

## **Community-based Mangrove Restoration In Menabe Region, Western Madagascar.**

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### **Submission:**

#### **Background**

Mangroves are crucial ecosystems for coastal areas due to their ecological and physical roles. They are important for the reproduction and development of many species of marine animals such as mollusks (oysters), crustaceans (crabs, shrimps), juvenile fish, etc. Mangroves are spawning and nursery areas of species which are often of great importance for the local, regional, and national economy. They also provide a protective role against coastal erosion and hyper sedimentation of coral reefs. In addition, mangroves are particularly important carbon sinks, and their protection and restoration provide opportunities to reduce and sequester greenhouse gas emissions for climate change mitigation.

Mangroves are found on the coasts, only on a narrow area within the intertidal zone. They are very threatened natural habitats because of their small surface area but also by sedimentation, pollution, illegal cutting for timber trade, charcoal production, and the effects of climate change (rising water temperature, erosion, dunes, more frequent devastating cyclones ...).

#### **Method**

GPPM works with the local communities of eight coastal villages from North to South: Andrahangy, Bosy, Kimony, Betania, Lovobe, Andika/Mer, Andranolava, Menaky. They restore bare mangrove areas by adopting several techniques: (1) passive restoration and (2) active restoration.

Passive restoration consists of protecting areas with natural regeneration by enforcing local bylaws (Dinabe); active restoration is done through two techniques: planting mature propagules and transplanting young plants from nurseries maintained by the locals.

USAID Mikajy and USFS are financially supporting GPPM in addition to strengthening the members' technical capacity in community organization, restoration sites identification (biophysical study), setting up nurseries, collecting wildlings and mature propagules, planting and monitoring restoration sites.

#### **Results**

Since March 2021, the efforts to restore the mangroves in eight coastal villages of Menabe Region are as follows:

- a total area of 66.89 ha for natural regeneration was protected by the local communities
- 42.04 ha were restored through planting propagules with a success rate of 55%
- 3.09 ha were restored through plants from nurseries

A total of 893 community members were trained in different restoration techniques.

A total of 49,379 plants were produced by the nurseries implemented in eight villages with a success rate of 99.5% and 233 villagers trained in setting up nurseries.

**Conclusion**

GPPM, USAID Mikajy and USFS chose to work in these villages as they were orphan sites meaning that no conservation NGOs worked there to support the local communities in sustainably managing their mangrove forests.

It is key to support local associations and communities to ensure that natural resources conservation is lasting in the long-term.