## Mangrove Reforestation

Mangrove restoration is the process of revitalizing and reestablishing mangrove ecosystems in areas where they have been degraded or lost. This effort involves planting and nurturing mangrove trees and other vegetation in coastal zones, with the aim of:



**Enhanced Biodiversity** 



**Prevented Shoreline Erosion** 



**Reduces Impacts of Climate Change** 

















#### **Eastern Africa Mangrove Restoration**

# Coastal Communities in Kenya and Tanzania are Reclaiming their Mangrove Forests

Forests
East African communities are dependent on the mangrove ecosystems for employment, livelihood, and nutrition. In recent decades, coastal areas in Kenya and Tanzania have been urbanized at unprecedented rates and mangrove forests converted into other land use. Coupled with lack of effective governance, mangroves were overexploited and over harvested.



80% of tree nursery participants are women



58% of all staff en members are women



Protect 70% of the world's tropical coastlines











#### **Eastern Africa Mangrove Restoration**

## **Reversing Mangrove Loss in East Africa**

East Africa has lost up to 40% of its mangroves. We are addressing the drivers of environmental degradation through:

- Utilizing dendrometers and soil sensors to measure tree growth and soil quality.
- Implementing trenching strategies to safeguard sediment flow and prevent flooding.
- Engaging local communities to maintain sustainable mangrove ecosystems.

#### We plant 9 mangrove species:







Avicennia marina



Ceriops Tegal

We also plant: Sonneratia, Lumnitzera, and Heritiera Bruguiera



### **Eastern Africa Mangrove Restoration: Fast Facts**



**Location**Tanzania & Kenya



**Planting Window** Jan - May













**0.31 tonnes (per tree)** Estimated CO<sub>2</sub> Sequestered



Site Technology
Geospatial Data Layers,
Dendrometers, Soil Sensors,
Tree Vision, Bioacoustic
Sensors, Light Sensors,
and Weather Station



80% Estimated Survivability



**20 Work Days**Per 10k Trees



**1 ha** Per 10k Trees





66

I've learned valuable skills, contributed to environmental restoration, and improved my family's well-being."

EarthLungs, Tree Planter

