

# **CONCEPT NOTE**

## **COVER PAGE**

Concept Note Title: MZ CorInvest	Recipient Organisation(s): BIOFUND
Convening Agent: BIOFUND - Foundation for the	Programme Location Country: Mozambique
Conservation of Biodiversity <a href="mailto:info@biofund.org.mz">info@biofund.org.mz</a>	Priority Coral Reef Site(s):
+258 21 499958	Maputo National Park to Inhaca Marine Reserve
Programme Focal Point Contact: Sean Nazerali Director for Innovative Financing	Inhambane Bay and Tofo
snazerali@biofund.org.mz +258 84 0135594	Vilanculos Bay and Bazaruto National Park and surrounds
	Primeiras and Segundas Environmental Protected Area, Nacala Bay and surrounding areas
	Northern Quirimbas Archipelago, Suafo Island / Palma District)
<b>Description:</b> Mozambique is rich in coral cover, but many coral sites are remote, and the investment environment is difficult. The MozCorinvest	Preparatory Grant Cost (USD)¹: BIOFUND = USD \$99,441

<sup>&</sup>lt;sup>1</sup> As per GFCR Executive Board decision, disbursements will be determined based on fiduciary assessment, expenditures and GFCR Secretariat's performance review.



programme is designed to overcome these obstacles and create a pathway for future investments to follow. In the south and north of the country, 4 sites have been chosen, all with existing tourist flows, to dynamize as prime beach, dive, and nature ecotourism destinations, two of which also already have substantial terrestrial wildlife as well. Facilitated tourism investment and small and medium sized business incubation, as well as site management plans, will develop the cash flow necessary to manage reefs optimally. In the centre of the country, carbon finance from Mozambique's extensive mangroves will finance protection and long-term development the Primeiras of and Segundas Archipelago, probably Mozambique's most beautiful and wild reef complex. Several companies will also develop capacity for reef, mangrove, and seagrass restoration, with developed destinations as clients as well as companies needing offsets under Mozambique's newlysigned "Biodiversity Offsetting Decree." Formal protection for all sites will be established or improved, and monitoring programmes established with the help of the Universities and the National Agency for Conservation Areas, ANAC. BIOFUND itself will contribute with finance, interns, technical assistance, and subgrant monitoring and supervision. Expected results are sustainable reef management / restoration of reefs in 5 refugia representing all reef types in Mozambique.

# Proposed Start Date<sup>2</sup>:

August, 2022

# **Proposed End Date:**

February 2023

<sup>&</sup>lt;sup>2</sup> Programme start date will be triggered by the initial fund transfer of the GFCR Trustee



**Fund-level expected results:** Please select the indicators below for which will be the most important for the programme and provide targets if possible.

F1. Reef fish species richness and biomass - (F.1.1 Reef Fish Abundance, F.1.2 Reef Fish Biomass, F.1.3 Reef Fish Species Richness) Targets: 25% increase in all parameters over the life of the project, in priority sites.

- F2. Benthic cover and composition F.2.1 Live coral cover as a total %, Target: 25% increase in all parameters over the life of the project for live coral cover
- F3. Integrated Local Threat Index (F.3.1 pollution (nutrients), F.3.2. pollution (sediments), F.3.3. Fishing pressure, F.3.4. Coastal development industry, F.3.5. Coastal development tourism, F.3.6. Coastal population) (F3.3.4- to F.3.6 can be done using remote sensing and GEM statistics, so easy to monitor). Target: 20% reduction in priority sites Threat Index.
- F4. Proportion of coral reefs under effective protection and management, F.4.2 Coral reef area under effective management). Target: 100% of area in priority sites.
- F5. Ratio of private and market finance to GFCR Grant Fund allocations (Private investment side: F.5.1. Equity invested; F.5.2. Private debt issued; F.5.3. public debt issued; F.5.4. Market-based financial flows (e.g., blue carbon flow, park entrance fee); F.5.5. Financed business revenue)
- F6. Ratio of Co-financing leveraged (F.6.1. Grants, technical assistance, and other concessional co-financing)

Signature of Convening Agent:	Signature of Co-recipient Organisation (if needed):
Print:	
OrganisationBIOFUND	
Name _Luis Bernardo Honwana	
Title _Executive Director	
Signature	
24-nov-2022 Date	Signature Date
Date	Date



# **Signature of GFCR Executive Board UN Partner:**

Print:

Organisation: UNDP Name: Midori Paxton

Title: Head of Ecosystems & Biodiversity

Signature AAE8A593532F45E...

Date 23-Nov-2022

# **BUDGET BY UNDG BUDGET CATEGORY**

UNDG Categories	TOTAL
1. Staff and other personnel	\$0
2. Supplies, Commodities, Materials	\$1,150
3. Equipment, Vehicles, and Furniture (including Depreciation)	\$0
4. Contractual services	\$59,225
5. Travel	\$32,560
6. Transfers and Grants to Counterparts	\$0
7. General Operating and other Direct Costs	\$0
Total Direct Costs	\$92,935
8. Indirect Support Costs (Max. 7%)	\$6,506
TOTAL Budget	\$99,441



#### **FACT SHEET**

**Title of the proposed Programme (limit to 30 characters):** MZ CorInvest **Convening Agent:** BIOFUND

Date: April 13, 2022

**Lead contact person:** Sean Nazerali (<a href="mailto:snazerali@biofund.org.mz">snazerali@biofund.org.mz</a>)

# Other participating entities/co-implements and contact persons:

**Proazul**. Blue Economy Fund. Government Fund. Contact Person: Simeao Lopes, Director.

**OceanHub Africa (OHA)**. South African Blue Economy Accelerator. Contact Person: Alexis Grosskopf

**Living Labs Federation (LLF)**. Singapore based impact innovations accelerator. Contact Person: Yann LeMoël. Note: OHA and LLF are partner organizations, and for ease will be referred to as OHA/LLF in this document. OHA, mainly focusing its activity on Africa and the blue economy, is planned to be leading activities with LLF support.

Marine Megafauna Foundation (MMF) is a non-profit marine research and conservation organization based in Tofo, Mozambique. Contact Person: Andrea Marshall

**Terra Firma Lda**. Mozambique Company focused on land tenure with experience working with coastal communities and coastal and forest management as well. Contact: Simon Norfolk

RARE Mozambique and International. Contact Person: Atanasio Brito

**Verde Azul Consult Lda.** is a for-profit company with experience in land tenure, coastal management and research, community development, and management planning. The contact person, Kemal Vaz, is also a Professor at the **University of Eduardo Mondiane (UEM)**, with much experience leading teams of interns and students in fieldwork.



**BIOFUND itself** has an ongoing internship programme in partnership with **local universities**, fielding more than 90 interns per year to Mozambique's network of protected areas.

Key Government Agencies:

Ministry of the Sea, Inland waters, and Fisheries (MIMAIP) National Administration for Conservation Areas (ANAC)

## **Partnerships still under discussion:**

- Additional possible partners include:

Peace Parks Foundation (<a href="https://www.peaceparks.org/">https://www.peaceparks.org/</a>)
African Parks Foundation (<a href="https://www.africanparks.org/">https://www.africanparks.org/</a>)
Vilanculos Wildlife Sanctuary (<a href="https://mozsanctuary.com/">https://mozsanctuary.com/</a>)
Ocean Revolution (<a href="https://oceanrevolution.org/">https://oceanrevolution.org/</a>).

# Possible additional co-funders (matching funds/leverage):

- Millennium Challenge Corporation, Mozambique (Blue carbon and MPA management improvements in the Primeiras and Segundas Environmental Protected Area).

Contacts: Deolinda Mabote Nunes, Coastal and Marine Management Team Leader; Peter Bechtel, programme design consultant

- Total Energy Corporation- Possible investment in MPA creation/expansion in Palma District, Quirimbas Archipelago. Contact person Mateus Muthemba

## Name of coral reef site or project area: Mozambique:

Maputo National Park to Inhaca Marine Reserve

Inhambane Bay and Tofo

Vilanculos Bay and Bazaruto National Park and surrounds

Primeiras and Segundas Environmental Protected Area

Nacala Bay and surrounds

Northern Quirimbas Archipelago, Suafo Island (Palma District) (depending on security situation in the region)

### Period of implementation (years and months):

Full Proposal Development by February 2023 (6 month PPG phase)

Programme proposal will have an 8-year vision



## Financing Needs:

Preparatory Grant Request: USD \$99,440

Early Estimate of Full programme Grant Needs: USD \$12 million

# Relevant objective/s from national strategic document/s:

- Mozambique is a member of the High Ambition Coalition (HAC) for Nature and People and has pledged to protect 30% of its territorial waters by 2030.
- Prior to this, the Ministry of the Sea, Inland waters, and Fisheries (MIMAIP) had set a goal of 10% by this time, current protection levels are around 3%.
- To extend the current Marine Protected Area (MPA) network from 2% to 10% of its territorial waters by 2024 (Aichi Biodiversity Target)
- To protect 5% of the marine ecosystems by 2025 (National Biodiversity Strategy and Action Plan)

# SDG targets on which the progress will be accelerated (includes targets from a range of SDGs and development pillars):

- **Goal 2.** End Hunger, achieve food security and improved nutrition and promote sustainable agriculture. (SDG 2 target to be addressed: 2.4).
- **Goal 8.** Promote Sustained Inclusive and sustainable development economic growth, full and productive employment, and decent work for all (SDG 8 targets to be addressed: 8.4, 8.9)
- **Goal 12.** Ensure sustainable consumption and production patterns. (SDG 12 target to be addressed: 12. B: Develop and implement tools to monitor sustainable tourism).
- **Goal 13.** Take urgent action to combat climate change and its impacts. (SDG 13 targets to be addressed: 13.1, 13.3, 13.a)
- **Goal 14.** Conserve and sustainably use the oceans, seas, and marine resources for sustainable development. (SDG 14 targets to be addressed: 14.1, 14.2, 14.3, 14.7, 14.b).

**Relevant GFCR outcomes and outputs:** Please refer to the GFCR Theory of Change and Terms of Reference <u>available here</u>

Protect priority coral reef sites and climate refugia
Well-managed MPAs and LMMAs
Entrepreneurial MPAs
Increased No-take zones
Increased studies on climate refugia



Transform the livelihoods of coral reef-dependent communities

Sustainable fisheries and aquaculture

Reef first businesses

Higher income for local communities

Blue carbon, including new 'retail' blockchain-based methodology for individual lifestyle offsetting

Restoration and adaptation technologies

Restoration technologies developed and piloted

Impactful reef restoration

Strengthened national policy framework for reef restoration

Pilot implementation of New Biodiversity offsetting legislation, creating precedents and SOP's

Recovery of coral reef-dependent communities to major shock

Crisis Plan

Reef insurance at key tourism sites

Integrated Site/destination management plans and stakeholder bodies

### **SELF-ASSESSMENT**

Eligibility criteria	Yes/No
The proposal reflects a holistic approach to mitigating various drivers of coral reef degradation	Yes
The proposal is based on a blended finance approach, with the goal of creating an enabling environment for private sector engagement and/or developing revenue streams to sustainable finance coral reef conservation and reef-first businesses	Yes
The proposed results are aligned with national SDG priorities	Yes



Eligibility criteria	Yes/No
The proposal is based on country consultations, as explained in the Concept note, and a letter of endorsement that explicitly states the name of the programme has been secured from a relevant national government body.	Yes



The proposal is based on the standard template for Concept Notes, it is complete, and it includes:  - Theory of Change demonstrating contribution to GFCR Outcomes  - Results-oriented partnerships. Convening Agent demonstrates the vision for diverse partnerships to achieve an integrated ecosystem approach.  - Environmental and socio-economic baseline data is available and/or there is a strategy in place to collect this data  - Results are measurable and a clear plan exists for monitoring and evaluation  - Blended solutions (transactions) and substantive outcomelevel results, and  - Initial risk assessment and mitigation measures.	Yes
The proposal is expected to leverage resources for coral reef conversation at scale	Yes



## 1. Summary of Programme

The MZCorInvest Programme will contribute to closing the coral reef conservation financing gap in Mozambique and reduce the local drivers of coral reef degradation. This will increase the natural resilience of reefs to climate change and other global factors of reef decline to guarantee stable service-providing coral reef ecosystems for the future generations of Mozambicans. The purpose of MZCorInvest is to enable and promote sustainable financing of coral reef conservation and restoration by leveraging private market-based investment and financial models that contribute to the preservation of functionally healthy coral reefs in Mozambique.

Mozambique spans a coastline of over 2,700 km with two major areas of coral reef systems. The northern coastline, or the Coral Coast, is about 900 km of nearly continuous true tropical coral reefs system sitting within the second global hotspot for Indo-Pacific coral reef biodiversity with some of the most diverse and best-preserved reefs of the Western Indian Ocean (WIO). The coast of central Mozambique is designated as the swamp coast with numerous major river outlet, including the Zambezi River Delta. This region is thus characterized by highly turbid waters and no coral reef development. The southern coast boasts sub-tropical reefs mainly composed of diverse coral assemblages growing on top of fossilized submerged dune. This region hosts globally important biodiversity areas for sharks and rays (including whale shark and giant manta rays) and diverse reef fish and invertebrate communities. All along the coast, millions of people from local coastal communities rely fundamentally on these coral reefs for their livelihood, mainly from artisanal fisheries.

More specifically, the Programme will target:

- Maputo National Park (which includes the former Ponta do Ouro Partial Marine Reserve - POPMR) plus the Inhaca Island Marine Reserve
- Inhambane Bay to Bazaruto National Park and Surrounds, including Tofo (no formal protection) and Pomene National Reserve
- The Primeiras e Segundas Environmental Protected Area (an already identified climate refuge)
- Nacala Bay and surrounds
- Note that areas in the central and northern parts of the province of Cabo Delgado (Quirimbas National Park and Vamizi Island, which are already identified climate refugia), may be included if the security situation in the province improves, as well as other parts of Palma District including Ilha Suafo.



In Mozambique, funding models for conservation are typically grant-based and there does not exist a financial ecosystem nor local capacity to develop an investment pipeline to promote the leverage of private investment required to close the financing gap. Combined with increasing threats (climate change and population growth), poor mobilization of local community knowledge systems, and low levels of professional expertise, the coral reefs of Mozambique are in a downwards spiral and risk collapse. Current interpretation of fisheries regulations and the lack of use of the many MPA models currently existing in marine legislation means that most reefs and associated ecosystems are open access, leading to a 'tragedy of the commons' approach to their use.

# Interventions and financing solutions

The MZCorInvest Programme will develop a toolkit that will be applied synergistically to the selected geographies. Work in each geography will start with Stakeholder Engagement and Identification of local constraints and opportunities (a SWOT-type analysis). All of the priority geographies are different. For example, the Maputo National Park has a strong tourist flow and relatively little fishing pressure comparing to other regions in the country and impressive mangrove ecosystems, part of Maputo Bay region. The Primeiras e Segundas Environmental Protected Area has a limited tourist flow, high levels of pressure from inshore fishermen and significant coastal and marine ecosystems. Obviously, tools needed to meet the four GFCR outcomes will be different in each area. One common element is a paucity of 'Blue Economy' partners.

## The toolkit will include:

- 1. Marine Protected Areas (MPAs), support and creation
  - a. MPA creation (Tofo, Nacala, Vilanculos Bay seagrass and seahorse areas, potentially others);
  - b. LMMA creation and gazettement to increase local benefits and create multiple tourism flows;
  - c. Rezoning of existing MPA's as knowledge increases about fisheries and coral long term survival needs;
  - d. Research programme in each priority geography to support a c above;
  - e. Create simple but widely supported site/destination management plans around MPA's, working with communities, operators, and local government. This activity is a fundamental building block to gain stakeholder buy-in as well as to coordinate many of the other interventions. Create management bodies composed of interested stakeholders, to coordinate plans over time.



