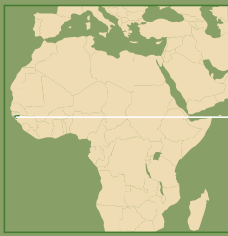


GUINEA-BISSAU

TRI Guinea-Bissau project at a glance



○ Project sites



Funding

\$ USD 3.3 million | GEF grants
USD 41.1 million | Co-funding

Duration



Institutional arrangements

Implementation by IUCN

Execution by Institute for Biodiversity and Protected Areas (IBAP)

Project components

- Improved policy environment for mangrove restoration, including a draft law on mangrove conservation
- Community-led restoration of abandoned rice fields and high-value agricultural fields
- Strengthened capacity of national institutions for management and restoration of mangrove ecosystems, and for accessing international climate and conservation finance
- Knowledge sharing, and monitoring and evaluation

Targets



Area under restoration (ha)
2 700



Increased area under improved practices (ha)
2 700



Greenhouse gas emissions mitigated (tCO₂eq)
520 493

In brief

Protecting and restoring mangroves and restoring degraded rice fields for food security and climate mitigation in Guinea-Bissau.

TRI's project in Guinea-Bissau is working to restore and protect mangrove ecosystems – among the most productive and threatened ecosystems in the world.

Found in the intertidal zones of coastlines, mangrove ecosystems are dominated by mangrove trees or shrubs, which are well-adapted to living in such salty environments. Specialized adaptations include complex root systems that extend above and below the water line and help to anchor the mangrove plant in place. In doing so, these root systems help prevent coastal erosion

while providing habitat, nurseries and feeding grounds for numerous fish and other organisms. In addition, mangrove ecosystems provide coastal protection from storms, as well as carbon storage, food, timber and livelihoods.

In Guinea-Bissau, mangroves face a number of threats – principally conversion for agriculture and coastal development. As a result of these and other drivers, the total area covered by mangroves has declined by 32% since 1940.

One type of agricultural practice particular to Guinea-Bissau is the cultivation of rice in coastal areas of cleared mangrove forest, using earthen dikes to protect

the rice fields from seawater ingress. This labour-intensive farming requires constant maintenance to safeguard and reinforce dikes. Moreover, if these agricultural fields are abandoned due to labour shortages, changes in rainfall patterns, or other reasons, and dikes are not simultaneously removed, the tide may not penetrate sufficiently into the formerly cultivated areas to encourage the natural restoration of mangroves, and the soil becomes prohibitively salty and acidic. In this situation, both farmers and the environment lose out.

TRI's project in Guinea-Bissau aims to reverse this trend by supporting communities through increasing the productivity of existing agricultural fields and restoring abandoned fields. To this end, the project is working with communities to rehabilitate the rice fields that the communities themselves consider most essential to their food security, by providing them with the means to reinforce dikes and improving hydraulic management of cultivated areas. In return, the villages commit to flatten the upper part of the dikes of abandoned rice fields to allow the sea to enter again and mangrove seedlings (called propagules) to grow again, and thus promote a natural restoration of the mangroves.

Interpretation of the landscape from aerial images in Guinea-Bissau. Photo by IBAP and En Haut!



Experiences from TRI's project in Guinea-Bissau will be captured and shared and, pending success of pilot interventions, support replication at other sites where appropriate. In addition, the project is helping support the creation of a national law on mangrove conservation and restoration, and build capacity of national institutions to better manage and conserve these important ecosystems.

Project updates

- The project is presently supporting territorial diagnosis in three intervention sites, using a participatory approach and employing a mixture of ground-based and aerial-based (drones) surveying.
- During field visits farmers provide information on the history of their lands, how they have been managed over time and propose solutions for the future. Different options are then discussed and evaluated on technical and financial merits before any decisions are taken.
- In the coming months formal agreements will be signed by the stakeholders allowing work on rice field rehabilitation and mangrove restoration to proceed.

Compared with other projects focused on agriculture and food security, TRI's project in Guinea-Bissau is characterized by an ecosystem-based approach utilizing nature-based solutions, implemented through a participatory approach, and with consideration of anticipated impacts from climate change.