

# EbA South

Ecosystem-based Adaptation Through South-South Cooperation in Seychelles, Mauritania & Nepal

2013-2020



Supported by the  
Special Climate Change Fund



## SUSTAINABLE DEVELOPMENT GOALS



Supporting 187 households to diversify their food production through vegetable farming and beekeeping, which increases resources for personal consumption and extra income.



Reducing vulnerability to climate change using Ecosystem-based Adaptation (EbA) approaches in three different ecosystems – deserts, mountains, and coasts



The EbA approaches involve the ecological restoration of 450ha in the deserts of Mauritania, 20ha of mangroves in Seychelles, and over 840,000 seedlings in the mountain slopes in Nepal.



## PROJECT TITLE:

ENHANCING CAPACITY, KNOWLEDGE AND TECHNOLOGY SUPPORT TO BUILD CLIMATE RESILIENCE OF VULNERABLE DEVELOPING COUNTRIES

## EXECUTING ENTITY:



National Development and Reform Commission (NDRC) of China through the Institute of Geographic Sciences and Natural Resources Research (IGSNRR), Chinese Academy of Sciences (CAS). Project management services were provided by the UNEP International Ecosystem Management Partnership (UNEP-IEMP).



## KEY FIGURES:

**840,000**

Seedlings planted in Nepalese watersheds to increase water supplies and reduce soil erosion.

**34**

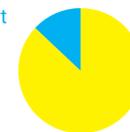
Technical reports and research papers developed.

**2,673**

People reached through public awareness activities at national and community levels.

## FUNDING:

GEF Grant  
\$4.9m



Cofinance  
\$32.8m

## PROJECT PARTNERS:

Ministry of Environment, Energy & Climate Change, Seychelles; Ministry of Forests & Environment, Nepal; Ministry of Environment & Sustainable Development, Mauritania; University of Seychelles; Tribhuvan University; Ecole Normale Supérieure de Nouakchott

## INTRODUCTION

- The *EbA South* project has been identified as a flagship initiative for South-South cooperation on climate change.
- A key part of the project was to share lessons in Ecosystem-based Adaptation (EbA) across 3 different ecosystems - coastal habitats in Seychelles, dry deserts in Mauritania, and mountainous forests in Nepal.
- EbA is the holistic strategy of using ecosystems – and the services they provide – to reduce the negative impacts of climate change on people.

## SOUTH-SOUTH COOPERATION

- **South-South Cooperation (SSC)** is a key aspect of international cooperation on climate change. It involves exchange between countries in the Global South through technology transfer, capacity-building, knowledge-sharing, policy support and fundraising, and more.
- To share lessons from the project's activities, a **web-based platform** was developed, which contains good practice case studies and webinars, as well as a planning tool, handbook, and guidelines for EbA: <http://www.ebasouth.org/>
- Through an **expertise exchange initiative**, trainings were provided for Seychelles, Nepal and Mauritania by Chinese and South African experts on data collection methods and analysis for EbA. For instance, an exchange visit to Mauritania and several visits to China were arranged.
- 10 workshops have trained around **500+ participants**, including scientists, regional advisors, decision-makers, and other government staff.
- After the infamous earthquake in Nepal in June 2015, a **field visit to Chengdu, China**, was organized to learn from China's experience in managing post-earthquake operations with both **ecosystem restoration and livelihood improvement**.

## RESEARCH & PUBLICATIONS

- To measure the effects of the project's EbA activities and to build a scientific base for EbA, **long-term research programmes were established** in partnership with local universities. In total, 14 technical reports and research papers were developed for Nepal; 7 for Seychelles; 12 for Mauritania; and 1 for the whole project.
- The project established plots of land in the pilot countries to serve as **research areas on the effects and benefits of EbA**. These plots have now been handed over to local universities and research institutes to continue research and monitoring.
- The project published a large amount of **EbA tools and knowledge products**, including:
  - \* *Ecosystem-based Adaptation to climate change: Lessons learned from a pioneering project* - [link](#)
  - \* *EbA Planning: ALiVE - Adaptation, Livelihoods and Ecosystems* – [link](#)
  - \* *Handbook: A Handbook for EbA in Mountain, Dryland, and Coastal Ecosystems* - [link](#)
  - \* *Resource Guide: Integrating Ecosystem-based Adaptation in Education Curriculum* - [link](#)
  - \* *Reference Guide: Research on Ecosystem-based Adaptation (EbA)* – [link](#)
  - \* For more resources and publications, visit the project website – [link](#)

## SEYCHELLES

- The Seychelles is a nation of 115 islands off the east coast of Africa. The country is highly vulnerable to climate change in the form of **coastal storms and rising sea levels**, which erode the shoreline and cause flooding.
- *EbA South* built the resilience of coastal communities by **restoring mangroves**, which prevent erosion and provide flood barriers. The project built 7 **culverts** and 2km channels between mangrove habitats to improve water flow and ecosystem health.
- These ecosystem-based approaches deliver benefits beyond climate resilience. For example,

- mangroves provide breeding grounds for fish species, boosting local fisheries.
- Sustainable financing plans were also developed for ecological restoration based on **market assessments of ecosystem services** (e.g. ecotourism). These assessments were used to produce cost-benefit analyses of adaptation interventions ([link](#))

## MAURITANIA

- Located in Western Africa and home to over 4 million people, Mauritania is one of the most arid nations in the world. Droughts are harming rural communities, and the country is expected to become **hotter and drier**.
- The impacts are likely to hinder water supplies and **reduce crop productivity**, resulting in severe impacts on rural livelihoods.
- To reduce these climate impacts, *EbA South* created **multi-use green belts** using indigenous drought-resilient species. These greenbelts protect crops from wind erosion and desertification by holding together the soil and retaining moisture in the ground.

- **Community-managed tree nurseries** were built to supply the required trees. Training was provided to understand which trees to plant in Mauritania for desertification control. Using market assessments, **new livelihood options** were identified, including fruit harvesting.

## NEPAL

- Nepal is a mountainous developing country in South Asia. Increased monsoon rainfall intensity and decreased winter precipitation are expected throughout the country.

Crop losses from **drought or floods**, and topsoil loss from soil erosion and landslides threaten food security.

**Community-based restoration** was carried out, with over 840,000 seedlings planted. The restoration used indigenous tree species that are effective at stabilizing soils. Species were prioritized if they were 'multi-use' – providing timber, fruits, medicines and fodder.

## CONTACTS

UNEP Task Manager:  
Atifa Kassam  
[atifa.kassam@un.org](mailto:atifa.kassam@un.org)  
UNEP-IEMP Director  
Linxiu Zhang  
[linxiu.zhang@un.org](mailto:linxiu.zhang@un.org)

## PROJECT LOCATIONS