### f. Financial Model:

- Application of existing tourism user fees (including entrance fees to MPAs and specific tourism activity fees); rationalization where necessary;
- ii. Application of special fees where appropriate (for example diving/ fishing/ snorkelling fees in locally community managed LMMA's;
- Tourist Information and Booking Centers to facilitate tourist access to sites with significant and potentially significant tourist flows;
- 2. Coral-friendly business incubation/acceleration programs to support local entrepreneurship/businesses;
  - These programs will not be limited to "in & around MPAs" and will use target-based selection criteria (amongst others), to enable support for both local solution development and soft-landing whilst always striving to uplift local communities.
- 3. Biodiversity offsets from coastal development projects, recently mandated in law as a part of Mozambique's ESIA mitigation hierarchy.
  - a. Reef restoration businesses
- 4. Blue carbon credits in and around MPAs
  - a. Mangrove conservation and restoration
- 5. Reef insurance (often created as a part of the destination management plan businesses that depend on reefs as contributors)
- 6. Waste management (also often linked to destination management plan)
  - a. Improved plastic waste management practices and services
  - b. Removal and valuation of marine waste (plastic cans, glass)
- 7. Grants, concessional loans, guarantees, equity investment, impact investment, applied strategically and as necessary.
- 8. fishery supply chain improvement (e.g. equity and traceability for SSF)
- 9. aquaculture: especially mangrove crab hatcheries

## Desired impact on coral reef ecosystems and local communities.

 The current decline of ecological integrity of coral reefs and associated marine ecosystems and processes is stopped or reversed through the expansion and effective management of a national coral reef MPA network, which includes priority climate-resilient coral reef areas.



- 2. Reduced dependence of local communities on coral reef and associated habitats through diversification of livelihood and sources of income/food security.
- 3. Awareness and capacity building allow coastal communities to adopt regenerative ocean economy practices and become custodians of coral reef sustainability and associated habitats.
- 4. Reduced pressure will allow for recovery and increased ecosystem productivity; the end goal is marine ecosystems at maximal productivity, yielding maximal sustainable benefits (both from consumptive and non-consumptive activities) to communities and reef-friendly businesses.

# Estimated leverage potential

- 1. Co-investment made in overlapping geographies by ProAzul and MCC, and in the case of the Primeiras and Segundas Archipelago, BIOFUND itself may contribute significantly to leverage potential.
- 2. Co-investments made for larger scale blue carbon projects with developers such as South Pole.
- 3. Investment incubation at various levels is designed to overcome business environment limitations with possible co-investments passed seed stage leveraging Ocean Hub Africa's ecosystem (inc. 1000 Ocean Start-ups Coalition).
- 4. Mozambique has made significant investments in developing its REDD+ framework, and the Ministry of Sea, Inland Waters and Fisheries (MIMAIP) is interested to explore to concept to mangrove forests in Mozambique
- 5. New biodiversity offsetting decree has potential for application in the development sector, with special interest to mining, and oil and gas sector.
- 6. Thus, for investment, a 2:1 leverage is likely.
- 7. For returns, over an 8- year period, these remain to be calculated for each individual business.

# Programme timeline/duration

The Programme duration will be of eight (8) years. As an indication only, over the course of 8 years, this project aims at rolling out at 6 incubation cycles as follows: Pipeline scoping = 2 to 3 months, incubation program design (based on pipeline and pre-agreed program objectives) = 1 to 1.5 months, program rollout (bootcamps and



individual training) = 6 to 8 months for first phase, program follow up over 3 to 6 months and impact assessment done simultaneously as a new incubation cycle starts.

# 2. Climate resilience of coral reefs and biodiversity value of reefs in the proposed project area(s)

## Biodiversity values

In 2001, the coral extension in the country was estimated at 1,800 km2<sup>3</sup> and Mozambique has at least 300 coral species (ca. 40% of the globally recognized nominal species)<sup>4</sup> over 800 species of reef fish<sup>5</sup> and a wide variety of other associated species<sup>6</sup>, despite the true extent and diversity of species as well as their exact distribution along the coast are still poorly known.

According to research<sup>7</sup>, "various lines of evidence suggest the northern Mozambique Channel may have been a refuge for shallow tropical species throughout its history, particularly during the Cenozoic. This deep evolutionary history suggests a unique biodiversity across multiple taxonomic levels in this second peak of tropical marine biodiversity".

The specific sites chosen for MZCorInvest are shown in the following maps. These are based on Mozambique's Maritime Spatial Plan (POEM) found at the website POEM webgis<sup>8</sup>.

<sup>&</sup>lt;sup>3</sup> (Spalding, 2007)

<sup>&</sup>lt;sup>4</sup> (Obura 2012a),

<sup>&</sup>lt;sup>5</sup> (Pereira et al. 2000)

<sup>&</sup>lt;sup>6</sup> (Frontier-Mozambique 1997, 1998a, 1998b)

<sup>&</sup>lt;sup>7</sup> Obura (2012b, 2015)

<sup>&</sup>lt;sup>8</sup> https://poem.gov.mz/POEMwebgis/



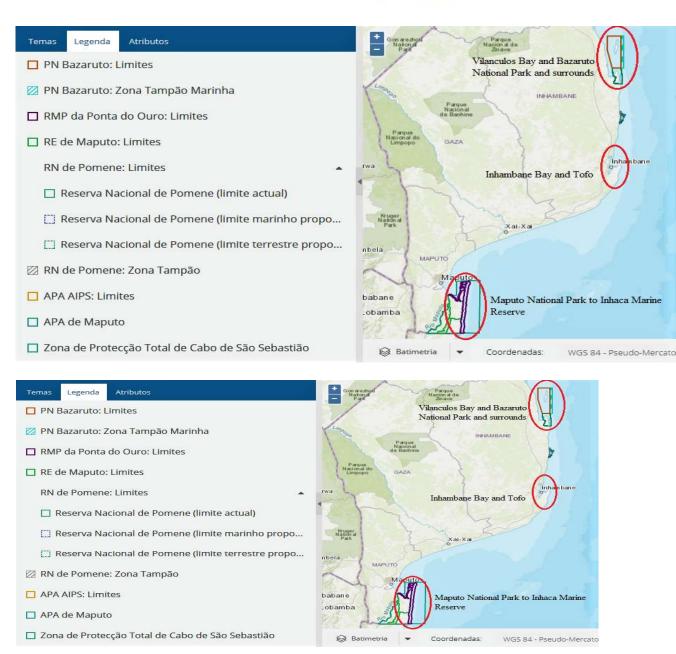


Figure 1. Priority Sites, Southern Mozambique (red ovals). Source: POEM





Figure 2. Priority Sites, Northern Mozambique (red ovals). Source: POEM



# Table: Brief description of priority sites

Priority Site	Coral cover	Comments
Maputo National Park to Inhaca Marine Reserve	18.5 km2 of coral cover	Protected area, recently increased in size, with recovering tourist flow in post-Covid era. Good access from Maputo and Durban.
Inhambane Bay and Tofo	2km2 of coral cover	No protection, though the area deserves it. Complex underwater habitats inside and outside of the bay, corals and seagrass predominate with some mangrove. Detailed plans for protection exist, and there is local support for this idea.
Vilanculos Bay and Bazaruto National Park and surrounds	88.6 km2 of coral cover	Protected area, with recovering tourist flow in post-Covid era. The seagrass beds of the southern bay currently unprotected and seahorses in particular are being poached.  Dugongs north of the Park also unprotected.
Primeiras and Segundas Environmental Protected Area	34 km2 of coral cover  Commercial prawn trawling threatens the 'blue highway' between offshore islands and coastal mangroves.	Excellent offshore reefs in largely good condition, with threats from sedimentation. Many areas with 100% plus coral cover (overlapping layers). Reefs have natural protection from a deepwater upwelling that occurs here along the coast.
Nacala Bay and surrounds	163 km2 of coral cover	Reefs have natural protection due to steep underwater cliffs and canyons



		which allow colder, deep water from the abyss to be moved into the bay by tidal forces. Some areas of exceptional coral, local reef building initiatives.
Northern Quirimbas Archipelago, Suafo Island/ Palma District) .	350 km2 in the entire Quirimbas Archipelago	Fringing reefs have natural protection due to steep underwater canyons which allow colder, deep water from the abyss to cool them. Additionally, some corals growing on the extensive intertidal areas already adapted to high temperature, algae, and sediment loads.

While the northern part of the country, particularly the Quirimbas Archipelago has some of the most beautiful and diverse corals, the ongoing armed conflict there has caused much internal displacement and killed possibilities of investment for most of the area. The one possible exception is the very northeastern most corner of the country, where Rwandan armed forces have established a security cordon and the gas company Total Energies is interested in investing in an MPA.

Nacala has a busy port and bay with a high marine biodiversity which has seen little formal conservation effort, yet private sector community initiatives with local communities and dive shops have shown some progress. Corals in the bay are of outstanding quality due to their proximity to deep water.

The Primeiras and Segundas Environmental Protected Area has the Mozambique's most remote and beautiful coral reefs, with excellent cover and high conservation value. Extensive mangroves line the coast, raising the opportunity of mangrove carbon to finance management of this remote area.

Bazaruto National Park is home to beautiful corals, but many important habitats, including coral and seagrass, are outside of the formally protected area. A recovering



tourist flow means that protection of this area can feasibly be strengthened by destination management and tourism revenue. The same is true for Inhambane and Tofo, with the added attraction of whale sharks and manta ray aggregation.

Ponto de Ouro has been a popular destination for South African Tourists for years and has Mozambique's southernmost corals, well preserved and defended by the wildness of the sea. There is little artisanal fishing pressure in the southern part of this area.

Please note that Mozambique has the second highest mangrove area of Africa with 300,000 ha<sup>9</sup>, comprising of 9 species. Mozambique's national forest reference level indicates a carbon storage of average of 118.7 tdm/ha for the living biomass, or 217 tCO2e/ha without accounting for Soil Organic Carbon, which is one of the main carbon pools in mangroves.

• Supporting scientific studies on reef resilience, historical knowledge and future projections of bleaching events

One of the 50 Bioclimatic Unit (BTU) identified through the 50 Reefs Portfolio is located in Mozambique.

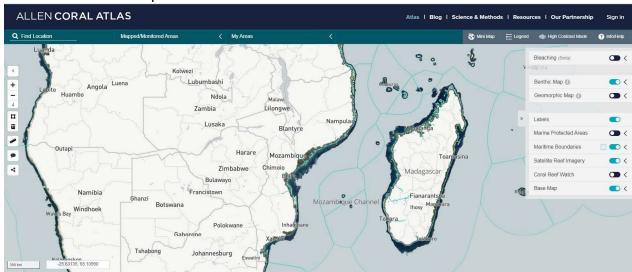


Figure 3. Allen Coral Atlas coral reef extension in Mozambique. Source: <a href="https://allencoralatlas.org/atlas/#8.61/-26.4330/32.7943">https://allencoralatlas.org/atlas/#8.61/-26.4330/32.7943</a>

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<sup>&</sup>lt;sup>9</sup> (Fatoyinbo & Simard, 2013)





Figure 4. Coral reefs in Ponta do Ouro. Source: <a href="https://allencoralatlas.org/atlas/#8.61/-26.4330/32.7943">https://allencoralatlas.org/atlas/#8.61/-26.4330/32.7943</a>





Figure 5. Coral reefs in Inhambane. Source: <a href="https://allencoralatlas.org/atlas/#8.61/-26.4330/32.7943">https://allencoralatlas.org/atlas/#8.61/-26.4330/32.7943</a>





Figure 6. Coral reefs in Nampula including Nacala and surrounding areas. Source: <a href="https://allencoralatlas.org/atlas/#8.61/-26.4330/32.7943">https://allencoralatlas.org/atlas/#8.61/-26.4330/32.7943</a>

- In the northern Mozambique Channel and the Quirimbas Archipelago, McClanahan et al. (2017) found strong regional environmental spatial heterogeneity that indicate a climate-adaptive center and the persistence of thermal stress-sensitive taxa, indicating that environmental conditions for an adaptive portfolio exist and include refugia for preserving climate-sensitive and for numbers of coral taxa.
- Hill et al. (2010) found limited evidence of coral bleaching mortality on an island of northern Mozambique (Quirimbas) suggesting the area has some level of resilience to bleaching events. It was suggested that the proximity to deep underwater canyons and wind generated upwelling event could provide supply of cooler deep water and counteract surface seawater warming during summer months.
- A WIO regional assessment (2016) global coral bleaching event (in Gudka et al. 2020) showed that sites in the north and south of the Mozambique Channel



were the less affected, with less than 30% of monitored Mozambican sites experiencing high to extreme bleaching and all monitored sites reporting less than 10% mortality, suggesting a good resilience to bleaching.

- Some future projections suggest that sea surface temperature may increase substantially in Northern Mozambique, but preliminary results of emerging research suggest that the occurrence of periodic mesoscale eddies in the Mozambique Channel could act as powerful drivers of local upwelling capable of counteracting the warming of SST along the coast of Mozambique. Reports from this research will hopefully be available in the coming years.
- There is a well-documented upwelling that buffers the reefs of the Primeiras and Segundas Archipelago from heat-related climate stress.
- The WIO regional assessment for the Red List of Ecosystems for Coral Reefs (Obura et al. 2021) revealed that while the WIO as region is vulnerable to coral reef ecosystem collapse, both northern and southern Mozambique were classified at least concern regarding Criterion C – Predicted environmental degradation due to bleaching.

## Data Gaps

Data on the climatic resilience of Mozambican coral reefs is still very limited, especially for the southern coast. Existing information often is related to specific studies focused on few geographic locations (see studies listed above). While changes in status of coral reefs have been monitored, to a limited temporal and geographical extent, little to nothing is known about changes in key processes that underlie reef resilience, rates of herbivory, rates of coral fecundity and larval recruitment and coral reef connectivity.

To address these gaps of knowledge, foundational ecological and socio-economic research should be promoted, and is an intention of the programme, to gain a better understanding of:

- Future trends in sea surface temperature and projection of bleaching events coupled with consistent, widespread monitoring and rapid reporting of coral bleaching events to validate potential resilience models
- Changes in rates of herbivory
- Changes in rates of coral fecundity and larval recruitment
- Coral reef connectivity
- Coral taxonomic diversity and distribution
- Experimental coral translocation and genetic local adaptation of coral populations to environmental conditions across the country's reefs



• Influence of the Mozambique channel mesoscale eddies on the variability of SST and their capacity to act as cooling factor for coral reefs in Mozambique.

# 3. Local drivers of coral reef degradation and solutions in the proposed project area(s)

1. Unsustainable fisheries: This includes both overexploitation and destructive fishing techniques, such as mosquito-net, seine-nets, unselective spearfishing and trampling on, manipulation of and anchoring on reefs. Overharvesting of herbivores has led in some cases to overgrowth of corals. The lack of compliance to relevant legislation both inside and outside protected areas is largely due to the high dependence of local communities to coral reefs for food security and income and is aggravated by limitations in capacity for good governance and effective management.

# 2. Coastal development:

- a. The development of offshore oil and gas industry poses a direct threat to coral reef through the physical removal of reef structure, increased sedimentation from the construction of underwater pipelines and indirectly through the risk of spills, decreased water quality and increased ship traffic. This threat is currently localized in potentially three areas, namely the northern Quirimbas Archipelago, the Primeiras and Segundas Archipelago and the Bazaruto Archipelago. However, Mozambique has launched its sixth petroleum exploration licensing round, which will run until August 31, 2022, with an offering of 16 blocks, of which two are in the Zambezi Delta and two in the Save River mouth area.<sup>10</sup>
- b. The proposed project of port construction in the Maputo National Park in southern Mozambique (Ponta Techobanine) is a long-standing threat that has gathered little traction but may still do so in the future.
- c. Much of the coastline of Mozambique has been requested for heavy sands mining; concessions have been made for prospection as well as full on mining. The risks here include coastal erosion, sedimentation,

<sup>&</sup>lt;sup>10</sup> https://www.energyvoice.com/oilandgas/africa/ep-africa/367224/mozambique-launches-sixth-licence-round/#:~:text=Mozambique%20has%20launched%20its%20sixth,two%20in%20the%20Save%20area.



and increased turbidity due to lax restoration and revegetation of mined areas.

