Ethiopia Investment Benefits from the Nile Basin Cooperation

Ethiopia

Ethiopia is the source of the Blue Nile (Abbay) which forms by far the largest tributary of the River Nile. Flowing from Ethiopia's Lake Tana the Blue Nile joins the White Nile at Khartoum in Sudan where it contributes about 85 percent of the water that makes up the main Nile. Since Biblical times, the life of the country has been attached to the Nile culturally, politically, and economically. Of the estimated land area of 1,144,035 km², some 32 percent lies in the Nile Basin, and about 40 percent of the population lives there.

In terms of support to NBI, Ethiopia provides financial contribution as per the agreed increments in table 3 on page 54. This is in addition to in-kind contribution of USD 24.2 million to-date (Refer to Annex II on page 60).

Ethiopia has been part of the Nile cooperation since 1999 when the country became a member of the NBI. The country signed the Cooperative Framework Agreement on 14th May, 2010 and ratified it on 13th June, 2013.

Access to reliable and affordable electricity

Fully commissioned at the end of 2013, the Ethiopia-Sudan Interconnector (194 km transmission interconnection between Bahr Dar and Gondar in Ethiopia; and 321 km connecting Gonder-Shehedi-Metema in Ethiopia with Gedaref in Sudan) with a capacity of 100MW has brought a number of benefits to Ethiopia. Nearly 1.4 million households (in both Ethiopia and Sudan) are able to access affordable and reliable electricity. Capacity to generate revenue from exporting power was also raised, to the extent that the export of surplus power has already boosted the country’s foreign exchange earnings by USD8.8 million annually. The predominantly hydro-system in Ethiopia has also reaped benefits by being part of a larger power system with Sudan, the significant thermal generation of which provides security of supply in periods of low hydropower production.
Other key benefits are the ability to better integrate reserve capacities, and in the process improve reliability of supply on the interconnected system and save on capital and operating costs. In addition, more reliable and secure supplies have secondary benefits through lighting of schools and homes, better access to social services, and greater opportunities for business development. Small- and medium-sized industries in particular such as flour mills, rural water supply installations, tanneries, and coffee processing plants are then better able to create employment and contribute to poverty alleviation.

Furthermore, Ethiopia participated in the Eastern Nile Joint Multi-Purpose (JMP) Study which identified the Abbay/Blue Nile subbasin as most suitable for cooperation among the three countries (Egypt, Ethiopia and Sudan). Line: Ethiopia-Sudan (Rabak)-Egypt (Nage Hamadi) will enable the country to generate over USD 600 million per year from electricity exports. A feasibility study has been undertaken for the Ethiopia-Sudan and Ethiopia-Egypt sections.

Irrigation and Drainage Projects.

More than 2,800 households benefitted from 14 newly-developed small scale irrigation schemes under the Tana-Beles Integrated Water Resources Development Project in the upper Blue Nile.
Improvements in soil and water conservation, agricultural practices, and access to extension services have led to increases in land productivity in different parts of the country. The project established 35 farmer training centers with about 700 farmers trained in improved cereal cropping, fruit tree cultivation as well as vegetable gardening and marketing. The project also established 13 animal health posts, supplied 735 modern beehives as well as 163 pieces of bee-keeping equipment. With the end of free animal grazing, fodder and livestock productivity also improved significantly.

In addition, small scale farmers and pastoralists in the Baro-Akobo-Sobat sub basin will benefit from implementation of the Baro-Akobo-Sobat multipurpose water resources development study project, which will identify upstream key environmental and social issues in this relatively pristine area and prepare medium and short term projects.

Food security
A total of 56,700 farmers will benefit from 20,000 ha of irrigation under the on-going construction of Ethiopia Irrigation and Drainage project. Another 92,000 people will benefit from the 7,500 ha Dinger Bereha irrigation scheme under the Eastern Nile Regional Transmission completed for the Ethiopia-Sudan 1,200 MW or 9,200 MWh/yr and Ethiopia-Egypt 2,000 MW or 7,700 MWh/yr interconnections.

The Eastern Nile Regional Transmission Dan) in terms of large-scale transformational multipurpose water infrastructure development from which each country could derive benefits (a classic ‘win-win’ outcome). The Study produced two working papers, Paper 1 on ‘Environmental and Social Perspectives on Blue Nile Multipurpose Development’ and Paper 2 on ‘Strategic Options Assessment for Blue Nile Multipurpose Development’.

Addis Ababa
Water security and environment protection

The Tana-Beles Integrated Water Resources Development Project in the upper Blue Nile has carried out a number of physical and biological soil and water conservation measures on 46,276 ha of cultivated land using a combination of technologies. Reduction in rainwater run-off has led to increases in groundwater recharge, river/stream bedflow rates, water flows over time and greater water volume in the system.

New springs have emerged, leading to a noticeable rise in availability of water for domestic use and for irrigation. Land vegetation cover in the protected areas has also increased, and indigenous plant species regenerated. In addition, 680 safe water points have been constructed, providing access to potable water for at least 75,000 people.

Furthermore, a total of 205,000 people in Chemoga and another 160,000 in Fincha are set to benefit from the 600,000 ha watershed management projects prepared under Eastern Nile Watershed Management programme - new round of investment projects.

The Eastern Nile Flood Preparedness and Early Warning-Phase I established the National Flood Forecasting Center and has completed flood risk mapping over 1,750 km². At least 50,000 people benefit directly and another 500,000 indirectly from these project interventions including people from 107 flood-prone communities. Phase II of the project is focusing on capacity development in flood risk management and technical institutional strengthening.