst from the Lesotho Highlands Waters Project. The framework for exploiting the Niger River Basin, the Zambezi River basin and the Nile Basin Initiative²² itself could serve as useful points of departure for cooperation.

Notwithstanding the above, Egyptian politicians often argue about "historical rights" and connect the water issue with the civilizations of the antiquities on the Nile delta and forget about the history of the formation of nations and states. Evidently this stance is self-serving in that it ignores historical tensions between black people in the region (present day Sudan, South Sudan, Niger, Eritrea and Ethiopia, among others) and the race controversy in the African origin of humanity and the history of the Nile Valley (see for example Martin Bernal's Black Antenna, 1987; Anta Diop²³, among others). The politics of the Nile River system thus has an Africa-Arab dimension and hence sensitive to Pan Africanist and Pan Arabism agendas. Hence, if a conflict between Egypt and Ethiopia erupts, it is more than likely to have spillover effects on the rest of Africa.

Like most of the post colony states of Africa, modern and independent Egypt was created out of the ashes of colonialism (see for example Achille Mbembe and Samir Amin, among others). Britain's colonial interest on the Nile dam at Lake Tana (main source of Abay/Blue Nile) is the foundation of Egypt's historical and legal claims to the water. Britain's interest however was primarily driven by its desire to irrigate its large cotton plantations in the Anglo Egyptian colony of the Sudan and supply its factories which were located in the United Kingdom. Modern day cotton plantations in Egypt are entirely dependent on the soil that gets exported by the river primarily from Ethiopian highlands. In a series of short articles, Dr. Yosef Yacob²⁴ documented the history of colonialism in the region and indicated how Emperor Menelik (1844-1913) and Emperor Haile Selassie (1892-1975) managed to escape Britain's colonial ambitions over the Ethiopian highlands. He also revealed how Emperor Haile Selassie was visionary in that he successfully resisted Britain's encroachments on Lake Tana by hiring an American engineering company to construct the dam and trying to finance the project through the issuance of debt securities in the United States. In other words, had the Emperor's wishes were realized, the GERD

would have been built a long time ago. We have yet to see any reasonable criticism of Dr. Yosef Yacob's treatise by those who oppose the construction of the dam.

The next leg of the Egyptian opposition is international law. Here too the argument collapses before it faces the scrutiny of legal scholars. Egyptian officials often refer to the 1929 colonial era agreement and the 1959 agreement signed between Egypt and the Sudan (both former British colonies) that Ethiopia was not party to and had never consented to. First, it is important to note that colonial treaties have no direct relevance for resolving Africa's contemporary problems. The Nile basin countries have already rejected it. Thus, the dominant view is that trans-boundary assets belong to the post-colonial states and the new states have to agree how to share their jointly owned assets. Second, Ethiopia was and is an independent state and it was not a party to the 1929 and 1959 agreements. Historical records also indicate that Britain, Egypt and the Sudan conspired and excluded Ethiopia from the negotiation. In this respect, Wuhibegezer Ferede and Sheferawu Abebe, writing on the Efficacy of Water Treaties in the Eastern Nile Basin, Africa Spectrum, 49, 1, 55-67 (2014) outline two approaches that evolve from the principles of international law.²⁵ The authors show the fundamental differences between upstream and downstream countries in that upstream countries (Ethiopia, Uganda, Tanzania, Rwanda, Burundi, Kenya, Democratic Republic of Congo, Eritrea and South Sudan) appear to favor clean slate policy while downstream countries (Sudan and Egypt) favor colonial treaties.²⁶ Notwithstanding the preference of one or another form of legal principle, Egypt's insistence on colonial treaties collapses simply because Ethiopia was not a colony of Britain or indeed any other European power.

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Now that we have seen Egypt's historical and legal arguments falling apart, the next step is to examine the third foundation of the Egyptian stance - the environmental aspects of the dam. Previous literature indicated that carbon emissions and contaminations of rivers that cross national boundaries are examples of trans-boundary environmental problems. Hence, policy formation requires enforceable global treaties, sound national policy and the examination of advances in a number of disciplines. Furthermore, investments in big national projects such as stadiums, mineral extraction, oil and gas, canals, big dams, highways, and big architectural projects add behavioral and political dimensions to the science, technology and the economics of such undertakings. Most of the finest buildings and stadiums that host world cup games were and are

being constructed in that national pride. And behavioral and emotional factors dominate financial arguments. In other words, national projects by their nature have behavioral dimensions and may not be captured by the paradigms of rationality and net present values. Time will tell whether the Ethiopian dam is different.

The mainstream literature on environmental economics focuses on welfare measurement, sustainability, technological change, externality and green accounting. The world commission on environment and development (aka the Bruntland Commission, 1987), for example, states that "sustainable development is meeting the needs of the present generation without compromising the ability of future generations to meet their own needs". Consistent with this understanding, the Nile River system has both trans-boundary and non-trans-boundary features for the riparian states and hence Egypt, in theory, may have a cause for concern. This concern can nonetheless be resolved through international instruments and institutions and bilateral relations that are based on mutual respect and trust. The international convention on the protection and use of trans-boundary and international lakes which was signed by nearly 40 countries does not provide the base for resolving disputes, and worse, no country from Africa (including Egypt) has actually ratified it. It nonetheless can be another point of departure. The <u>United Nations Environmental program</u> could also be a facilitator. Furthermore, as noted earlier, Africa has frameworks for inter-basin development. The Nile Basin Initiative (NBI) has been a major institutional development which enables all riparian states to collaborate and act as equal members. Egypt's effort to undermine²⁸ this agreement is a mistake.