- d. Industrial waste. There is currently just one industrial waste facility in Mozambique, located in the south very near Maputo. Industrial waste from the north and coastal areas is often stored on-site for long periods of time increasing the risk of spills and leaching into marine habitats.
- e. While tourism is still relatively limited in Mozambique with a limited negative impact on coral reefs, this sector will grow in the future. Experience exists in Tofo of species (especially manta rays) abandoning cleaner wrasse stations at lesser depths due to high numbers of sport divers.
- 3. Mangrove deforestation: Cutting of mangrove is a major source of fuel and construction wood in Mozambique, while clearing for aquaculture needs is a lesser threat, remaining lower in Mozambique than global levels.
- 4. Cyclones: While the occurrence of large magnitude cyclone destruction of coral reefs is rare, this will tend to increase in the future due to global warming.
- 5. Upstream riverine and hillside deforestation adds to turbidity and sedimentation, even without the presence of cyclones and other stochastic events.
- 6. Population growth is 2.9% p.a. (2020 data), which means increasing fishing pressure from a rapidly rising population.

# 4. Barriers hindering progress towards sustainable practices, development of financial instruments and barriers to private sector engagement related to coral reef ecosystem health

### Policy related barriers:

Despite a strong adherence of the state in international biodiversity conservation initiatives, Mozambique still lacks a complete legislative framework for managing and conserving nature, especially coral reefs. A National Strategy and Plan of Action for Coral Reefs is under-development, and it will provide strategic lines and procedures for corals management and conservation in Mozambique.



At local level, Community Fisheries Councils (CCPs) are stablished with the mandate to manage fisheries resources at community levels in coordination with the local and central representatives from the Ministry of the Sea, Inland Waters and Fisheries (MIMAIP). However, the Maritime Fisheries Regulation (REPMAR<sup>11</sup>) leaves the management role of CCP's open to a variety of interpretations, so decentralized management of each CCP's home waters has not yet been achieved. Rights of access and exclusion need to be clearly defined.

### Capacity limitations related barriers:

- 1. Local understanding of coral is limited.
- 2. Local capacity for conservation of coral reefs is still very limited in the country.
- 3. The national protected area authority has no marine specialists at the Headquarters level, and only one MPA Warden has a marine academic background. MIMAIP has no capacity for MPA management nor LMMA support.
- 4. Very few conservation practitioners both from public and private organizations have a sound knowledge of coral reefs, which hinders their capacity to design reef positive financing solutions and attract private investment/capital.
- 5. Communities with high dependence on coral reefs are also among the poorest, with limited access to quality health care and education. Low rates of literacy, schooling and higher education prevail in those communities. Therefore, there is very limited capacity for local communities to develop alternative livelihoods and diversify sources of income through innovative reef positive business and financing models.
- 6. A desperately poor population: In 2021, 60 percent of the population in Mozambique lived in extreme poverty, with the poverty threshold at 1.90 U.S. dollars a day (over 19.5 million people). The poverty rate for fisher families is likely higher than this.
- 7. Blue economy still a new concept for the country.
- 8. High dependency of coastal communities on coral reef ecosystems for livelihood, income and food security, which leads to overexploitation and unsustainable use of destructive fishing gear, including mosquito nets, beach seines, unselective spearfishing and anchoring and trampling on reefs
- 9. Limited marine protected areas (MPAs) covering coral reef areas and lack of financial, technical and institutional capacity from the government to effectively manage the existing network of MPAs, resulting in "paper parks".

<sup>&</sup>lt;sup>11</sup> https://www.proazul.gov.mz/wp-content/uploads/2020/10/REPMAR-Decreto-89 2020-de-08-de-Outubro-de-2020-que-Aprova-o-Regulamento-da-Pesca-Mari%CC%81tima-REPMAR-e-revoga-o-Decreto-n.-o-432003-de-10-de-Dezembro.pdf



10.Lack of entrepreneurship limits jobs creation and lack of formal higher education hinders the employability of local communities in markets that are not based on the extraction of coral reef resources.

### <u>Financial ecosystem related barriers:</u>

Lack of readiness and effective support blocks access to finance for entrepreneurship; the conservation sphere lacks entrepreneurial solutions to tap into available capital.

- 1. A difficult business environment: the world bank ratings are that Mozambique is
  - a. 138th out of 190 economies in 2021 in terms of ease of doing business
  - b. 176 of 190 for 'Starting a Business'
  - c. 165 of 190 for 'Getting Credit'.
- 2. Limited tourism, confined mainly to the southern region of the country (from South Africa). Mozambique recorded a total of 2 million tourists in 2019, ranking 102nd globally, with 0.065 tourists per resident (ranked 162nd globally and 6th in Eastern Africa).
- 3. Limited access to affordable capital. Commercial banking institutions in Mozambique are very risk averse, leading to a very high cost of capital (above 20% per annum for most projects).
- 4. Ever more frequent climate disasters which have caused substantial livelihoods. and infrastructural damage. Mozambique is the fifth most affected country by climate change over the past 20 years.

## Security related barriers:

Insurgency and war in the province of Cabo Delgado poses an extremely high risk for investment from public and private sectors in one of the richest areas of the country in terms of coral reef biodiversity value. Armed conflict has caused est. 700,000 internally displaced persons; 1.5 million people total will require food assistance as of this writing.

### 5. Thesis and theory of change of the Programme

The MZCorInvest Programme's desired change is, "to prevent the extinction of coral reefs in Mozambique by eliminating the coral reef financing gap and supporting interventions for their best chance of survival."



The Fund's desired change can be achieved by:

- (1) minimizing the threats outlined in Section 3 of this document, and thus improving resilience of coral reefs to climate change; and,
- (2) raising local and high-level political buy-in for transformational change through assuring development co-benefits.

The mechanism chosen by the Programme to achieve these two intermediate impacts and support the desired change is a combination of a) unlocking major investment in conservation and b) focus on outcomes that produce SDG co-benefits.

This overall theory leads to four target Outcomes:

- 1. **Protection:** Protect priority coral reef sites and climate change-affected 'refugia' through improved management of existing MPAs and the creation of effective new ones, at least doubling the area of coral reef inside protected areas. Management of MPA's and LMMA's will be based on co-management principles, with emphasis on the participation of historically excluded groups (i.e. women and youth) in management structures.
- 2. **Transformation:** Transforming the livelihoods of coral reef-dependent communities from low-value subsistence fishing to higher value and more diversified livelihoods, again, with emphasis on the participation of historically excluded groups (i.e. women and youth). Indeed, due to exclusion, some of the most promising opportunities (such as use of intertidal resources such as mangrove crabs) lie within the traditional purview of these groups.
- 3. **Restoration:** Restoration and adaptation technologies are tested and adapted to the Mozambican context.
- 4. **Resilience:** Improved recovery of coral reef MPAs to major climate emergencies and improved coastal protection mechanisms in place.
- Programme outcomes and outputs
- Outcome 1: Protect priority coral reef sites and climate refugia.
  - Output 1.1: Increase in scientific studies on climate refugia
  - Output 1.2: Well-managed MPAs and LMMAs are created and/or supported
  - Output 1.3: The development of "entrepreneurial MPAs"
- Outcome 2: Transform the livelihoods of coral reef-dependent communities.
  - Output 2.1: Sustainable fisheries and aquaculture are expanded.
  - Output 2.2: Reef-first business are incubated and accelerated.



- Output 2.3: Reef friendly investment promotion agency(ies) link (s) provides 'site and service' services to private sector investors, reducing risk and impediments to business startup, and promoting an effective investment pipeline.
- Output 2.4: Pollution and waste Management Systems are created or improved.

# • Outcome 3: Restoration and adaptation technologies

- Output 3.1: National regulatory framework for restoration is strengthened.
- Output 3.2: Reef restoration businesses are created.
- Output 3.3: Biodiversity offsetting.

# • Outcome 4: Resilience and Recovery of coral reef-dependent communities to major shocks

- Output 4.1: Reinforced Existing Climate Emergency Response Fund (BIO-CERF)
- o Output 4.2: Destination Management plans are created
- Output 4.3: Improved coastal protection mechanisms in place.



#### Desired Change:

Reduced decline of ecological integrity of coral reef and associated marine ecosystem through the expansion and effective management of coral reef MPAs network. Identified and protected priority (climate refugia hotspots) coral reef areas.

Reduced dependence of local communities to exploitation of coral reef natural living resources through diversification of livelihood and sources of income/food security. Benefits from the continued sustainable use of healthy coral reef ecosystems

#### **Impact**

Save Mozambican Coral Reefs from extinction by unlocking sustainable financing options for effective protection.

# Outcome 1: Protect priority coral reef sites and climate refugia

Output 1.1: Increase in scientific studies on climate refugia good Output 1.2: Well-managed MPAs and LMMAs are created Output 1.3: Development of entrepreneurial MPAs

#### Revenue streams

- Co-Mangement
- Tourism fees
- Payment for ecosystem services
- Blue Carbon
- Biodiversity offsets
- Government Support

#### Outcome 2: Transform the livelihoods of coral reefdependent communities

Output 2.1: Sustainable fisheries and Aquaculture Output 2.2: Reef-first business
Output 2.3: Reef friendly investment promotion agency
Output 2.4: Pollution and waste Management
Systems

#### Revenue streams

- Sales of fish from sustainable fisheries and aquaculture
- Reef-first business
- Waste management payments
- Valorised/upcycled plastic waste

#### Outcome 3: Restoration and adaptation technologies

Output 3.1: National regulatory framework for restoration is strengthened Output 3.2: Innovative technologies for restoration and monitoring are developed and applied Output 3.3: Biodiversity offsetting

#### Revenue streams

- Biodiversity offsets
- Fees for restoration training workshop
- Fees for reef restoration tourism activities
- Reef restoration
   business

#### Outcome 4: Resilience and Recovery of coral reefdependent communities to major shocks

Output 4.1: Existing Climate Emergency Response Fund is reinforced Output 4.2: Destination Management plans developed Output 4.3: Improved coastal protection mechanisms

#### Revenue streams

- Tourism revenues
- Biodiversity offsets
- Insurance income
- Fees for reef restoration
- tourism activities
- Reef restoration business

SDG Cobenefits

# Theory of Change

### Assumptions

- Continued government engagement and political will to promote the protection of coral reefs in the pursuit of national and international targets committed to.
- Public institutions, NGOs, the private commercial sector and local communities will be receptive to ideas and approaches that depart from the business-as-usual paradigm for coral conservation, understanding the need to develop innovative mechanisms for financing conservation of coral reefs, and thereby protecting their own incomes and livelihoods.
- Security related questions in Northern Mozambique, which hinder a safe environment for conducting research, social work, business development, etc., will not spread to provinces south of Cabo Delgado Province.



#### Rationale

# Outcome 1: Protect priority coral reef sites and climate refugia.

Mozambique is already committed to international targets for coral reef conservation (e.g., CBD, SDG, High Ambition Coalition 30X30 Challenge), which are reflected in national legislation and strategies (e.g. National Biodiversity Strategy, National Strategies for the management and conservation of critical habitats such as coral reefs and mangrove, legislation for the implementation of LMMAs). Effort at the national level to expand the network of MPAs through systematic conservation planning has already been conducted and produced expansion scenarios, which also fall within the scope of the recently developed Marine Spatial Plan. National and international organisations have begun to produce studies on climate-refugia and climate resilient reefs, and upcoming research is promising in identifying further priority reef areas. There is a growing scientific workforce that can continue to lead these research efforts at national level, while benefiting from international support and collaboration. This contributes to make Mozambique more attractive to grant donors and private investments that will support conservation of priority reef areas. Furthermore, Mozambique is among the first countries to have a Biodiversity Offset scheme in place and accompanying legislation that will obligate all industries (including mining and Oil & Gas) to implement Biodiversity Offsets for their non-avoidable residual impacts, so there will great opportunities for the Programme to leverage funds for conservation and restoration of coral reefs and associated ecosystems.

# Outcome 2: Transform the livelihoods of coral reef-dependent communities.

Despite the current lack of a financial ecosystem/ local capacity to develop an investment pipeline to leverage private investments required to close the financing gap, the recently created Government Fund ProAzul (a project partner in the GFCR) has instituted a system of matching grants for private sector initiatives, in partnership with the World Bank. ProAzul has also very recently (2020) carried out a specific study on "Financing Mechanisms for Mozambique's Sustainable Blue Economy". ProAzul has a program (Mais Peixe Sustentavel) which seeks to support sustainable projects in artisanal fisheries for up to 25.000 USD per project, representing 80% of projects' needs with the remaining 20% to be match-funded by the project proposers. MZ CORINVEST will seek to build ontop of this established mechanism by assisting proposers to benefit from this opportunity and increase their access to matching funds. This will require technical assistance facilities and incubators to increase the readiness of local communities, individuals and business startups to tap into increasingly available funding for reef-first enterprises. It may also require pooling together multiple small-scale



projects along the coast into a wider platform with access to an ecosystem of investors more likely to attract major investment. There is already national frameworks that the Programme can use/build on top of, such as the MSP which has a strategic objective to "Promote policies and legislation to the development of artisanal fishing, including financial services to minimize the difficulties in accessing credit for coastal communities".

One opportunity for transformation is provided by the new maritime fishing regulations of 2020, which ban the use of beach seine nets by 2024 (used by more than half of the artisanal fishers in Mozambique). Beach seines are destructive both to juvenile fish and prawns, and damage substrates extensively, including both coral and seagrass. An opportunity exists to leverage this ban to transform fishing arts to less destructive ones, or to generate other revenue streams entirely (for example, a change from beach seining to prawn gillnetting).

Certain coral areas of Mozambique, such as the Maputo National Park, Tofo Beach and to a lesser extent the Greater Bazaruto area, already have well developed tourism industry and culture with higher readiness in the local community to engage in alternative livelihoods. These areas will offer a good terrain for the promotion of livelihood transformation, acting as national hubs for reef-positive change that can be replicated and transferred throughout the country. These are the first areas to be targeted for comprehensive destination management schemes, where many of the other 'tools' in the MZ CORINVEST toolbox will be deployed.

## **Outcome 3: Restoration and adaptation technologies**

Coral reef restoration has already been successfully piloted in Mozambique<sup>12</sup>. There are globally recognized organizations and commercial ventures that work to establish international best practice standards for reef restoration and tap into a multitude of blended finance models to leverage funds for restoration. There are therefore opportunities for collaboration and attraction of commercially oriented enterprises to restore reefs, including tourism fees to participate in or visit restoration projects, develop, and pioneer innovative restoration and monitoring technologies. Furthermore, the soon to be implemented National Coral Reef Strategy already recommends measures to create/strengthen the legal framework for coral reef restoration and promote active engagement into restoration, which will facilitate the attraction of capital investors in this sector. There is also a great opportunity to mobilize funding for restoration from biodiversity offset, namely

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<sup>&</sup>lt;sup>12</sup> https://www.eni.com/en-IT/media/news/2019/03/eni-and-unilurio-sign-a-partnership-for-community-development-and-biodiversity-protection-in-cabo-delgado.html



from mining, Oil & Gas industries. A potential partner here is Verde Azul Consultoria Lda. With university support.

# Outcome 4: Resilience and Recovery of coral reef-dependent communities to major shocks

Some mechanisms for resilience have already been developed in Mozambique. Specifically, BIOFUND has set up a special Climate Emergency Response Fund (BIO-CERF), which supports protected areas including the resident and adjacent population in the period immediately before and after major climate emergencies to minimize damages, as well as disaster preparedness planning.

Additional resilience can be developed through improved coastal protection mechanisms. These should include nature-based solutions, focusing on coral restoration as a defence mechanism as well as testing artificial reefs for wave protection and habitat improvement. Within the key tourism destinations, Destination Management plans need to include reef insurance, supported by reef-dependent business, to stockpile rehabilitation funds against future needs. Reef insurance should be a part of both lifestyle footprint offsetting as well as destination management.

