

Seas of Change: TUMCA Biodiversity Project

Zanzibar, Tanzania



Seas of Change: TUMCA

Biodiversity credit methodologies provide a framework that protects resilient ecosystems while providing livelihoods for the user communities that rely on them.

Community monitoring is at the project's core, where the observation of key indicator species will be the basis for accreditation following Savimbo's methodology. The project supports sustainable, long-term livelihood alternatives for communities as well as enhancing local species habitats and populations while increasing ecosystem integrity and health.

The project will be certified by Cercarbono Standard through the surveillance of indicator species.



Location: Mwana na Mwana and Hanga Reef , TUMCA Marine Protected Area (MPA), Zanzibar, Tanzania



Duration: 10 years



Area: No take zones (320 Ha scalable to 820 Ha)
Broader impact MPA: 16,290 Ha



Biodiversity credits:

12 per hectare per year in biodiversity hotspots
311,950 BC

Biodiversity and Ecosystem Services

The **diversity** of life forms existing in a natural environment. It manifests itself across different scales and is a fundamental part of the natural balance of planet Earth.



Genes



Species



Ecosystems

**42,000 species
(>30% of
biodiversity)
are in danger
of extinction**

Biodiversity provides **essential services** for the proper functioning of natural systems and for the survival and permanence of living beings.



**Approximately half of global
GDP (USD \$44 trillion) is related
to biodiversity**

TUMCA: Tumbatu Marine Conservation Area

Biodiversity loss drivers:



Unsustainable fishing



Water pollution



Increasing coastal development



Lack of livelihood alternatives

Ecological and social consequences:

Depletion of fishing resource

Decrease in ecosystem resilience and regeneration

Loss of habitat of attractive species for tourism

Project Interventions



NO TAKE ZONE IMPLEMENTATION

- Monitoring, surveillance and data collection.
 - a. Community indicator species recording
 - b. Community led smart patrolling
 - c. Data recollection and analysis
 - i. Benthic surveys
 - ii. Reef fish census

SUBSISTANCE ALTERNATIVES

- Seed capital and technical assistance for community projects in prioritized sustainable aquaculture, such as sea cucumber farming and seaweed farming
- Value chain support

CAPACITY BUILDING

- Community project onboarding
 - Biodiversity thematic trainings
 - Project social and environmental safeguards
- Sustainable fishing practices and tools, No Take Zone delimitation, species fishing bans and fish size ban

Project Impacts

MPA efficient management

Supporting patrolling and surveillance activities

20 fishermen

Involved monthly in participatory monitoring activities

>80 community members

Involved in alternative livelihoods initiatives

Research and Monitoring

Ecological information for other conservation projects

Secure fishing resource

Maintaining spawning areas

50 community members

Strengthened through capacity building activities

Labour formalization

Through project activities and alternative initiatives

Proposed Methodological Approach

Marine Savimbo Adaptation

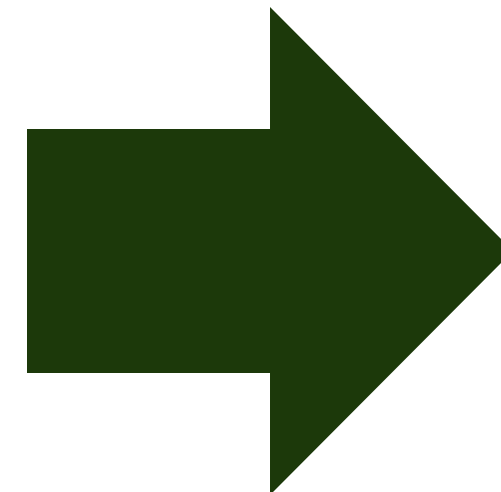


Indicator species
selection
(their presence implies a
resilient and healthy
ecosystem)

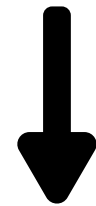
Community based
monitoring

- Parrot Fish
- Apex Predators (Sharks)
- Hard and Soft Corals
- Turtles
- Sea Mammals

- Underwater cameras
- Baited deep water cameras
- Fisher's participation and behavioural shift



Ushimo Bahari Leverage



**No Take Zone
(NTZ) establishment
and effective
management
Reduction of
overfishing**



Biodiversity Credits High Integrity Principles



The International Advisory Panel on Biodiversity Credits has published a list of integrity principles for the development of projects and the overlaying market, providing **verified outcomes for Nature, equity and fairness for people, and good governance for markets**

1. Verified outcomes for Nature	Criteria	2. Equity and fairness for people	Inclusion and rewards	3. Good governance for markets
Lifecycle	HLP 5: Additionality HLP 6: Baselines HLP 7: Durability HLP 8: Leakage	Rights	HLP 14: Indigenous Peoples and local communities' involvement in governance	Transparency
HLP 1: Defined biodiversity objectives and activity type HLP 2: Demand integrity and the mitigation hierarchy HLP 3: Credit issuance and tracking HLP 4: Ex ante and ex post credits	Validation HLP 9: Monitoring, reporting and verification HLP 10: Third-party audits	HLP 11: Legal and customary land and water rights HLP 12: Respecting human rights and the rights of Indigenous Peoples HLP 13: Free, prior and informed consent	HLP 15: No harm HLP 16: Benefit sharing HLP 17: Grievance mechanism	HLP 18: Transparent governance structure
				Accountability
				HLP 19: Data sovereignty HLP 20: Alignment with frameworks HLP 21: Tradability

Land rightholders, project developers, certification bodies, auditing bodies, buyers and governments are all **key actors** that must consider these principles for the proper establishment of a biodiversity credit market



**WE MANAGE
INVESTMENTS IN THE
FIELD, MAXIMIZING THE
ECONOMIC, SOCIAL AND
ENVIRONMENTAL RETURN.**

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