Other features of the leaked report of the International Panel of Experts covers the main factors of the project. Among other things, it confirms that: (i) GERD is economically feasible; (ii) the design meets international standards, subject to minor "corrections"; (iii) the contractor is reliable and has extensive international expertise and reputation in building large dams; (iv) the environmental impact study within Ethiopia is adequate and the trans-boundary effect on the Sudan is favorable and controls flood; and (v) the section on trans-boundary effect on Egypt requires additional study using complex models and actual data rather than reliance on desk work. In short, the authors of the 48 pages-long confidential report did not say that they expect a catastrophe and the vanishing of the Egyptian nation if the project gets completed. In short, Egypt is not in any imminent danger. This conclusion has ramifications for the multilateral institutions that refused to

finance the project. In summary, Egypt's opposition to GERD is indeed misplaced. Its return to the negotiation table and the African Union and the ratification of the Nile River Basin Cooperative Framework and Convention on the Protection and Use of Trans-boundary Watercourses and International Lakes are avenues for resolving the sticky problems of water sharing.²⁹

 $http://www.gwp.org/Global/ToolBox/References/Capacity\%\,20Building\%\,20Actions\%\,20in\%\,20Groundwater\%\,20Management\%\,20Issues\%\,20as\%\,20an\%\,20Aspect\%\,20if\%\,20IWRM\%\,20for\%\,20the\%\,20Nile\%\,20Region\%\,20(CapNet,UNDP,BGR,\%\,202007).pdf$

http://www.academia.edu/2243972/Supporting_the_Nile_Basin_Initiative_A_Political_Analysis_Beyond_the_River

 $^{^{1}\,\}underline{http://chimpreports.com/index.php/special-reports/18421-ethiopia-egypt-tensions-shift-to-power-plant.html}$

² The NBI is composed of ten countries: Egypt, Sudan, Ethiopia, Uganda, Kenya, Tanzania, Burundi, Rwanda, the Democratic Republic of Congo (DRC), as well as Eritrea as an observer.

³ Hassan (2011): http://www.ethiomedia.com/augur/4363.html

⁴ http://world-wire.com/2014/04/23/scientists-present-alternative-to-sarawaks-mega-dams/

⁵ http://world-wire.com/2014/04/23/scientists-present-alternative-to-sarawaks-mega-dams/

⁶ http://www.foreignpolicy.com/articles/2014/03/06/troubled waters

⁷ http://www.madote.com/2014/02/is-egypt-seeking-military-defense-pact.html

⁸ http://origins.osu.edu/article/who-owns-nile-egypt-sudan-and-ethiopia-s-history-changing-dam

⁹ http://www.madote.com/2014/02/is-egypt-seeking-military-defense-pact.html

 $^{^{10} \}overline{\text{http://www.al-monitor.com/pulse/originals/2014/03/egypt-south-sudan-nile-water-dispute-ethiopia.html\#}$

 $^{^{11}\} http://www.linkethiopia.org/guide-to-ethiopia/the-pankhurst-history-library/the-portuguese-ludolf-and-le-grand-the-nile-myth-is-shattered/$

¹² http://www.dailynewsegypt.com/2014/02/04/renaissance-dam-poses-threat-egyptian-monuments-antiquities-minister/

¹³ http://weekly.ahram.org.eg/News/5823/21/Egypt-Sudan-water-relations.aspx

¹⁴ http://www.sudantribune.com/spip.php?article46307

¹⁵ http://www.ethiomedia.com/broadway/4503.html

¹⁶ http://www.internationalrivers.org/

¹⁷ http://www.theafricareport.com/Soapbox/rejoinder-on-the-construction-of-the-grand-renaissance-dam-in-ethiopia.htm

¹⁸ A number of analysts have indicated that Egypt has not been an efficient user of the available water. Not only is water not priced properly, but the Egyptian authorities also have allowed the expansion of water devouring crops of rice and sugar cane- against the advice of experts and bilateral donors. The irrational and increasingly thirsty nature of Egyptian use of water has failed to recognize the realities of our time: escalating shortages of water exacerbated by global warming, population pressure and life-style changes.

²⁰ Natural Resources Forum, Volume 23 #1, February 1999 pp. 3-30.

²¹ http://gurukul.ucc.american.edu/ted/lesotho.htm

http://www.youtube.com/watch?v=qi0IRivzlNM

²⁴ http://www.ethiomedia.com/14news/5712.html

²⁵ http://water.tkk.fi/wr/tutkimus/glob/publications/Ilomaki/chapters1-8/ch2 laki.html

²⁶ It is not clear whether some of the governments would change their position as a result of Egypt's recent diplomatic offensive.

http://www.internationalwaterlaw.org/documents/regionaldocs/Nile_River_Basin_Cooperative_Framework_2010.p

http://www.emeraldinsight.com/journals.htm?articleid=17038597
http://law.missouri.edu/melpr/recentpublications/Ibrahim.pdf