# • Cross-cutting issues

There are several **transversal issues** that comprise a fundamental part of the programme:

- 1. The importance of establishing monitoring, evaluation, and participative and institutional learning cycles in all activities.
- 2. The importance of communicating lessons learned, successes, and failures, and learning from others through experience exchanges, publications, white papers, etc.
- 3. The importance of gender and youth inclusive approaches. This goes beyond a numbers game, and includes qualitative elements such as effectiveness of women and youth participation, acceptance by men and power structures, and agency and self-identity that women and youth themselves feel.
  - a. It is important to remember that both women and youth engage differently from men in terms of their engagement with reefs and the sea, and that there are regional variations.
    - Women are usually collectors of intertidal resources while men fish, for example, and thus programming must be designed with these differences in mind. Differences include both benefits derived from reefs (such as octopus and molluscs, but also



- damages caused; women are more likely to trample reefs that to damage them with boat anchors).
- ii. Youth often lack financial resources to acquire their own boats; and thus, become trapped in the dead end job of seine-net pulling for boat owners, a trade which is paid in fish, sometimes as little as ½ a kilo per day.<sup>13</sup>
- iii. MPA, destination management, and business incubation must all actively plan to address these differences.
- b. There is a particular vulnerability associated with young women that results from the migratory nature of much artisanal fishing. Fishing boats and their crews leave their homes for months at a time, camping on the beach. Economic desperation can lead to heightened levels of prostitution, as young women augment their customary role in the value chain of re-sellers and processers (usually drying) due to needs of home and family. Specific attention will be paid to this issue especially with respect to development of alternatives and income improvements.

# 6. What are the specific intervention(s) of the proposed Programme?

An outline of each intervention is presented below, with further information in the appendixes.

## Outcome 1: Protect priority coral reef sites and climate refugia.

Output 1.1: Increase in scientific studies on climate refugia is achieved.

Specific Interventions: BIOFUND will:

- a. Fund and supervise studies on identifying climate resilient reefs and their associated processes, through partnerships with local and international research institutions and NGOs (for example WCS is already engaged in a Marine Key Biodiversity Area identification funded by USAID), as well as through calls for proposals (UEM; UNILURIO).
- b. Develop and fund a long-term monitoring program on coral reef health in all national MPAs, using harmonized indicators and methodologies drawn from the GFCR (ANAC- the national Agency for Conservation Areas)

<sup>&</sup>lt;sup>13</sup> Brito et al. 2022. Fisheries Assessment for Nampula and Zambezia. USAID Speed Program, Maputo.



c. Maintain studies and monitoring reports in its virtual library available to stakeholders in the GFCR programme as well as others

# Output 1.2: Well-managed MPAs and LMMAs are created.

Specific Interventions: BIOFUND will:

- a. Finance baseline studies, community work, design, planning, and implementation of new MPA's/zones (see annex 3 for more details; RARE, Terra Firma, Verde Azul, ANAC)
- b. secure the sustainable management of these areas through the strategies outlined in 1.3 below, before and during MPA/zone creation (RARE, Terra Firma, Verde Azul, ANAC):

Output 1.3: The development of "entrepreneurial MPAs" through development of innovative sustainable funding mechanisms and business models using blended finance.

Specific Interventions: BIOFUND will:

- a. Identify collaborative management partners for ANAC (and facilitation of negotiations) who bring expertise and funding, <u>before</u> the new MPA's/zones are created.
  - i. An example is the BIOFUND Tender that attracted the Conserve Global/ TerraNautics/ Centro Terra Vivo Consortium that has been selected to help manage the Primeiras and Segundas Environmental Protected

    Area.
- b. Lobby for increased Government inputs especially for recurrent costs.
  - This is an ongoing activity that is supported by BIOFUND's financial clout
- c. For MPAs that have sufficient tourist flow, (the Maputo National Park, Tofo and Inhambane Bay, and Vilanculos and Bazaruto), support ANAC, MIMAIPs and individual MPAs to increase revenues through market-based user fees
  - Support willingness to pay studies to identify market parameters for the establishment of user fees (either nationally or park-specific), and finance technical support for establishment and implementation
  - ii. Develop a Sea Sensorium in Ponta do Ouro to be invested in together with other investors, ANAC and PPF.



- d. BIOFUND will directly develop, in coordination with ANAC and individual MPAs, new innovative financing mechanisms that guarantee a flow of funds to MPA management and sustainability, these being:
  - i. Mangrove carbon, especially important for the Primeiras and Segundas Environmental Protected Area(Terra Firma, Verde Azul)
  - ii. Mixed mangrove and seagrass carbon, especially important for Vilanculos and Bazaruto<sup>14</sup> (Verde Azul)
  - iii. Biodiversity offsetting as per the recently signed Biodiversity Offsetting Decree and existing EIA legislation (Verde Azul)
  - iv. Fishery supply chain improvement around the MPAs (ProAzul)
  - v. Mangrove crab/sea cucumber hatcheries around the MPAs ProAzul) Fish and seafood sustainable aquaculture (ProAzul)
- e. Finance technical assistance in planning and community liaison to maximize community co-management using decentralised mechanisms as defined in Mozambique legal framework, during and after MPA/zone creation, to reduce costs and increase community ownership (a variety of Partners)
- f. Finance the development of destination management plans that are created participatively with the input and buy-in of MPA neighbours, and outline frame conditions and roadmaps for livelihoods and business development. These will subsequently be implemented jointly by MPA management and Destination business fora to be established under Outcome 2 (A variety of partners)

### **Outcome 2: Transform the livelihoods of coral reef-dependent communities.**

Output 2.1: Sustainable fisheries and aquaculture are expanded, and new revenue streams improve the income of local communities and reduce their dependence on coral reefs.

Specific Interventions: BIOFUND will:

- a. Finance PROAZUL interventions in sustainable fisheries, including:
  - i. Support to retiring of beach seines as per law by prohibiting new sales and promoting sales of new gear, like gill nets
  - ii. Establishment of rotational harvesting zones and open/ closed seasons in and around MPAs

<sup>14</sup> According to the Mozambican legal framework, rights to all carbon stocks in PAs below to the PA; in practice this will mean financial support for the MPA's as well as affected and involved local communities.



- iii. Promotion of sustainable mangrove crab fattening in areas where appropriate
- iv. Promotion of tilapia aquaculture, in coastal areas where appropriate (as per MIMAIP policy)
- v. Seaweed farming, to cultivate *Asparagnosis taxiformis*, a highly effective and nutritious cattle feed mix that reduces the amount of methane produced by cattle by up to 80%.

### Output 2.2: Reef-first business are incubated and accelerated

Through Technical Assistance Facilities and/or entrepreneurship incubators and accelerators which assist to develop or identify reef-positive projects, start-up reeffirst enterprises. Each outcome of the GFCR can be leveraged through innovation acceleration programs to build long-term, economically viable projects whenever applicable. OHA and LLF are partner organizations collaborating on building such programs to support entrepreneurship and innovations for sustainability. As OHA is focusing on blue economy in the African region, they can be the focal contact for the project, leveraging LLF for international outreach, support and expertise.

Specific Interventions: BIOFUND will:

- a. Create and finance business incubation partnerships with local/national incubators, with technical marine backstopping from Ocean Hub Africa and Living Labs Federation. Incubators will support entrepreneurs in project areas to develop Direct and Indirect reef friendly businesses
- b. **Building innovation acceleration programs.** Several actions can be taken, depending on the different stages of maturity of innovations to be developed. This will be determined after a first assessment phase.

Example of roadmap that can be deployed:

- Map and build a database of all the local and regional innovation ecosystem stakeholders (incubators, accelerators, investors, governmental programs)
- ii. Build a roadmap to decide the type of acceleration programs to deploy; for instance:
  - Build an entrepreneurship training program with local accelerators
  - Build a pitching event to promote existing local innovators and seek funding



- Build a call for innovation based on problem statements to source existing regional solutions
- Scout for specific technologies and build implantation projects via blending financing (Grants, sponsoring, loans, ...)
- Involve local professional organizations via a Design Sprint to launch transformation plans of the local economy for existing local corporations
- o Communicate to generate traction and support:
- Organize promotional events and meetups with governmental and private organizations to seek long term support

### c. Building capacity of local entrepreneurs.

Business & technical training and technological support (choice, funding, and training to use appropriate technologies) with a view to increase livelihoods based on resource optimization (reduced losses, improved value, etc)

- i. OHA/LLF can organize cohorts directly or in partnership with local incubators/accelerators. This is the preferred approach for local knowledge and gaining long term local support. Split of the tasks between OHA and LLF to be along incubation services and/or capacity, however running programs will require local support over the course of each program/cohort.
- ii. Build new business/jobs opportunities: Business & technical training and technological support to diversify livelihoods away from direct coral reef resources OR directly contributing to coral reef restoration (coral farms, conservation projects, ecotourism, etc)
- iii. Provide Resource management training (understanding benefits and practicing sustainable resource management, waste reduction, etc)
- iv. Provide Assessment of Knowledge Attitude Practice and socioenvironmental impacts of trained groups, and disbursement of concessional funding

#### d. **Trainings**

- i. deliver basic sustainable blue business training (sustainably managed resources, inclusive/equitably distributed opportunities, sounds business management practices inc projecting/planning/saving)
- ii. explain and support youth/women participation to business value
- iii. design KPI and dashboards for informed management (both business and resources)



- iv. unlock low-hanging opportunities for development (often on customer or product portfolio, market positioning, branding)
- v. set communities on track for fundraising
- e. **Supporting deployment of innovative projects and associated grants.** The goal is to provide technical assistance following the training to support in methodology and implementation. Technology helps sustain, scale (and sometimes initially convince) groups to shift practices. These projects can be funded through Grant disbursement (performance based, recoverable but no straight debt or equity, other guarantees may be explored). OHA can manage the deployment of such funding systems or work in partnership with local recognized organizations

Output 2.3: A reef friendly investment promotion agency(ies) link (s) provides 'site and service' services to private sector investors, reducing risk and impediments to business startup, and promoting an effective investment pipeline.

Specific Interventions: BIOFUND will:

a. Contract specialized technical assistance to work with project districts and municipalities to develop a mechanism to promote and reserve sites and facilitate land acquisition for reef friendly and/ or ecotourism enterprises within the scope of the destination management plan.

Output 2.4: Pollution and Waste Management Systems are created or improved creating alternative employment opportunities and new revenue streams for conservation while reducing degradation.

Specific Interventions: BIOFUND will:

- a. Promote the creation of an integrated waste management system in Nampula serving the coastal mining and development zones of northern Mozambique<sup>15</sup>
- b. Conduct feasibility assessment report on waste generation and estimated waste quantities as well as potential valorisation materials (e.g. plastic, glass, metal, organic) including proposed activities (e.g. establishment of buy-back centres / waste banks for recyclables) in the scope of a private sector or a public/private sector investment in Vilanculos, Inhambane and Ponta de Ouro,

<sup>&</sup>lt;sup>15</sup> The existing industrial landfill in Mavoco for example is a government-owned infrastructure where the day to day operations of which are contracted out to a private waste-management company. Nacala has already carried out preliminary studies for this kind of facility.



to be integrated in a waste management action plan and/or incorporated into the Destination Management Plan.

# Output 2.5: Creation of Destination Business Forums to implement Destination Management Plans.

These will consist of local business owners who will work with and lobby City Councils, District Administrations, and MPA's so that Destination Management plans are implemented.

Specific Interventions: BIOFUND will:

a. Finance technical and organisational assistance to create and provide management training and coaching to Destination Business forums, to coordinate Destination Management and promote and lobby for business friendly MPA and local government management.

### Outcome 3: Restoration and adaptation technologies

### Output 3.1: National regulatory framework for restoration is strengthened

Specific Interventions: BIOFUND will:

a. In cooperation with the Ministry of Land and Environment and MIMAIPS, fund consultants to support the development of a specific framework for the management and protection of coral reefs, including restoration. This will be based on the recent National Strategy and Plan of Action for the Management and Conservation of Coral Reefs (EN-COR), the National Marine Spatial Plan (MSP) and Blue Economy Strategy.

#### Output 3.2: Reef restoration businesses are created

Specific Interventions: BIOFUND will:

a. Through the incubator/accelerator programs (see Output 2.2), fund and assist the creation and growth of in-country businesses focused on coral restoration to cater to the different markets that exist for this service, including biodiversity offsets and reef insurance for example.



# Output 3.3: Biodiversity offset finance unlocked to provide financing for reef restoration.

BIOFUND has pioneered the concept and supported the development of a legal and technical framework for biodiversity offsets in Mozambique. With the 2022 approval of the specific regulations for this mechanism, BIOFUND will be required to take on a role as a service provider in offset implementation.

Specific Interventions: BIOFUND will:

- a. Support setting up a Department within BIOFUND to work as a service provider for biodiversity offsets management plans. This unit will operate as an offset manager.
- b. Pilot biodiversity offsets in marine protected areas to demonstrate proof of concept and quantify potential biodiversity gains.
- c. Through the incubator and accelerator, fund and assist the creation and growth of in-country businesses focused on coral restoration to cater to the biodiversity offsets market.

Specific Example: **Coral reef conservation project in Nacala bay** in collaboration with a private tourism company (Kwalala lodge and JDI Consultancy) that have been working in that region for over 20 years, with a strong interested in coral reef conservation, ecotourism, reef restoration and establishment of a community partnership for long-term conservation and management of this reef important area in north of Mozambique<sup>16</sup>

# Outcome 4: Resilience and Recovery of coral reef-dependent communities to major shocks

### Output 4.1: Existing Climate Emergency Response Fund (BIO-CERF) is reinforced

BIO-CERF currently supports protected areas in the period immediately before and after major climate emergencies to minimize damages, as well as disaster preparedness planning.

<sup>&</sup>lt;sup>16</sup> https://www.youtube.com/channel/UCaakT2rsRMHtnymg-XPtkwQ https://kwalala-lodges.com/



Specific Interventions: BIOFUND will use GFCR Funding for:

- a. Financing the preparation of disaster-preparedness plans for the MPAs in the target areas
- b. Fund investments to be made in preparation for emergencies (such as underground or reinforced storehouses, strengthening a safe harbour location, purchase some readiness equipment such as window protectors or necessary post-event supply stocks like water purification tablets etc.)
- c. Develop an insurance system for the CA assets. Work with insurance companies to develop a general insurance policy on major infrastructures throughout the PA system. Once established, private sector operators will be approached to join the scheme for a fee, making use of the economies of scale that BIOFUND represents.
- d. Investigate the potential for parametric reef insurance for all businesses that depend on the reef at each destination.

### Output 4.2: Destination Management plans include reef insurance

Specific Interventions: BIOFUND will:

a. Investigate the potential for parametric reef insurance for all businesses that depend on the reef at each destination

### Output 4.3: Improved coastal protection mechanisms in place.

These should include nature-based solutions as well as testing artificial reefs for wave protection and habitat improvement.

Specific Interventions: BIOFUND will:

- a. Provide grant funding to NGOs and/or research institutes for testing artificial reefs for coastal protection (Verde Azul and Universities)
- Provide match funding to private sector initiatives using nature-based solutions as well as artificial reefs for coastal protection of assets (assuming above tests are positive)

## 7. Programme and GFCR Equity Fund Engagement Strategy

 Local drivers of degradation that can be addressed by an Equity Fund investment



Specific drivers that can be mitigated and attenuated by Equity Fund investments include the following:

- Unsustainable fisheries
  - Overfishing (of herbivores and others)
  - Manipulation, dragging of nets and anchors, and trampling
- Coastal Development
  - Equity fund investments will offset impacts from oil and gas and mining exploration
  - o Industrial waste leakage into the marine environment
  - Promote coordinated Tourism development and responsible tourism promotors
- Climate events, including cyclones and bleaching equity fund can buffer the effects of these changes
- Sedimentation from upstream erosion and climatic events-equity fund can support mangrove restoration and mangrove carbon which will lead to improved sediment capture.
- Type of business that can be invested in and any existing businesses or partners that can be engaged. Including investment target size if known.

