



# AT A GLANCE: THE WESTERN INDIAN OCEAN MANGROVE RESTORATION GUIDELINES

**Over 1 million hectares of mangroves dot the 5,000 km coast of the WIO region. Because of their critical importance to the biodiversity, local economies, and food security of the region, there have been many efforts over the years to restore degraded mangrove forests.**

Yet information on the lessons and best practices on mangrove restoration efforts in the region have not been readily available to inform other restoration activities around the world. The existing guidelines for mangrove restoration are based on activities in other regions, thus their applicability in the WIO region has been limited. There was therefore a need for tailor-made hence guidelines relevant to local conditions and experiences.

That is why the Nairobi Convention, in implementing the WIOSAP[1] Project, has published the WIO Guideline on Mangrove Ecosystem Restoration.

Funded by the Global Environment Facility, WIOSAP strives to reduce land-based stresses by supporting the protection of critical habitats, improvement of water quality, and management of river flows.

The newly published Western Indian Ocean Guideline on Mangrove Ecosystem Restoration is the first to provide customized guidelines relevant to the region. Several failures have been reported in many countries and have been attributed to poor understanding of the local ecosystem requirements and misapplication of the principles of ecological mangrove restoration. Thus, the lessons from many of the restoration projects in the region have posed more questions on the desired impact and sustainability.

This informational publication highlights some of the important featured information in the Guideline.

[1] WIOSAP: implementation of the Strategic Action Programme for the Protection of the Western Indian Ocean from Land-Based Sources and Activities

## Purpose of the Guidelines

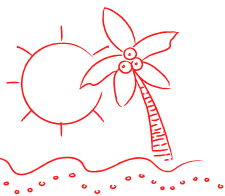
The purpose of the WIO Guideline on Mangrove Ecosystem Restoration is to support the return of lost mangrove goods and services using cost-effective and environmentally friendly ways. It aims to provide step-by-step procedures to restore mangrove areas impacted by both human and natural stressors.

## Objectives of the Guidelines



- Highlights status and conditions of mangrove forests around the world, their goods and services, threat facing them, and the need to restore degraded mangroves for present and future generations.
- Serves as documentation of previous mangrove restoration activities and lessons learnt from across the WIO region.
- Outlines best practices from previous mangrove restoration activities across the region, thus allowing for objective site-specific assessment of restoration pathways and enhanced successes;

## Benefits of Mangroves



- Communities along the coast depend on mangrove wood for fuel, construction, fish traps and boat building and non-wood products such as traditional medicine.
- Coastal communities often associate mangrove forests with sentimental and cultural values.
- Some communities have ventured into ecotourism and other income generating activities in the mangroves.
- Mangroves function as habitat and nursery grounds for economically viable marine fauna, making them an important source of fish for both subsistence and commercial benefits.
- The broad and towering canopies provide nesting and resting ground for migratory and sea birds and other wildlife.
- Stable and resilient mangrove ecosystems support the associated ecosystems such as seagrass beds and coral reefs thus maintaining ecosystem health, functioning and integrity.
- Mangroves act as a buffer between land and the sea thus plays a significant role in sediment stabilization, shoreline and coastal protection as well as water purification.
- Mangroves reduce and protect coastal communities from storms by decreasing the height of wind and swell waves by up to 66% over 100 m; and reducing the water level of storm surges between 5 and 50 cm per km of mangrove width.
- Mangroves capture and stores huge stocks of carbon –in both above and below ground components; making them one of the most carbon rich ecosystems on the planet
- Diminished energy of incoming waves also lessens the risk of flooding to communities that live behind mangroves

