

The GERD as a site of cooperation

Ethiopia has an ambition to build a modern economy based on agriculture, manufacturing and industry. It is committed to developing social infrastructure with quality education, health systems and the provision of clean water for its people. Ethiopia also aims to nurture a clean environment able to sequester carbon and emit net zero carbon; to maintain biological diversity and to build a resilient ecosystem that is not exposed to climate vulnerabilities.

The key to realizing such ambitions however, is rooted in energy. For Ethiopia, the most comparative advantage in its energy generation needs is hydropower, as it is blessed both by topography and water resources.

Electricity is a basic infrastructure lacking in Ethiopia and over 53% of my fellow citizens or about 60 Million people do not have access. Without electricity no country has ever managed to defeat poverty, brought about inclusive growth, secured a dignified life for its citizens, and managed to attain sustainable economic, social and environmental development. Hence why Ethiopia believes that Nile waters can be developed reasonably and equitably for the benefit of all people of riparian countries, without causing significant harm.

The Grand Ethiopian Renaissance Dam (GERD) is a good example that is demonstrative of the principle of cooperation. The dam has been constructed through the earnest contribution of all citizens of Ethiopia and holds multiple benefits for the two downstream countries of Sudan and Egypt, as well as the East African region at large.

A large volume of the Nile water body, amounting to about 85%, originates from the highlands of Ethiopia. As a transboundary resource, this water traverses through Ethiopia, Sudan and Egypt. The Ethiopia side comes from the tributaries of Abbay, Baro and Tekeze rivers while the other 15% of the Nile comes from other upstream Nile riparian countries. The Grand Ethiopian Renaissance Dam, (GERD), is under construction near the border with the Sudan, where all tributaries of the Abbay join the main stem of the river. This consequently makes the location ideal to maximize electricity generation.

The major function of the GERD is to manage the highly variable flow of the Abbay and produce 15,700-Gigawatt hour per year electricity since for Ethiopia electricity remains a resource that is enormously lacking. Large quantity of the flow (about 90%) occurs within four months of the rainy season and during the rest of the year the mighty Abbay trickles like a small river. The dam is needed to regulate this variable flow by reducing flooding and augmenting dry flow.

Ethiopia's intention in constructing the GERD is to enable the regulation function so that electricity generation from the infrastructure is uniform throughout the year. This means, as a hydropower dam, the GERD does not consume water. Rather the water continues to flow downstream uninterrupted. The benefits for downstream countries are often untold.

In Sudan, for example, the GERD provides ample protection against devastating floods and the effects of water shortage during drought and dry periods. It will help Sudanese water infrastructure to be operated optimally as they receive regulated flow.

This means that more electricity could be generated from existing infrastructure and adequate and regular water could flow in the river downstream throughout the year to enable reliable water supply for people, agriculture, and the ecology. The GERD also brings more energy to the already interconnected systems of Sudan and Ethiopia as well as to others.

Egypt also benefits from water conservation at the GERD instead of wastage of billions of cubic meters of water to evaporation and in downstream flood plains. The GERD also helps to prevent future spillage that overtops the Aswan Dam.

Globally and in the Nile region, the GERD as a clean renewable energy source would help to reduce emission that could avoid up to 10.6 million tons of greenhouse gases if it were produced from fuel, coal or gas plants. Hence, development of the GERD plays an important role in meeting and increasing renewable energy generation share towards Sustainable Development (SDG) Goal 7 and better water management of Goal 6 of the SDGs, as well as meeting many targets of Africa's Agenda 2063.

For the Nile region and for all its citizens, the GERD has a potential to stabilize energy mix. Hydropower, due to its nature of flexible operation and suitability, can be put in operation in a matter of minutes and can enhance harnessing of other energy sources of solar and wind energy that are variable depending on weather and climate. Undoubtedly, it will also enable affordable energy provision to the region.

While perceived negative factors have been made more visible in the GERD discourse, the positive attributes rather outweigh the opposing rhetoric and downplay the potential for cooperation to mitigate negative factors, if such factors exist.

It is time for our three countries of Ethiopia, Egypt and Sudan to nurture the narrative towards building peace, cooperation, mutual co-existence and development of all our people without harming one another. Nile in general and the GERD project in particular are opportune for such a higher purpose.

God bless Ethiopia and its people!

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