Specific businesses identified vary from site. Investment sizes at this point are partially educated guesses. Investments include:

- Sustainable Ocean Production:
  - Aquaculture (fish and mangrove crab) 5 million USD
  - Seaweed farming in Cabo Delgado, to cultivate Asparagnosis taxiformis, a highly effective and nutritious cattle feed mix that reduces the amount of methane produced by cattle by up to 80% - 200-400.000 for startup phase, 1-2M for full production
  - Aggregation of smaller investments, per site; 3 million USD
- EcoTourism
  - Ecotourism development at scale (provision of site and service sites and/or facilitated land acquisition, investment, and ESIA authorizations 10 million USD
  - Marine Interpretative and Recreation Centre in Ponto do Ouro 2M
- Sustainable Infrastructure and Waste Management
  - Coral Restoration for Biodiversity offsets 2-3M



- Integrated waste management facility (for the north of Mozambique) (unknown cost)
- Sustainable Financing Initiatives
  - Blue carbon (mangrove); 5million USD, Terra Firma Lda. And Verde Azul Consult Lda.
  - Retail carbon and biodiversity lifestyle offsetting, based on the Cardano blockchain: Terra Firma Lda. and Emurgo (<a href="https://emurgo.io/">https://emurgo.io/</a>) 4 million USD
  - Reef, mangrove, and seagrass restoration technology and training.
     Cofinancing value to be determined during planning phase. Verde Azul Consult.
- How the investment can be designed to contribute to the integrated ecosystem approach (e.g., synergies with other interventions in the area such as protected areas, aquaculture, fisheries, blue carbon, etc.)

This has been addressed in other sections. However, and in short, all activities that reduce consumptive pressure on reefs, and all activities that contribute to maximising reef productivity, are synergistic. Most sites require fortified legal protection (MPA creation or improved management); definition of access rights and exclusions; development of cash flows, both improvements to existing as well as new pipeline projects, better coordination of stakeholders at each site (destination management plans) and particular efforts to include and unlock the creativity and contributions of vulnerable and marginalised groups. Training and skills development is key to all interventions.

• Type of pre-investment Technical Assistance needed: enabling work needed to assess, design and structure such an investment

Various types of technical support will be needed:

- Structure and market assessment for blue carbon products
- Creation of non-fungible tokens on the Cardano blockchain
- Market chain studies for specific fisheries and aquaculture products
- Design and feasibility assessment for waste management facility



- Feasibility assessment on the establishment of an integrated tourism development facility
- Feasibility assessments of blue carbon
- Detailed feasibility assessment of the Marine Interpretative and Recreation Centre
- Development of the capacity of local incubators/accelerators for blue economy investments
- Key will be technical assistance on locating and attracting skilled and capable investors able and willing to work in Mozambique's difficult business environment

Type of post-investment Technical Assistance needed: continued support that will be ongoing to ensure that the investment has the intended impact. Given the low level of skills for sustainable blue economy enterprises currently in the country, technical assistance will be needed during the first years of all investments to provide adequate training for operations and management of the different interventions identified and chosen. This is likely to include dedicated technical advisors, learning exchanges and visits, and professional trainings. This may also include supporting sustainability certifications and adapting traditional operations to integrate more eco-friendly practices.

Inputs needed from the Equity Fund

i. Sustainable ocean production to address overfishing, destructive fishing techniques and enhance food security (300 words)

The EF will need to provide matching funds for fisheries and aquaculture businesses.

The EF will also need to provide startup to create non-fungible tokens on the Cardano blockchain as mentioned earlier.

#### ii. Ecotourism to address unsustainable tourism

The EF will be used to provide the capital for provision of site and service sites and/or facilitated land acquisition, ESIA authorizations, and equity investment in new operations.

iii. Sustainable infrastructure and waste management to address pollution



The EF will be used to construct an**d** outfit the Integrated waste management facility, as well as providing startup funding for commercial coral reef restoration provision.

### 8. What are the expected results of the proposed Programme?

During proposal development, BIOFUND will collaborate with UNEP to harmonize the indicators of the GFCR with identified interventions to ensure alignment of the programme and Fund-level results frameworks.

### Output 1.1: Increase in scientific studies on climate refugia is achieved

- Portfolio of climate-resilient reefs established.
  - database to measure/monitor (Also GIS layers).

### Output 1.2: Well-managed MPAs and LMMAs are created

- Increase in live coral reef cover/ reduction in fleshy microalgae, Increase in commercial and/or herbivorous reef fish.
  - o Underwear ecological assessments (and GIS layers).
- Area of coral/mangrove/seagrass protected or restored.
  - GIS layers.
  - Number of hectares of coral reefs in new MPAs.
- Area under better conservation management.
  - Number of hectares of coral reefs in MPAs whose METT score has improved by 20% or more since the beginning of 2022.

### Output 1.3: The development of "entrepreneurial MPAs" is stimulated

 Volume of own revenues generated by MPAs is doubled by year 5 of the programme.

# Output 2.1: Sustainable fisheries and aquaculture are expanded, and new revenue streams developed

- Number of new sustainable fisheries and aquaculture schemes developed (project reports, direct observation).
- Increases in reported fish / mollusc catch by fishers, over time (opinion survey).
- Decreases in damaging fishing arts and practices reported, over time (beach seines, trampling of corals, MPA violations, etc.) MPA management entity records, destination management committee records.

# Output 2.2: Reef-first business are incubated and accelerated



- Increase in the number of blue economy (reef-positive) businesses and in the number of alternative livelihood jobs for reef-dependent communities.
  - Number of blue economy businesses established and revenue generating.
  - Jobs created for local communities.
- Increase in the number of beneficiaries and engagement of local communities
  - o Number of beneficiaries from the Programme.
  - Level of local community engagement.

### **Output 2.3: Reef- friendly investment promotion**

- Number of new commercial scale investments attracted.
- Percentage of sites prepared actually occupied.

# Output 2.4: Pollution and waste Management Systems are created or improved

- 1 Integrated Waste management Centre operational in the north of Mozambique.
- Number of waste management/transformation business created.

### Output 3.1: National regulatory framework for restoration is strengthened

Number of Government policies approved, appropriateness of said policies (appropriateness measured by peer review of Mozambican marine and legal specialists, as documented during public hearings on new measures (which are a part of the Mozambican legislative process).

#### **Output 3.2: Reef restoration businesses are created**

- Number of restoration business initiated (including mangrove carbon, reef restoration, etc.).
- Number of hectares successfully restored, per habitat type.

### **Output 3.3: Biodiversity offsetting**

- By the end of the project, at least 20 companies are channelling funds to biodiversity offsets via BIOFUND.
- At least 2 MPAs are receiving support for biodiversity offset measures (possible from multiple sources).
- Quantified condition-hectares of coral reef improved, as per the national metrics for coral reefs and as per the specific biodiversity offsets management plan.



# Output 4.1: Existing Climate Emergency Response Fund (BIO-CERF) are reinforced

• All MPAs have contingency plans and emergency response plans in place for the most common climate related risks.

# Output 4.2: Destination Management plans and lifestyle footprint offsetting include reef insurance

- At least 2 Destination Management Plans approved by local authorities.
- At least 20M USD in reef insurance schemes established with MZCorInvest Programme support.

### Output 4.3: Improved coastal protection mechanisms in place

• At least 2 coastal protection systems in place using nature-based solutions (including artificial reefs).

### **Cross-cutting:**

For all community-based training, SME incubation, and technical training, a goal of 50% gender balance has been established. Youth participation should be at least 20% (under 25 years) in the same. Note that gender and youth are unrelated strataone participant can represent both their gender and youth.

For all MPA establishment and/or strengthening, two indicators have been chosen: 50% women's participation in management structures (quantitative indicator). Women's and youth concerns are reflected in the management plans and management structures (qualitative indicator).

### 9. Co-implementing partners

- **ProAzul** is a governmental institution created to manage blue economy projects and to facilitate Blue Economy investments throughout Mozambique. They have a number of projects underway including sustainable fisheries work as well as climate resistant coasts. Their role will be to support MZCorInvest projects in these areas.
- Cape Town based **OceanHub Africa** is an "ocean-impact catalyst", supporting ocean-impact ventures through incubation programs and coordinating an international ocean-minded enabling ecosystem. Its mission is to inspire and assist innovative impact start-ups and nurture an environmentally conscious and profitable economy that would effectively mitigate the oceans' overexploitation, pollution as well as the effects of global warming on the oceans. OHA has developed a pan African program for hi-tech-hi growth blue economy start-ups and launched more recently coastal communities' blue entrepreneurship programs in S Africa [ag1] and Tanzania



and will help develop the same concept in Mozambique under the GFCR. They have business and personal/team coaching capacity, product/technology development expertise and are creating a grant disbursement facility.

The first acceleration programme was successfully completed in 2020 despite the circumstances and saw 6 start-ups of different stages (prototyping to growth stage), technologies (digital and hardware) and industries (aquaculture/fisheries, shipping/ship-building, marine renewables/biotechnologies, coastal tourism/ocean-sports, awareness/education, data/exploration) graduating during the Ocean Innovation Africa Summit in Nov 2020. Two other cohorts have since followed to date, resulting in a tripleline impact: social (e.g., more than 60 jobs created), economic (e.g. more than \$7million raised) and environmental (e.g. reduction of plastic and chemical inputs into the oceans, reduction of GHG emissions, reduction of marine biodiversity loss).

OHA's Coastal Community programs aim to strengthen and promote sustainable blue enterprises that will contribute to resilient livelihoods while conserving nature. The objective is to support selected entrepreneurs in developing and piloting ocean ventures: Incubation program is designed to act as a driver of development for ocean ventures with a financially viable model and a potential to scale, by providing them with training, network, coaching and seed-funding. Particular attention and priority are given in the program to ventures that:

- Demonstrate a strong **gender** and/or **youth** transformative approach
- Are geared towards improvement of vulnerable populations' livelihood
- Are **eligible to existing funding mechanisms** beyond Global Fund for Coral Reef: Blue Natural Capital Financing Facility, Global Environmental Fund, Climate Adaptation Lab, local governmental grants, etc.
- **Focus on sectors** such as fishing, aquaculture and seafood farming, horticulture (plant-based agriculture), coastal tourism and ocean sports, mangrove, coral or seagrass conservation activities, among others.
- Have **strong institutional and financing** (saving and credit) arrangement.
- **Living Labs Federation (LLF)** is an impact innovations accelerator that builds programs combining local impact projects (from Initiators) and solutions (from Innovators).

These programs are adapted to the innovator's maturity stage, from ideation to commercial availability.



LLF supports Initiators such as multilateral agencies, governmental organizations, NGOs and corporates with aligned intentions, actions, and impact. They scope solutions for these Initiators with start-ups and ensure success between the two by providing access to global Enablers (capacity building, knowledge, expertise, blended funding).

LLF has deployed projects on Blue Economy, Food Waste, Agritech. It has also provided entrepreneurship courses, expertise, training, and support to various Initiators and Innovators.

LLF's outreach is global and activities are covering LatAm, Africa, Indian Ocean and South-East Asia. LLF is an enabler uniting global actors for solving local challenges:

LLF is also a co-founder of Innovation for Sustainability Alliance ('IxSA'-www.ixsa.earth) – a network of more than 800+ members representing key players in the world of investment, innovation, acceleration, sustainability, NGOs, GOs sharing a set of principles and operating models. IxSA gathers collective knowledge to create frameworks, guides, solutions to boost innovation for sustainability.

Example of projects managed by LLF:

- Map and build a database of all the local and Indian Ocean innovation ecosystem: supported by Cap Business OI (Union of Chambers of commerce) and FrenchTech (Mayotte).
- Build an entrepreneurship training program with local accelerators: Done for OIF in Indian Ocean, EDB (Economic Development Board) in Singapore and BPI in France.
- Build a pitching event to promote local innovators and seek funding: Done with EDB, Mo Angels, ABAN, Untapped, Investable Oceans...
- Scout for specific technologies and build implantation projects: Done on food waste in FnB with Business Mauritius, Cap Business OI, incubation of a Salicornia farm in Rodrigues, ...
- Design Sprint to launch transformation plans of the local economy involving existing corporations: Done with Cap Business OI, and several private organizations in Singapore with our partner <u>Co-Creation Lab</u>

OHA and LLF are partner organizations with some common and also specific activities. OHA takes the lead on Africa Blue Economy related projects when both organizations are involved.

- **Marine Megafauna Foundation (MMF)** is a non-profit marine research and conservation organization based in Tofo, Mozambique. Their vision is a world in which



marine life and humans thrive together. MMF tackles the root causes by educating and empowering local communities to manage their marine resources sustainably through innovative education, pioneering research, and community empowerment. In the project they can provide training courses to local communities, play the role of a neutral information hub for the tourism industry, and backstop the creation of a new MPA in the Tofo area.

- **Terra Firma Lda.** will develop in coastal and mangrove areas a blockchain- based crowdfunding/ retail sale programme of blue carbon and biodiversity credits, linked to small and micro-business finance, tenure and access issues, and marine conservation. Will also assist in clarifying land tenure issues (especially for mangrove areas) and defining and legally documenting community limits within target areas.
- **-RARE Mozambique** is dedicated to improved livelihoods for fishers as well as improved marine conservation. They have been active in the creation of Locally Managed marine areas with a focus on Northern Mozambique. MzCorinvest is negotiating with them to lead creation of a new MPA, with associated work with local communities, in the Nacala geography, as well as in Vilanculos Bay in the Southern seagrass beds. Rare worldwide also has worked with the GFCR in the Philippines, and would advise and support BIOFUND as asked/ necessary in overall programme design and management.
- Wildlife Conservation Society-Mozambique (WCS-Mozambique) has established an MoU with the Government of Mozambique (MIMAIP) to support marine conservation activities and sustainable use of biological resources in this environment, and support the Government to achieve its national goals of expanding the network of MPAs and supporting mitigation of the effects of climate change through ecosystem-based approaches. There are thus many synergies between WCS projects and MZCorInvest, especially in terms of MPA and LMMA creation, alternative livelihoods and ecosystem restoration. Those could be supported in part by the MZCorInvest and WCS could play a role in liaising with government counterparts, in the implementation and coordination of activities under outcomes 1, 2 and 3, as well as engage/coordinate local organizations that are already doing groundwork on community management and sustainable fisheries.

Verde Azul Consult Lda. is a Mozambican management and consultancy company established in 1999, dedicated to finding solutions to current and future social and environmental challenges and sustainable development in Mozambique. Verde Azul has four areas of specialization:

Sustainable Land Tenure, Land Access and Land Use Management, Community
Participation, Environmental Research and Management (people, ecosystems and entire



biotic community)
Project Management and Business Development.

Verde Azul has long experience in marine management, including the development of MPA management plans as well as large agricultural investments. Verde Azul will create partnerships with communities to establish mangrove carbon products in the Primeiras and Segundas Area (and others), and will lead on coral reef restoration, establishing it as a viable business to be accessed by those in need of coastal protection, biodiversity offsetting, destinations, and international donors and the GoM.

### 10. Leadership and implementation coordination of the Programme

BIOFUND is a private non-profit foundation with public utility status in Mozambique, dedicated to financing biodiversity conservation.<sup>17</sup>

The Mission of BIOFUND is to support the conservation of aquatic and terrestrial biodiversity and the sustainable use of natural resources, including the consolidation of the national system of conservation areas.

BIOFUND bases its operations on three inter-related strategic pillars: Consolidating BIOFUND; Financing conservation, with a focus on the National System of Conservation Areas; and promoting the consolidation of an enabling environment for conservation.

Each of BIOFUND's strategic pillars contributes to the achievement of the goals set out in the Sustainable Development Goals (SDGs).

<sup>&</sup>lt;sup>17</sup> See www.biofund.org.mz for more details.











































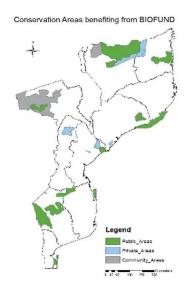


Figure 7. BIOFUND Strategic Pilars

Management of BIOFUND's operations is vested in the 31-staff Secretariat, headed by the Executive Director. The Executive Director is appointed by the Board following competitive selection. The secretariat is composed of professionals with the skills and experience needed to carry out not only the administrative, but also financial and operational activities.

