



## CASE STUDY

# Transboundary: SWOT analysis and challenge of Nile Basin Initiative

## Summary

Complex environmental, social, economic, and political structures make the Nile hard to manage. The Nile basin states have collectively recognised the need to protect, manage, and utilize the Nile basin in an integrated sustainable manner through a close co-operation. Action was taken and the Nile basin states formed the Nile Basin Initiative. This illustrates the opportunities created by multidisciplinary networks to solve complex environmental problems, stemming from their broad platform.

## Background

It is on record that river Nile is one of the world's longest transboundary rivers flowing a distance of more than 6,700 km from its farthest source at the headwaters of the Kagera Basin in Rwanda and Burundi to the Mediterranean Sea in Egypt. Its catchments basin covers approximately 10% of the African continent and river is shared by ten riparian countries which include Burundi, Democratic Republic of Congo, Egypt, Ethiopia, Eritrea, Kenya, Rwanda, Sudan, Tanzania, and Uganda.

The Basin contains an extraordinarily rich and varied range of ecosystems, with mountains, tropical forests, woodlands, savannas, high and low altitude wetlands, arid lands and deserts (World Bank, 2008). Since the Nile waters do not stop at administrative or political boundaries, the river basin has been of great importance as regards human settlement, development of a rich diversity of cultures, civilization, and development for centuries. As of today, the Nile is a crucial resource for the economic development of the Nile basin States and a vital source of livelihood for 160 million inhabitants as well as 300 million people living in the ten riparian countries (Ibid). It is estimated that in the next 25 years, the population in the Nile basin will be 600 million.

Nevertheless, for decades, the Nile basin people have been facing many complex environmental, social, economic, and political challenges that have made it difficult of the proper management and sustainability of Nile water. Such problems include among others, disputes and conflicts over the control and use of the Nile waters; extreme poverty, food insecurity; droughts; floods; environmental degradation exacerbated by high population growth; inadequate sanitary services; unreliable electricity, water scarcity; lack of cooperation on the shared resources of the Nile basin. The transboundary nature of the river also possesses extra challenge.

Consequently, the Nile basin States jointly recognized that the best way to utilize, protect

and manage the Nile basin in an integrated sustainable way was through a close international co-operation between and among all the countries within the natural, geographical, and hydrological unit of the river whereby all interests of upstream and downstream countries are considered. However, this cooperative management of the Nile River Basin is one of the greatest challenges of the global international water agenda. Nevertheless, it is an important catalyst for greater regional integration, economic, political, knowledge integrations with benefits far exceeding those derived from the river itself.

## **Actions taken**

In 1999, Nile basin states formed the Nile Basin Initiative (NBI) which reflects various aspects of integrated water resource management. The NBI is one of the recent international river basin management organizations where all the Nile basin states except Eritrea unite to pursue long-term sustainable development goals. Important other steps that followed were the adoption of Strategic Action Program, including its Subsidiary Action Programs (SAP). The NBI states are currently building a multidisciplinary network of professionals (stakeholders) from economic planning, research institutions, technical experts from public and private sectors, and representatives from civic groups and NGOs from across the basin. Training to develop skills in government ministries, NGOs, and local communities in each country in such areas as environmental management and monitoring, water quality monitoring, and conservation of wetlands has also been undertaken.

This case study provides for overview of the most important projects, programmes, and initiatives. Shared Vision Programs form the core of the NBI. They include seven thematic projects:

1. The Nile Transboundary Environmental Action Project
2. Water Resources Planning and Management Project
3. The Socio-economic Development and Benefit Sharing Project
4. The Confidence-Building and Stakeholder Involvement project (CBSI).
5. The Nile Basin Regional Power Trade Project
6. The Applied Training Project (ATP)
7. The Efficient Use of Water for Agriculture Project

Authors carried out the SWOT analysis to identify various environmental concerns related to water resources management.

## **Outcomes**

NBI focuses on multi-country, multi-sectoral program of collaborative action, exchange of experience, and trust and capacity building designed to build a strong foundation for regional cooperation and sustainable management of the Nile water. NBI is intrinsically geared towards achieving the Millennium Development Goals and Sustainable Development. NBI is developing knowledge based and essential tools for integrated water resource management through capacity building in each Nile Basin Countries.

The actions taken have led to informed decisions for sustainable water resource planning and management in the basin. The initiation of Nile Basin Decision Support System (DSS) for data sharing among countries on river hydrology to better understand river system behaviour, evaluate alternative development and management schemes has facilitate

knowledge integration thus facilitating decision making. The project is promoting broad-based stakeholder participation including dialogue, collective analysis, action, and monitoring for feedback and learning. NBI has managed to create a strong stakeholder commitment and ownership of its projects among all member countries by creating project management location units in each country NBI has Strategy for Addressing Environmental and Social Safeguards through an Environmental Management Plan.

NBI has strong donor support from giant institutions like the World Bank, GEF, GTZ, ADB and CIDA for implementing its projects. It has a framework for following up its projects through consolidated annual and quarterly interim financial reports. NBI promotes regional cooperation important for increasing a range of direct benefits to riparian states which include electricity production, environmental conservation and watershed protection. The NBI has set up governance, institutional structures and processes to provide permanent mechanisms for constructive dialogue, planning and development among riparians, focused on the sharing of water and water's benefits.

The Nile basin Initiative represents the most comprehensive and complex management plan ever attempted for sustainable development of international transboundary rivers. The NBI tries to deal with all potential problems occurring at people-environment and development interface in the Nile basin through a multi-disciplinary, socio-cultural, economic, political, and geographical environment which is an important attribute of achieving sustainable development as well as the Millennium Development Goals.

Nevertheless, the NBI is not immune from the challenges, weaknesses, and threats as it can be clearly noticed in the SWOT analysis. The NBI should capitalize on its strengths and opportunities to work out the challenges it faces.

## **Lessons Learned**

The multidisciplinary network creation is a vital tool for solving complex environmental problems since it provides a broader platform to exchange views and solutions than a disciplinary network which provides no platform for exchange of knowledge.

SWOT analysis also resulted in recommendation to serious amendment of the 1929 colonial Nile water treaty which possess significant challenge for realization of the initiative's goals.

The study recommends that rather than building capacity in only scientific skills with regards to Nile water resource management, the local knowledge base and management skills should also be upgraded to have a strong foundation for integrated water resource management.

Carrying out a livelihood analysis to develop poverty eradication projects is important for designing strategies to improve the welfare of the majority of the people at household level which will act as an incentive towards sustainable utilization of basin resources.

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**Supporting Materials**

[GWP Eastern Africa](#)

[Transboundary: SWOT analysis and challenge of Nile Basin Initiative](#)

**Related IWRM Tools**

[Transboundary Organisations](#), [Basin Organisations](#), [Transboundary Diagnostic Analysis](#),  
[Shared Vision Planning and Collaborative Modelling](#)

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