



## Addressing the Dimensions of Transboundary Water Use

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# Addressing the Dimensions of Transboundary Water Use

## The Nile Basin Initiative

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The catchment area of the Nile—the longest river in the world at 6695 km—links 10 African countries: Egypt, Sudan, Ethiopia, Eritrea, Uganda, the Democratic Republic of Congo, Kenya, Rwanda, Burundi, and Tanzania (Figure 1). A treaty regulating water use was signed in 1929 (revised in 1959) between

Egypt and Sudan, which greatly favors Egypt. But more and more water is being claimed by countries upstream. Altogether, some 300 million people share the water of the Nile. The question of use represents an enormous potential for conflict, and water issues are now being addressed by the Nile Basin Initiative.

*“The only reason for Egypt to go to war in the future would be over the resources of the Nile and anything that threatens the life of the more than 60 million Egyptians.”*  
(Egypt’s former president Anwar As-Sadat, as quoted by Moustafa El Saïd Hassouna)



**FIGURE 1** Overview of the Nile Basin shared by 10 African countries. (Map by Sebastian Eugster)

### Egypt’s relations with Kenya and Sudan

“The Egyptian government has been able to put together a program that will provide some 130 boreholes for people in the Rift Valley in Kenya alone,” underlines Moustafa El Saïd Hassouna, Egyptian lecturer in Strategic and Security Studies. Why does Egypt finance water-drilling projects in Kenya, a country thousands of kilometers away? The answer is simple: Egypt wants to preserve as much water as possible in the upstream regions of the Nile—water that it can use downstream—

because it needs every single drop for its population of 65 million and more. The use of borehole water could prevent Kenyans from tapping Lake Victoria, the huge water reservoir that feeds the White Nile.

Egypt keeps a very close eye on developments in the upper regions of the Nile and does not hesitate to maneuver overtly or covertly on political issues it considers important to its own interests. Thus, it has always intervened in the long-standing conflict in Sudan between the northern Sudanese—primarily Muslims who claim Arab descent and culture—and the African people in the south, who belong to the Christian faith or profess traditional religious beliefs. For 19 years a civil war has been raging in this country, the largest in Africa, exacerbated by the present fundamentalist regime of General Omer El-Beshir in Khartoum, who intends not only to dominate but also to Arabize and Islamize the southern Sudanese.

Even though the major armed group in the south, the Sudan People’s Liberation Army, favors a united secular state, there is growing desperation among the population about the seemingly endless fighting and misery, and the idea of separating northern and southern Sudan into 2 different states is gaining popularity. Egypt, however, is doing all it can to prevent Sudan from splitting up because this would jeopardize the present water treaty between the 2 countries that gives Egypt the right to use 55.5 km<sup>3</sup> per year (Sudan 18.5 km<sup>3</sup>). Indeed, as argued by Abdel Alier, former vice-president of Sudan, part of the water in the internal lakes of the Sudd and the Machar Marches—which is currently lost through evaporation—“could be channeled to reach northern Sudan and Egypt. That means that there is a potential in southern Sudan for more water for northern Sudan and Egypt. Now,

**FIGURE 2** Nile Basin partners survey the Gezira irrigation scheme in Sudan. (Photo by Simon Mason)



if southern Sudan became an independent country, Egypt would have to make fresh agreements with the new Southern Sudan in order to hope to get some of the water trapped in the internal lakes of Southern Sudan” (Figure 2).

As a desert country, Egypt is largely dependent on water from the Nile. To feed its rapidly growing population, it is at present undertaking ambitious irrigation schemes in the desert. The Toshka Project, west of the Nile Valley—Egypt’s hope for the 21<sup>st</sup> century, according to President Hosni Mubarak—encompasses 2268 km<sup>2</sup> and will produce potatoes, onions, cucumbers, asparagus, cabbage, and grapes in large quantities. The water pumps are due to begin operating this autumn. A similar project—El-Salam—will pump Nile water through a 242-km-long, mostly subterranean channel into the Sinai. Although their economic viability and profitability are uncertain, these projects will bring Egypt to the point of exploiting the Nile treaty with Sudan to the full.

### Other interests upstream of Egypt

Today, more and more Nile water is being used further upstream. Sudan is building new dams for hydropower and irrigation, such as the Karima Dam near the ancient site of Merowē. Under the provisions of the Nile treaty, Sudan still has substantial potential in terms of unused water

resources. Upstream countries such as Uganda and Ethiopia, however, bluntly reject the treaty altogether because they were not asked to participate in its drafting or revision. Moreover, the highlands of Ethiopia are the main source of the Nile: 85% of the water flowing downstream after the junction with the White Nile in Khartoum is carried by the Blue Nile.