BIOFUND brings to the table a series of already-existing operating and granting procedures which have been approved by the World Bank, AFD, EU, USAID, and other major international donors, and an implementation team closely linked to the national conservation processes and authorities.





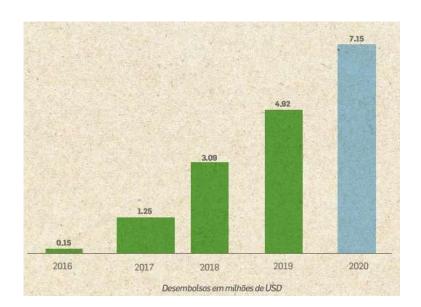


Figure 8. BIOFUND Beneficiaries in 2021 (left) and Cumulative disbursement of BIOFUND in USD (right)

BIOFUND is one of more than fifty Conservation Trust Funds (CTFs) that have been created since the mid-1990s to support biodiversity conservation and related environmental actions. The creation, management, and evaluation of CTFs are guided by the Practice Standards for Conservation Trust Funds<sup>18</sup> to which CTFs voluntarily subscribe. In 2019 an independent assessment of the foundation was carried out which examined the status of actions taken by BIOFUND in six areas<sup>19</sup> that are considered key to establishing the effectiveness of a CTF. Using this benchmark, BIOFUND meets or exceeds 83 of the 85 applicable norms that are attributes of successful CTFs.

Within the BIOFUND Secretariat, the GFCR initiatives will be overseen by the Innovative Financing Directorate, which leads the organization on the development of non-traditional funding instruments for conservation, such as biodiversity offsets, PES, private sector engagement and impact investment.

#### Specific Governance Arrangements

The project will be implemented by BIOFUND and the Blue Economy Development Fund (ProAzul).

<sup>18</sup> Practice Standards for Conservation Trust Funds, Spergel B. and Mikitin K., Conservation Finance Alliance, October 2014.

<sup>&</sup>lt;sup>19</sup> Governance; operations; administration; asset management; resource mobilization; monitoring, evaluation and reporting.



BIOFUND will be the fiduciary agent for the MZ CorInvest Program, as well as the overall coordinator of all activities. Fisheries and aquaculture interventions will be implemented by ProAzul, and other interventions will be implemented by other partners under contractual agreements with BIOFUND. BIOFUND, in collaboration with ProAzul, will lead on technical supervision and coordination, project planning, quality oversight, communication, safeguards management, reporting, procurement, financial management, and activities' progress monitoring and reporting.

A dedicated Project Implementation Unit (PIU) will be established in Maputo at the BIOFUND office. The PIU will be led by a project coordinator, and will include the staff to be identified during full concept note stage, but possibly including a procurement specialist, financial management specialist, safeguards specialist, investment specialist, communication specialist and M&E specialist. This team will be supported by BIOFUND fiduciary management. The project coordinator will have overall responsibility to supervise the PIU staff in their planning, organizing and executing of administrative, technical and legal activities of the project. S/he will liaise with the project partners to ensure strong local participation in the implementation of the project. The coordinator will ensure coordination with BIOFUND and ProAzul, who will carry out procurement functions for activities under their leadership.

ProAzul currently funds projects through two windows. Window 1 targets artisanal fishers, traders, fish processors and transporters, carpenters and naval mechanics, as well as other value chain operators, providing matching grant funding of up to MT 1.2 million for 80% investment in assets defined in a limited list of options (equipment for product handling and conservation, and replacement of vessels and gear), subject to participation in management training sustainable use of natural resources and practices to reduce post-harvest loss, as well as signing a commitment to sustainable management of natural resources. Window 2 targets MSMEs that partner with small-scale fishers and aquaculture operators, providing matching grant funding of up to MT 20 million for a 70 percent investment in goods, equipment and services, and subject to participation of the beneficiary in training on sustainable management of natural resources, signing a commitment to sustainable management of natural resources. EF projects will also be supported by Window 2. ProAzul has a dedicated Implementation Manual for Mais Peixe, which will be part of the overall operating procedures.

The project will work with partners on the ground. Experienced international and local NGOs, local CBOs, companies, and Service Providers (SP) as detailed in the partner sections above.

A Project Steering Committee (PSC) will meet twice a year in Maputo and virtually, and be responsible for i) providing overall policy guidance and decision making on all issues related to the project, ii) facilitate coordination among relevant sectors,



agencies, and partners, iii) reviewing and approving annual work and expenditure plans submitted by PIU coordinator, iv) ensure project alignment with other Government Programs and provide strategic direction. As such, the PSC will ensure there is adequate coordination between the main PIU and the line Ministries. The PSC will be composed of representatives of BIOFUND, ProAzul, MIMAIPS, ANAC, specific project partners, the private sector, and civil society organizations. The exact composition and the Presidency of this body will be finalized during the full program development phase.

The M&E function focuses on data collection and reporting on key performance input, output, and outcome indicators, including targeted data collection, surveys, participatory assessments, and midterm and end-of-project evaluations. The Results Framework will improve the M&E system by sourcing new data as presented in the following paragraphs. It will be integrated in BIOFUND and count on the support of other institutions.

### 11. Expected period of implementation

The MZ CorInvest Programme will be implemented for 8 years. This can be broken down into 3 phases:

Phase 1: 24 months. This phase will set up the incubators and link them to the international partners, hire all the project staff and make contractual relationships with the different project implementers. This phase will also carry out the more detailed feasibility and baseline assessments necessary, pipeline scoping and design with the GFCR Equity Fund, as well as carry out several calls for innovation in order to identify pre-viable business models and entrepreneurs and initiate the training and incubation/acceleration of the identified national investors.

Phase 2: 36 months. Phase 2 is focused on the startup of the different reef-positive ventures, continuing training and acceleration of business models and specific investments and mobilizing the GFCR Equity Fund and other external investment funding.

Phase 3. 36 months. This phase is focused on achieving break even volumes on the different businesses and expanding the most promising ones to a diversity of sites across the country.



### 12. Cost, co-financing and leverage potential of the Programme

Costs will be further refined during proposal development but are estimated at USD 12 Million for the 8-year program. However, there is significant co-financing and leverage potential due to the presence of other, complimentary projects under development or underway. These include:

- 1. The Millennium Challenge Corporation's 50-million-dollar investment in coastal and marine management that overlaps thematically in the areas of blue carbon, MPA's, improved fisheries livelihoods, nature- based coastal protection, community organization for improved marine and coastal management, and overlaps geographically with the Primeiras and Segundas Marine Protected Area
- 2. USAID's Resilient Coastal Communities Project (under development), that overlaps with Nacala and the Primeiras and Segundas Marine Protected Area
- 3. The USAID SPEED Programme's 'Promoting and Protecting Mozambique's Marine Biodiversity Programme' countrywide policy and piloting project aiming to improve the enabling environment for marine conservation and blue businesses (under development).
- 4. BIOFUND's own investments in all the existing MPA's, including the EU (PROMOVE Biodiversidade project, managed by BIOFUND 3.5M UD in APAIPS). The APAIPS is also the only protected area in Mozambique that benefits from a small but long-term grant originally donated from Conservation International, that yields annual returns from BIOFUND endowment investment. BIOFUND also has an intern programme for training and developing the next generation of conservation leaders, as mentioned earlier.
- 5. World Bank investments in the landscape-level MozNorte project in APAIPS (approximately 1.5M USD).
- 6. The Mais Peixe Sustentavel programme of ProAzul (<a href="https://www.proazul.gov.mz/em-curso/">https://www.proazul.gov.mz/em-curso/</a>) mentioned earlier.
- 7. A possible investment from the Total Energy Corporation in MPA creation in Palma District, Quirimbas Archipelago, and others.



### 13. Country conservation ambition

- Mozambique ratified multiple international convention for the protection of biodiversity, such as:
  - International Convention for Biological Diversity (CBD)
  - Sustainable Development Goals
  - o High Ambition Coalition's 30X30 Challenge
  - RAMSAR convention
- Mozambique launched in 2019 a biennial international conference: Growing Blue, which recognizes the importance of capitalizing on the sustainable use of marine resources to boost national economic growth in respect with the rich marine biological heritage of the country. As a result of this first conference, the blue economy development fund ProAzul was created as a platform that acts as a gateway and link between stakeholders, providing information about the financing needs of projects aimed at the development of the blue economy, has been a key development. ProAzul focuses in particular on screening, monitoring, and realization of potential opportunities for the blue economy in Mozambique, where it could be focusing in particular on ports and related infrastructure; mineral and hydrocarbon resources; fishing and aquaculture; culture, tourism and sport; maritime transportation and shipping industry; energy, and research and development.
- The government recognizes coral reefs as critical ecosystems in all its legislations related to the conservation and management of nature and the coast/ocean.

### Relevant government policy, plans and actions.

- Law of the Sea and Policy of the Sea (POLMAR)
- National Biodiversity Strategy and Action Plan
- National Strategy and Action Plan for the management and conservation of coral reefs
- National Strategy and Action Plan for the management of Mangrove
- Marine Spatial Plan
- KBA declaration portfolio
- Design of scenarios for the expansion of the national MPA network
- Legalization of community fishing councils and legal framework for locally managed marine areas and resource recuperation areas
- Biodiversity offsets framework
- National Rural Development Strategy
- National Blue Economy strategy



- Blue economy Development Fund (ProAzul)
- National Aquaculture Development Strategy

# 13. Risk assessment (300 words max.) (5pts)

Potential Risk	Response	Comments
Low level on UN's Human development Index (HDI) plus high population growth creates risk of short-term exploitation by a desperate population	Integrate destination communities into MPA's making sure that they are managed for increased marine resource capture as well as biodiversity conservation and reef friendly businesses	Mozambique's HDI is 181 out of 189. Population growth rate is 2.9 % p.a.  Special outreach for unemployed youth in alternatives such as freshwater aquaculture and other business opportunities will be essential to engage this demographic.
Mozambique is not an easy environment for business; there is concern that insufficient investors may be willing to assume associated risks	Incubation and investment facilitation services are designed to reduce risk; participation in the GFCR itself may improve BIOFUND efforts to 'market' business opportunities.	Mozambique was ranked 138 of 190 countries in 2021, in the WB Ease of Doing Business index. One of the most important factors was land acquisition (which is the motive behind Output 2.3). Business incubators may address many of the additional problems, such as EIA requirements, licensing, etc.
Climate change related weather events damage not only reefs, but also human	Selected programme geographies lie outside the historical 'cyclone	According to the World Bank, Mozambique is the 3rd most vulnerable country in the world to climate change, with a recent history of floods, cyclones, and torrential rains that have caused



livelihoods and infrastructures (roads, bridges, communications, electricity), limiting success of reef- friendly businesses and discouraging investment.	belt' of Mozambique, so risks are reduced, but not entirely absent, as recent cyclones have hit both north and south of this area.	extensive damage to public infrastructure, including infrastructure that supports reef friendly businesses.  While reef insurances and the Existing Climate Emergency Response Fund (BIO-CERF), mitigate environmental impacts, destination management plans should include mitigation measures for human infrastructure and livelihoods as well (such as ensuring adequate drainage channels for runoff, nature-based solution for storm mitigation, etc.)
The armed conflict affecting the northern coast is currently suppressed but not overcome yet.	Possibility of partnership with Total Energies would mean that a highly influential ally with significant political clout would lobby hard for a continued security presence in the area.	Both Palma and Mocimboa da Praia Districts are currently within a security cordon/Zone maintained by international peacekeeping forces from Rwanda.  The worst-case scenario is that this component of the programme would be cancelled before disbursement/ implementation. This component would initiate in year 3 to allow time for evaluation of risk.

With respect to safeguards, the programme does not anticipate any contradictions with the WB ESS safeguards framework. No resettlement is involved and no additional risks ranking higher than low/ moderate for the environment or humans are anticipated. One example of a low/ moderate risk might be increased in the risk of traffic accidents due to increased movement in destinations. City Councils and destination management plans may address this. Another might be increased STD transmission due to transactional sex. Mitigation would include working with NGO's and government agencies dedicated to amelioration of this sort of risk. There are no foreseen reputational risks to the GFCR at this time.



### **15. Preparatory Grant Activities**

The principal Preparatory Grant activities are as follows:

- 1. Compile an inventory of the existing blue economy businesses in the country
- 2. Carry out an inventory of the existing business incubators in the country, determining:
  - a. Capacity and experience.
  - b. Gap analysis on governance, science, and entrepreneurship
  - c. Refine strategy, define KPIs and targets, define key factors of success and priorities actions
- 3. Scoping studies will need to be carried out on some of specific interventions proposed, such as:
  - a. Scoping study for land and sea tenure activities needed, including identification of affected Communities and Community fishing councils.
  - b. Scoping studies for establishment of new conservation areas/ rezoning of existing ones. In-depth threat analysis for each site.
  - c. Scoping of coral and other habitat restoration needs;
  - d. Scoping of potential projects needing to offset in marine/coral environments
  - e. Identification of land for Ecotourism ventures and negotiation with Municipalities and Districts
  - f. For blue carbon activities within the Primeiras and Segundas Landscape, establishment of draft collaborative contracts
- 4. Consultation process on the activities and interventions proposed in the different regions of the country as well as at the national level, preliminary dialogue about management plans and elements of destination management.
- 5. Administrative preparation
  - a. Recruiting partners and defining TORs, agenda, and operation models.
  - b. Human Resources preparation (TORs) and recruitments for the implementation period as required
  - c. Finalize Steering Committee and oversight procedures
  - d. Assess adequacy of current BIOFUND/ProAzul procedures for GFCR necessities and adapt as needed

For this process it is critical that BIOFUND contract specialized technical assistance in the form of consultants to help carry out all this work, as the current staff of the Foundation is unable to do so unaided.



### **OVERVIEW OF FUNDING REQUESTED**

Indicate the financing needs from the GFCR grant window and the leverage ratio of private sector investment capital. Additionally, please provide a very brief description of the activities in each funding category. The below if for the full programme vision, not the preparatory grant.

Category	Amount (USD)	Description
Baseline studies	1M	Specific baselines studies will be conducted in this category, including:  - Studies on climate refugia - Local driver(s) of degradation addressed - Creation of additional no-take zones and special management zones - Creation of additional no-take zones and special management zones (rotational harvesting zones for example) - Potential for New MPAs - Benefit partnerships between local communities and ecotourism ventures tourism fees for MPAs - Carry out studies at the CA level on the " protection provided " by Cas - Diversification of revenue streams through biodiversity offsetting, individual lifestyle offsetting, and others - Assess seed investment in the blue carbon market



Pipeline projects	7M	<ul> <li>Start-up reef-positive artisanal/commercial fisheries enterprises</li> <li>Assessment of diversified aquaculture/mariculture businesses</li> <li>Support to development of ecotourism ventures</li> <li>Baseline on waste management practices and services in key coastal areas</li> <li>Valuation of marine plastic and debris removal</li> <li>Investigate the potential for parametric reef insurance for all businesses that depend on the reef at each destination</li> <li>Other activities will be included based on the results of the preparatory phase</li> <li>Support existing MPAs and LMMAs</li> <li>Incubate start-ups and accelerate</li> </ul>
		existing projects  - Support reef and other habitat restoration startup and pilot activity; monitor results.  - Support the Biodiversity Offsets Department at BIOFUND  - Blue carbon projects  - Waste management projects
Programme development/ Operations	4M	<ul><li>Project personnel</li><li>Project management fee</li><li>Equipment's and materials</li></ul>
TOTAL	12 M	- Total cost of activities listed above
Expected Programme	1:2	



leverage ratio of grants to investment capital		
Expected Programme leverage ratio of grants to revenue generation	1:8	Grant possibilities as noted earlier in the text, from MCC, USAID, BIOFUND itself, and others.



## **ANNEX 1: TECHNICAL REVIEW CRITERIA FOR CONCEPT NOTES**

Category	Criteria	Weight in category	Weight of total
	1.1 Submission is appropriate, complete and follows guidelines outlined in Concept Note template and the budget and workplan template such as includes inclusion of maps, Theory of Change figure, etc.	Pass/Fail	
Mandatory     criteria	1.2 Concept is aligned with national priorities and demonstrated by a government letter of support for the programme	Pass/Fail	
Criteria	1.3 Vision for programme timeframe is aligned with GFCR expectations (3-10 years)	Pass/Fail	
	1.4 Concept Note demonstrates blended finance approach to increasing the resilience of priority coral reef ecosystems and associated communities	Pass/Fail	
	2.1 Alignment to the GFCR Theory of Change and integrated ecosystem approach.	x/15	
	2.2 Blended finance approach is viable and applied to generate revenue streams, leverage investment capital, and achieve financial sustainability. This criterion includes leverage ambition.	x/10	65%
2. Relevance	2.3 Selected Priority Sites satisfy the following criteria: climate refugia, biodiversity value; socioeconomic value; potential for revenue streams; impact potential	x/10	
2. Neievanie	2.4 Convening Agent role is well reflected through appropriate and diverse partnerships, government relationships, ability to plan coordination.	x/10	
	2.5 Coral reef resilience and associated socio- economic impacts are project priorities and demonstrate ambition for scaled and sustained impact. Further, programme aims to address issues of gender and social inclusion.	x/10	
	2.6 Needed enabling conditions are identified and reflected within the programme activities	x/10	
	3.1 Governance arrangement are appropriate, efficient, and inclusive of stakeholders.	X/10	
3. Delivery and operations	3.2 Partners' Capacities (technical capacities and/or abilities) to implement a holistic approach towards conservation, community and private sector engagement objectives	X/10	35%



3.3 Risks and mitigation factors delineated	X/10
3.4 Envisioned full programme cost adequacy (cost-	
efficiency and appropriateness). Scoring is lightly	V/F
weighted due to need for further pipeline scoping	X/5
during proposal development.	

#### **ANNEX 2: ADDITIONAL BASELINE DATA**

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#### **ANNEX 3: BUSINESS MODELS AND FINANCIAL INSTRUMENTS**

For the purposes of brevity this annex provides additional information to assist the understanding of previous text.

### Outcome 1: Protect priority coral reef sites and climate refugia.

### Output 1.2: Well-managed MPAs and LMMAs are created

- Expansion of MPAs (in line with GoM High Ambition Coalition Objectives)
  Marine Protected Areas)
  - Creation of additional no-take zones and special management zones (rotational harvesting zones for example) within the Maputo National Park and associated Environmental Protection Area.
  - New MPA, Tofo and northern Inhambane Bay (area of Ilha dos Porcos e Ilha dos Ratos, and seagrass beds and mangroves to the east)
  - New MPA, southern Vilanculos Bay, protecting corals, extensive seagrass beds, mangroves, and specifically seahorses and pipefish, with links to the São Sebastião Wildlife Sanctuary and Bazaruto National Park.
  - Creation of additional no-take zones and special management zones (rotational harvesting zones for example) within the Ilhas Primeiras and Segundas Marine Protected Area
  - New MPA, Nacala Bay, including important corals, mangroves, seagrass, and blue highways
  - New MPA, Possible creation of the Rovuma Marine Reserve, in Palma District, in partnership with Total Energies and ANAC.
- Main purpose of most MPA's will be to protect coralline habitats and promote fish capture through the spill over effect. High component of local management will positively affect local buy-in and sustainability)
  - Reef categories particularly in need of protection include:
    - Those under considerable human stress (manipulation, trampling, net and anchor dragging sedimentation from coastal and riverine deforestation)
    - Those with good natural protection from heat and other climate change effects (i.e., near to deep water, like the canyons of Cabo Delgado; or near to upwellings, like the Primeiras and Segundas Archipelago)



- Those already adapted to heat and turbidity, such as those in Nacala Bay and Palma District tidal flats, so these can act as a larval source for other areas coming under stress.
- Active encouragement of management / benefit partnerships between local communities and ecotourism ventures.
- establish finance mechanisms that contribute to financing the operation costs of existing and to be declared MPAs in the long-term using blended finance. This may include:
  - Article 49.1 of Law 16/2014 provides that "Fees are due for access and the use of natural resources, for compensation of conservation efforts and for ecological services of the conservation area." To take advantage of this source the following should be done:
    - Carry out studies on the level of CAs on access and the use of natural resources, for compensation of conservation efforts and for ecological services of the conservation area in CAs.
    - Set the amounts to be charged.
    - o Investigate implementation mechanisms and collection.
  - Improving the structure of tourism fees for MPAs, developing specific tariff regimes for the most highly visited sites (willingness to pay studies).
  - Strengthening MPA access-fee collection system (implementation of boom-gates at key physical access points, establishing frequent user payment schemes, cooperation schemes with tourism accommodation providers, creating fee collection businesses) using Ponto do Ouro as a pilot area.
  - Improvement of CA management models by facilitating comanagement agreements/opportunities.
  - Maximizing state support for MPAS.
    - Support ANAC in the process of registering on the state payroll new and existing rangers to secure long-term government salary support.
  - Mobilizing new possibilities, taking advantage of the terms of the conservation law of 2014
    - 1. Article 11.1 of Law 16/2014 states that "A public or private entity exploring natural resources in a conservation area or in its buffer zone, benefiting from the protection afforded by a conservation area, shall contribute financially to the protection of biodiversity in the conservation area in question." To capitalize on this source, the following should be done:



- a. Carry out studies at the CA level on the "protection provided "by CAs.
- b. This should start with the protection services against coastal erosion and mitigating the impacts of storms, provided by natural infrastructure, such as coral reefs, mangroves, islands and coastal dunes. These services are relevant to the coastal CAs where there are substantial investments that potentially benefit from these services, most relevantly the Primeiras and Segundas Archipelago, the QNP, and the RMPPO.
- c. Once the services and beneficiaries have been identified, start discussions with the beneficiaries about the appropriate values and the mechanisms for their collection.
- Diversification of revenue streams through biodiversity offsetting, individual lifestyle offsetting on the Cardano Blockchain, and others as described below.

### • Output 1.3: The development of "entrepreneurial MPAs" is stimulated

- Intervention 1.3.1: Channel compulsory and voluntary compensation financing from the private sector to MPAs:
  - Creating a platform to help direct CSR funding to meet specific needs of specific MPAs protecting coral reefs thus linking MPA managers to existing CSR funds.
    - Support for the mechanism for Biodiversity offset funding to be channelled to MPAs and Community Managed Conservation areas. Note that biodiversity offsetting diploma has been signed so all the legal framework is in place. What is needed is to develop a compliance and implementation framework that makes it easy for the company needing offsets to identify and implement an offset (essentially subcontracting of the service to a specialized entity (ies). What is needed here may be business incubation.

### • Intervention 1.3.2: Promoting energy-efficiency in MPAs

 Supporting renewable energy alternatives through a variety of mechanisms (concessional loans, equity, tax incentives and reductions, de-risking) that will promote energy efficiency of MPA management operation, thus reducing operational costs.



## • Intervention 1.3.3: Blue Carbon Projects in Ponta do Ouro and the Primeiras and Segundas Marine Protected Area

- Unlocking seed investment in the blue carbon market to generate returns to be directed to MPA operational costs.
- Strengthening protection and restoration of the Maputo National Reserve 5399 ha of mangroves, and the Primeiras and Segundas MPA with 100,000+ ha of mangrove
- Mangrove conservation and restoration, especially in MPA's, who, by law, own the carbon that lies within their borders, and in selected destinations to manage. NB: Mozambique has much of the needed legislation science, and preliminary work in place) See <a href="https://fnds.gov.mz/mrv/">https://fnds.gov.mz/mrv/</a>; <a href="https://www.fnds.gov.mz/index.php/en/our-projects/project-list/redd">https://fnds.gov.mz/mrv/</a>; <a href="https://www.arcgis.com/apps/MapSeries/index.html?appid=6602939f39ad462-6a10f87bf6253af1e">https://www.arcgis.com/apps/MapSeries/index.html?appid=6602939f39ad462-6a10f87bf6253af1e</a>, and others).

## Outcome 2: Transform the livelihoods of coral reef-dependent communities.

#### • Output 2.1: Sustainable fisheries and aquaculture are expanded

#### • Intervention 2.1.1: Expanding sustainable fisheries

- Work with ProAzul's Programme Mais Peixe Window 1: Use the existing portfolio of project to identify reef-positive projects and assist them to leverage the required match funding by linking them to potential investors.
- Work with private financial institution or investors to provide concessional loans or equity investment to start-up reef-positive artisanal/commercial fisheries enterprises.
- Supporting commercial enterprises that improve fishing communities' access to markets and help improve the value-chain thus increasing community revenue from their fishing products (road + transport, cold-chain businesses, processing facility, distribution facilities/deals/guaranties, renewable energies, certification labels).

#### • Intervention 2.1.2: Expanding sustainable aquaculture

 Expanding the commercial aquaculture sector has been identified by the Aquaculture Development Strategy (2020-2023) as one of its priorities for investment and a means to diversify its economy and revenue base. The Government is already in consultation with industry



and development partners to review the enabling environment and map out the sector's key stakeholders, needs, potential market, investment opportunities and financing options through ProAzul. A preliminary roadmap has been laid-out addressing enabling factors and opportunities, risks and mitigation measures. In partnership with ProAzul, WB, MEF and NGOs, the Programme will seek to support key stages that can be addressed with blended finances approach (combination of public finance as grants and concessional lending to strengthen policy, institutional & technical capacity, market-based incentives and private investment as DFI/PPP, guarantees for commercial loans and global capital for commercial aquaculture operations), contributing to leverage the need for the development of technical and institutional capacity, productive and supportive infrastructure and strong scalable proposals projects to attract investors both public and private over a timeline of 5-10 years. Potential ROI for investors will include license fees; domestic and export sales of fish/aquaculture products; tax revenue, equity percentages. Existing and new commercial enterprises, the business community at large, academia, NGOs, the Government and local communities will be the direct beneficiaries, while decreasing fishing pressure on marine ecosystems and coral reefs.

- Development of diversified aquaculture/mariculture businesses
- Development of regionally leading markets for the sale of fish, seaweed, crab and sea cucumber products from sustainable aquaculture. Focus on mangrove crab and cape sand oyster as we know how to do these and there is a crab market developing in Zambezia.
- Focus on Tilapia in central/ northern Mozambique as water is plentiful and their are commercial supplies of single-sex fingerlings already available.

## • Output 2.2: Reef-first business are incubated and accelerated

- Intervention 2.2.1: Mozambique Blue Cluster
  - Identified as a priority instrument by the WB for ProAzul, the Mozambique blue cluster would include three closely related components: an incubator, focused on building entrepreneurial skills for start-up businesses and their entrepreneurs and networks for young Mozambicans to develop blue economy



businesses; an accelerator to provide mentoring and investor matchmaking to promising start-ups in exchange for a seed investment, and the services of the 'cluster' to provide market insight and advocacy for the interests of the blue economy private sector. With a timeline of 5 years for the first round of funding, approximately US\$ 1.65 million would be required (650k grant funding, 1 million investment capital) and could be sourced from a combination of grants for cluster and incubator and seed finance provided by venture capital/impact funds in exchange for % equity stake in start-ups in accelerator, with a typical IRR 25-48% IRR for accelerators (not assessed for the cluster and incubator). As a first step, the Programme will work with ProAzul and partners such as CTA and the Academia to survey appetite for a blue economy incubator, accelerator and cluster and develop business plan on which to begin fundraising.

### • Intervention 2.2.2: Destination marketing hub and training center

- The Programme will assist to set up and fund a tourism association to do destination marketing, coordination with communities in conservation, participate in destination management, and promote the variety of products on offer, including all operators in the area, do accommodation promotion and bookings. (destination website especially). In time, membership fees (for tourist and touristic operator) will turn the hub financially self-sustainable.
- In parallel, the Training Center will build a skilled workforce for the tourism industry (e.g., dive Masters, diving instructors, boat skippers, dive compressor technician, tractor drivers, hospitality training school scholarships, lifeguards) which can respond to the needs of the member businesses.

### Output 2.3: The development of sustainable tourism at scale is facilitated

 Potential idea: Support to development of ecotourism ventures, particularly a linked route (A' big five' for diving) using tourism operators for divers and snorkelers that starts in Ponta de Ouro, passes through Zavora, Tofo, Bazaruto, primeiras and Segundas, Nacala, Quirimbas, and Lake Niassa), with award patches for each destination and an honour roll for those who complete the full route. Will need a website and coordination between operators).



- Set up a similar birding route along the coastline, to increase destination flow-through without adding pressure on the underwater environment.
- Online app for 'retail' carbon and biodiversity impact offsetting, built on
  the CARDANO blockchain using non-fungible tokens linked to specific
  plots of mangroves, to create a real value and market for plots
  (represented by tokens) linked to value of CARDANO cryptocurrency.
   See <a href="https://www.wren.co/about-us">https://www.wren.co/about-us</a> for an example of a similar idea
  (though not really place-based, nor using cryptocurrency to create a value
  proposition for the consumer, other than the gratification of a carbon
  neutral lifestyle). This app forms the basis for many other offshoots
  below.
- Integrate coral friendly business incubators into areas with tourism potential and create simple but widely supported destination management plans, working with communities, operators, and local government.
  - (the local NGO Ntumbuluku has already created a broad-based coalition to work on these issues in Vilankulos near Bazaruto, for example).
  - Destination management includes zoning, waste control, and sets frame conditions for tourism development so sites are not overwhelmed; destination management plan has at least three objectives:
    - 1. Control impacts of tourism so that sites are preserved in an attractive, close to pristine state;
    - 2. Increase both tourist expenditure per day and length of stay in each destination;
    - 3. Creation of voluntary local conservation fund applied at all accommodation (the trick is to add it to the bill automatically, and then ask the guest if it should be removed, as it is optional, then compliance gets close to 90%. Done the other way round, compliance rarely gets out of single figures).
  - Business incubators (see 2.2 above) assist local people to create hospitality products in support of the first two objectives above. Products may include homestays, rural visits, shows (dance and song), traditional cooking and brewing classes, adventure trips (sailing on local dhows (such as Sailaway offers in Bazaruto), fishing and snorkelling. There are three elements:
    - 1. Basic skills training for hospitality, guiding for fishing and birding, Divernaster licensing, all with crosscutting issues of inclusion (gender, youth, and others);



- 2. Initial business planning and ongoing coaching
- 3. Crowdfunding of promising projects, using perhaps the CARDANO blockchain, with tokens representing shares or loans to the local business. Differs from traditional crowdfunding in that there is a double value proposition for the buyer as noted above (joy of giving/ helping as well as returns on loan or investment)
  - There is an opportunity to link women entrepreneurs to women, youth entrepreneurs to youth, etc. can be targeted specifically to increase outside investment).
- Two additional things to note here:
  - Crowdfunding and carbon neutral lifestyle offsetting can be run through a public benefit corporation(s), established for this purpose.
  - Local benefit receivers make commitments to environmental action as a part of their loan/benefit package. Direct contact to be established with loaners investors to monitor compliance and a hotline to the incubator established in case of problems.
  - Local business development will create both alternative jobs as well as a cadre of local environmentalists.
- Establishment of locally-led, destination-based coral and related habitat monitoring, established along the lines of wild dog or lion monitoring in terrestrial parks; tourists and locals who are in coral areas report species sightings, take photos at determined spots annually to visually document reef conditions over time, etc, which feed into a central database. Who maintains the database could be a number of institutions... This leads us right into the next activity proposal...
- Monitoring is needed for every area of action. Monitoring design for locally managed, low tourism potential areas will be locally based (perhaps photographic monitoring), or other simple techniques (measuring of catch size and abundance at regular intervals, for reef products).