Ethiopia is “losing” not only enormous quantities of unused seasonal rainwater but also huge amounts of fertile soil washed away by this water (Figure 3). It also has a large and growing population of 69 million to feed—which is equal to that of Egypt. But Ethiopia’s water-use schemes are not well developed: of 1000 planned small-scale dams, only 50 have been completed. The construction of a hydropower dam at the outflow of the Blue Nile from Lake Tana has been hampered by the war with Eritrea. The still valid Blue Nile master plan envisages the construction of 5 large dams, reducing the water flow of the Blue Nile by 6 km<sup>3</sup> per year. This is seen by Egypt as a very serious matter.

### The Nile Basin Initiative

Ten years ago the Ministers of Water of 6 riparian countries along the Nile launched an initiative to promote cooperation and development in the Nile Basin. The 6 countries—Democratic Republic of Congo, Egypt, Rwanda, Sudan, Tanzania, and Uganda—formed a technical coopera-

*“Everybody wants water. But how to use it efficiently? Some countries have a potential for hydropower, while others don’t. Therefore, we have to look into electricity connection; how can you get power from one area to the other. In the end, whatever the resource, the question is how to spread the benefits.” (Patrick Kahangire, Director, Ministry of Water Resources, Uganda)*





*"I'm extremely happy to say that on 26 June 2001 the international donor community were glad to see the common programs of all the Nile Basin countries and have responded with substantial financial support." (Meraji O.Y. Msuya, Executive Director, NBI)*

#### A shared vision

To achieve sustainable socioeconomic development through the equitable use of, and benefit from, the common Nile Basin water resources.

tion committee, whereas 4 others—Ethiopia, Eritrea, Kenya, and Burundi—participated as observers. This undertaking showed the growing concern of the Nile Basin countries over the increasing tensions resulting from water use. It was the first undertaking involving not only technical experts but also high-level politicians. Progress was slow, however, taking 5 years to elaborate a common basis which resulted in a shared vision and an action plan. Another 2 years were needed to finalize the documents approved by an extraordinary meeting of the Nile Basin Council of Ministers in Dar-es-Salaam, Tanzania, on 22 February 1999. This meeting formally established the Nile Basin Initiative (NBI) with the participation of 9 riparian countries; only Eritrea has remained as an observer.

To expect the NBI to immediately address the question of the share of water each country should receive and to renew the Nile treaty of 1929 with the cooperation of all riparian states would be erroneous. The approach of the NBI is much more realistic, given the climatic, geographical, and cultural diversity of the Nile Basin countries. The primary aim is to focus on common interests and build confidence through cooperation at practical levels.

**FIGURE 3** Aliyu Amba irrigation scheme in Ethiopia. The scarcity of water in most Nile Basin countries makes international agreements on water use and efficient and sustainable use of existing resources an absolute priority. (Photo by Eva Ludi)

#### A pragmatic approach

A vast range of issues is presently being studied and analyzed, with a view to transforming them into concrete projects involving several countries. Among other things, these issues are concerned with river regulation, water hyacinth and weed control, water quality management, desertification control, regional energy and telecommunication development, regional railway and road transport, river and marine navigation, promotion of trade, industrial development, protection of wildlife, and malaria and disease control. All projects are conceived as win-win projects for the participating countries and are based on fundamental principles such as the "obligation not to cause significant harm" and to guarantee "equitable and reasonable utilization" of resources.

Of immediate practical use is the establishment of a database collecting all relevant information on the Nile Basin in the NBI's secretariat on the shores of Lake Victoria in Entebbe, Uganda. This includes geographical references such as maps and satellite pictures, water flow and meteorological data, as well as socioeconomic data and data on agricultural production. All this information has so far either been unavailable or only partially available in sketchy rather than in standardized form. At present, it is being collected and processed by international experts and made available to all NBI members.

However, the fact that the countries did not approve a centralized database system in the NBI secretariat but opted for national databases shows the still low level of confidence in the Nile Basin. According to Executive Director Meraji Msuya, the NBI is a long-term project and development of a common ground for all member states will take time.

#### FURTHER READING

**Nile Basin Initiative.** [www.nilebasin.org](http://www.nilebasin.org).

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Ruedi Küng has been an African correspondent for Switzerland's German-speaking national radio (DRS) for 5 years and is based in Nairobi, Kenya. He has a degree

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