## Output 2.4 Pollution and waste Management Systems are created or improved

 Waste management (incorporate this into destination management areas as these will need it most)



- Improved waste management practices and services in key coastal areas
- Valuation of marine plastic and debris removal. Building and tourist products can be made from plastic waste. Consider including glass management as well, and tin recycling. Valuation of waste (plastic, cans, glass) and waste removal systems.

# • Intervention 2.4.1: Development of commercially viable waste management systems in tourism and reef hotspots.

- Conduct a pre-feasibility assessment in 2 sites (during PPG Phase cost aprox 30.000 USD). Including models such as the following:
  - Organise collection points for recyclables (ideally in places where people already naturally go, e.g. markets or schools)
  - Organise a programme incentives people to bring-in recyclables.
     Typically, recyclables for food or recyclables for school and sport material.
  - Include in the same programme awareness activities (which include waste reduction) but also recovery activities. For example, turning organic waste into compost or charcoal
  - Have a way to evacuate unprocessed recyclables to the mainland working with fishermen, for example or with the reverse logistics of lodges, when it exists.
  - Find/create companies to receive the recyclables and process them.

#### **Outcome 3: Restoration and adaptation technologies**

- Output 3.1: National regulatory framework for restoration is strengthened
  - The soon to be approved National Strategy for Coral Reefs will advocate to strengthen the legal framework for coral reefs.
  - Supporting NGOs such as WCS that are assisting the gov with this strategy could help. The elaboration of new Laws and regulations about reef restoration (based on international best practice- Reef Restoration Consortium) will need to be conducted. GFCR could help fund this process
- Output 3.2: Reef restoration businesses are created



- Reef restoration at its easiest involves the removal of all stressors possible, as long as a fixed substrate still exists and there are corals within larval reach. Mozambique has several examples of spectacular coral restoration through simple removal of stressors. This is inexpensive and within the reach of community led LMMA's.
- In areas subject to excessive heat stress, the propagation/ transplantation of corals from areas already identified as having heat and turbidity resistant corals (like in Ibo Bay in the Quirimbas National Park is a solution, though costly and requiring technical expertise).
- In areas without a fixed substrate, the use of shipwrecks, cars, etc, to create a substrate has already been done a number of times in Mozambique and could be expanded. The use of coral spiders has been introduced and will be an important technology for development.
- Where corals have been killed over large areas and there are no larvae to repopulate, actual transplantation may be needed.
- o Year one will include a needs and feasibility study for all target areas.
- Year 2 will be project design and fundraising.
- Years 3 to 8 will be training, business incubation, and implementation.
- Output 3.2. Seagrass restoration businesses are created. Seagrasses have been significantly damaged in many areas, especially the Primeiras and Segundas archipelago. A cycle similar to Output 3.2 is envisioned. Note that for both, 3.2 and 3.3, technology and training will have to be brought in from outside the country. Verde Azul Consult will be developing this capacity as a part of their consulting services.
- Output 3.3: Biodiversity offset finance unlocked to provide financing for reef restoration. The legal requirement to offset for residual damages has existed since 2015, and the technical regulations on how to do so are being published in 2022 Q2, with significant inputs from BIOFUND. BIOFUND is interested in exploring a more financial role in the offset implementation and a service provider.
  - Specific Interventions: BIOFUND will use GFCR Funding for:
    - a. Support for setting up a Department within BIOFUND to work as a service provider for biodiversity offsets management plans. This unit will operate as an offset manager, and will require the following capacity:
      - 1. Legal support for contracts



- 2. Sales Unit (Commercial Directorate)
- 3. Monitoring and Evaluation (ME&E)
- 4. Operational Manuals for Results based payments
- 5. Insurance, liability procedures
- b. Pilot biodiversity offsets in marine protected areas to demonstrate proof of concept and quantify potential biodiversity gains
- c. Through the incubator and accelerator, fund and assist the creation and growth of in-country businesses focused on coral restoration to cater to the biodiversity offsets market

## Outcome 4: Resilience and Recovery of coral reef-dependent communities to major shocks

- Output 4.1: Existing Climate Emergency Response Fund (BIO-CERF) are reinforced:
- **Specific Interventions:** BIOFUND will use GFCR Funding for:
  - Finance the preparation of disaster-preparedness plans for the MPAs in the target areas
  - Fund investments to be made in preparation for emergencies (such as underground or reinforced storehouses, strengthening a safe harbour location, purchase some readiness equipment such as window protectors or necessary post-event supply stocks like water purification tablets etc.)
  - o Develop an insurance system for the CA assets. Work with insurance companies to develop a general insurance policy on major infrastructures throughout the PA system. This insurance would need to specifically cover major damage from exceptional events. A preliminary analysis of one of the hunting areas that is currently insuring its headquarters and other capital investments against major events shows premiums are being charged at a rate of approximately 0.3% of the value of the goods insured. In other words, a premium of 100.000 USD per year would likely be able to insure infrastructures of up to about 33M USD. In this context, we note that in 2015, ANAC estimated the total value of the investments in the publicly managed protected areas at only about 55M USD, although the actual current value of physical insurable infrastructure will need to be determined in greater detail. The premiums for this insurance policy would be initially paid out of the GFCR. Once established, private sector operators will be approached to join the scheme for a fee, making use of the economies of scale that BIOFUND represents.

#### Output 4.2: Destination Management plans include reef insurance



- Specific Interventions: BIOFUND will:
  - Investigate the potential for parametric reef insurance for all businesses that depend on the reef at each destination
- Output 4.3: Improved coastal protection mechanisms in place. These should include nature-based solutions as well as testing artificial reefs for wave protection and habitat improvement.
- **Specific Interventions:** BIOFUND will:
  - Provide grant funding to NGOs and/or research institutes for testing artificial reefs for coastal protection
  - Provide match funding to private sector initiatives using nature-based solutions as well as artificial reefs for coastal protection of assets (assuming above tests are positive)

# Annex 4: Accountability, financial management, and public disclosure [TEXT IS FIXED DO NOT CHANGE]

The Programme will be using a pass-through fund management modality where UN Multi-Partner Trust Fund Office will act as the Administrative Agent (AA) under which the funds will be channelled for the Programme through the AA.

The convening agent and recipient organizations shall assume full programmatic and financial accountability for the funds disbursed to them by the Administrative Agent of the Global Fund for Coral Reefs (Multi-Partner Trust Fund Office). Such funds will be administered by each recipient organizations, Fund, and Programme in accordance with its own regulations, rules, directives and procedures. Each recipient organizations shall establish a separate ledger account for the receipt and administration of the funds disbursed to it by the Administrative Agent.

Indirect costs of the Recipient Organizations recovered through programme support costs will be 7%. All other costs incurred by each entity in carrying out the activities for which it is responsible under the Fund will be recovered as direct costs. The project management cost should not exceed 18%.

Funding by the GFCR will be provided on an annual basis, upon successful performance of the programme.



Procedures on financial transfers, extensions, financial and operational closure, and related administrative issues are stipulated in the Operational Guidance of the GFCR.

Partners must comply with GFCR Fund brand guidelines, which includes information on donor visibility requirements.

Each recipient organization will take appropriate measures to publicize the GFCR and give due credit to the other partners. All related publicity material, official notices, reports and publications, provided to the press or Fund beneficiaries, will acknowledge the role of the host Government, donors, partners, the Administrative Agent, and any other relevant entities. In particular, the Administrative Agent will include and ensure due recognition of the role of each recipient organization and partners in all external communications related to the GFCR.

#### **Annex 5: Project Administrative Arrangement for Recipient Organizations**

On behalf of the Recipient Organizations, and in accordance with the UNDGapproved "Protocol on the Administrative Agent for Multi Donor Trust Funds and Joint Programmes, and One UN funds" (2008), the MPTF Office as the AA of the GFCR will:

- Disburse funds to each of the Recipient Organizations in accordance with instructions from the GFCR Global Team. The AA will normally make each disbursement within fifteen (15) business days after having received instructions from the GFCR Global Team along with the relevant Submission form and Project document signed by all participants concerned;
- Consolidate the financial statements (Annual and Final), based on submissions
  provided to the AA by Recipient Organizations and provide the GFCR annual
  consolidated progress reports to the donors and the GFCR Global Team;
- Proceed with the operational and financial closure of the project in the MPTF Office system once the completion is completed by the Recipient Organizations. A project will be considered as operationally closed upon submission of a joint final narrative report. In order for the MPTF Office to financially close a project, each RO must refund unspent balance of over 250 USD, indirect cost (GMS) should not exceed 7% and submission of a certified final financial statement by the recipient organizations' headquarters);
- Disburse funds to any RO for any costs extension that the GFCR Global Team may decide in accordance with the GFCR rules & regulations.

#### Accountability, transparency and reporting of the Recipient Organization:



Each Recipient Organization will establish a separate ledger account under its financial regulations and rules for the receipt and administration of the funds disbursed to it by the Administrative Agent from the Fund Account. That separate ledger account will be administered by each Recipient Organization in accordance with its own regulations, rules, policies and procedures, including those relating to interest

The Recipient Organization will assume full programmatic and financial accountability for the funds disbursed to them by the Administrative Agent. Such funds will be administered by each recipient in accordance with its own regulations, rules, directives and procedures.

The Recipient Organization will have full responsibility for ensuring that the Activity is implemented in accordance with the signed Project Document;

In the event of a financial review, audit or evaluation recommended by the Executive Board, the cost of such activity should be included in the project budget;

Ensure compliance with the Financing Agreement and relevant applicable clauses in the Fund MOU.

## Reporting:

Each Receipt Organisation will provide the Administrative Agent and the Fund Secretariat with:

Type of report	Due when	Submitted by
Bi-annual project progress report	15 June	Convening Agent on behalf of all implementing or recipient organizations and in consultation with/ quality assurance by the GFCR Global Team, where they exist
Annual project progress report	15 November	Convening Agent on behalf of all implementing and recipient organizations and in consultation with/ quality assurance by the GFCR Global Team, where they exist



End of project report covering entire project duration	Within three months from the operational project closure (it can be submitted instead of an annual report if timing coincides)	organizations and in consultation with/ quality assurance by the GFCR Global Team, where they
Annual progre ss report, which may contain a request for additional GFCR allocation if the context requires it		Convening Agent on behalf of all implementing or recipient organizations and in consultation with/ quality assurance by the GFCR Global Team

For the preparatory grant financing, the full programme document will be considered as the annual reports. The GFCR Global team might request a summary of the preparatory activities.

#### Financial Reports and timeline

The financial reporting requirements for the below follow the 8 UNDG budget categories.

Timeline	Event	
28 February	Annual reporting - Report <b>Q4 expenses</b> (Jan. to Dec. of	
	previous year)	
30 April	Report <b>Q1 expenses</b> (January to March)	
31 July	Report <b>Q2 expenses</b> (March to June)	
31 October	Report <b>Q3 expenses</b> (January to September)	
Certified final financial report to be provided at the quarter following the project financial closure		

Unspent Balance exceeding USD 250 at the closure of the project would have to been refunded and a notification sent to the Administrative Agent, no later than three months (31 March) of the year following the completion of the activities.

### **Ownership of Equipment, Supplies and Other Property**



Matters relating to the transfer of ownership by the Recipient Organization will be determined in accordance with applicable policies and procedures defined by the Fund.

#### **Public Disclosure**

The Fund Secretariat and Administrative Agent will ensure that operations of the GFCR are publicly disclosed on the GFCR website (https://globalfundcoralreefs.org) and the Administrative Agent website (http://www.mptf.undp.org)

## Final Project Audit for recipient organization projects (Not Applicable to Preparatory Grant)

An independent project audit will be requested by the end of the project (For multiyear projects the GFCR Executive Board might request add. audit reports). The audit report needs to be attached to the final narrative project report. The cost of such activity must be included in the project budget.

#### **Special Provisions regarding Financing of Terrorism**

Consistent with UN Security Council Resolutions relating to terrorism, including UN Security Council Resolution 1373 (2001) and 1267 (1999) and related resolutions, the Participants are firmly committed to the international fight against terrorism, and in particular, against the financing of terrorism. Similarly, all Recipient Organizations recognize their obligation to comply with any applicable sanctions imposed by the UN Security Council. Each of the Recipient Organizations will use all reasonable efforts to ensure that the funds transferred to it in accordance with this agreement are not used to provide support or assistance to individuals or entities associated with terrorism as designated by any UN Security Council sanctions regime. If, during the term of this agreement, a Recipient Organization determines that there are credible allegations that funds transferred to it in accordance with this agreement have been used to provide support or assistance to individuals or entities associated with terrorism as designated by any UN Security Council sanctions regime it will as soon as it becomes aware of it inform the head of Fund Secretariat, the Administrative Agent and the donor(s) and, in consultation with the donors as appropriate, determine an appropriate response.

Annex 6: Provisions Related to the Prevention of and Response to Sexual Harassment (SH) and Sexual Exploitation and Abuse (SEA) involving Implementing Partners (IPs)



- The Implementing Partner acknowledges and agrees that UNDP will not tolerate sexual harassment and sexual exploitation and abuse of anyone by the Implementing Partner, and each of its responsible parties, their respective sub-recipients and other entities involved in Project implementation, either as contractors or subcontractors and their personnel, and any individuals performing services for them under the Project Document.
  - a. In the implementation of the activities under this Project Document, the Implementing Partner, and each of its sub-parties referred to above, shall comply with the standards of conduct set forth in the Secretary General's Bulletin ST/SGB/2003/13 of 9 October 2003, concerning "Special measures for protection from sexual exploitation and sexual abuse" ("SEA").
  - b. Moreover, and without limitation to the application of other regulations, rules, policies and procedures bearing upon the performance of the activities under this Project Document, in the implementation of activities, the Implementing Partner, and each of its sub-parties referred to above, shall not engage in any form of sexual harassment ("SH"). SH is defined as any unwelcome conduct of a sexual nature that might reasonably be expected or be perceived to cause offense or humiliation, when such conduct interferes with work, is made a condition of employment or creates an intimidating, hostile or offensive work environment.
- 2. A) In the performance of the activities under this Project Document, the Implementing Partner shall (with respect to its own activities), and shall require from its sub-parties (with respect to their activities) that they, have minimum standards and procedures in place, or a plan to develop and/or improve such standards and procedures in order to be able to take effective preventive and investigative action. These should include: policies on sexual harassment and sexual exploitation and abuse; policies on whistleblowing/protection against retaliation; and complaints, disciplinary and investigative mechanisms. In line with this, the Implementing Partner will and will require that such sub-parties will take all appropriate measures to:
- i. Prevent its employees, agents or any other persons engaged to perform any services under this Project Document, from engaging in SH or SEA;
- ii. Offer employees and associated personnel training on prevention and response to SH and SEA, where the Implementing Partner and its sub-parties have not put in place its own training regarding the prevention of SH and SEA, the Implementing Partner and its sub-



#### parties may use the training material available at UNDP;

- iii. Report and monitor allegations of SH and SEA of which the Implementing Partner and its sub-parties have been informed or have otherwise become aware, and status thereof;
- iv. Refer victims/survivors of SH and SEA to safe and confidential victim assistance; and
- v. Promptly and confidentially record and investigate any allegations credible enough to warrant an investigation of SH or SEA. The Implementing Partner shall advise UNDP of any such allegations received and investigations being conducted by itself or any of its sub-parties referred to in with respect to their activities under the Project Document, and shall keep UNDP informed during the investigation by it or any of such sub-parties, to the extent that such notification (i) does not jeopardize the conduct of the investigation, including but not limited to the safety or security of persons, and/or (ii) is not in contravention of any laws applicable to it. Following the investigation, the Implementing Partner shall advise UNDP of any actions taken by it or any of the other entities further to the investigation.
- 2. B) The Implementing Partner shall establish that it has complied with the foregoing, to the satisfaction of UNDP, when requested by UNDP or any party acting on its behalf to provide such confirmation. Failure of the Implementing Partner, and each of its sub-parties, to comply of the foregoing, as determined by UNDP, shall be considered grounds for suspension or termination of the Project.