

# Coastal Forests of Eastern Africa Investment in the Indian Ocean Islands of the United Republic of Tanzania Mafia, Pemba, Unguja, and Related Islets

### **Summary and Context**

The Critical Ecosystem Partnership Fund (CEPF) was established in 2000 as a mechanism to engage civil society in the conservation of critical ecosystems in the global biodiversity hotspots. CEPF is a joint initiative of l'Agence Française de Développement (AFD), Conservation International, the European Union (EU), Fondation Hans Wilsdorf, the Global Environment Facility, the Government of Japan and the World Bank. The European Union through AFD as fiduciary agent is providing strategic assistance to civil society to take targeted action for biodiversity conservation and climate change adaptation in the Western Indian Ocean through CEPF.

CEPF has supported civil society in the United Republic of Tanzania since 2004, with investments in two biodiversity hotspots: the Coastal Forests of Eastern Africa (2004-2014); and the Eastern Afromontane (2012-2020). CEPF awarded 69 grants for US\$4.2 million through these investments and maintains networks with past grantees in the country. There is now an opportunity to award a further US\$850,000 in grants in the United Republic of Tanzania's offshore islands in the Indian Ocean, focused on Unguja, Pemba, Mafia and related islets.

CEPF investment in each biodiversity hotspot is guided by an ecosystem profile: a shared investment strategy developed through an extensive consultation process involving civil society, government and private sector actors. Ecosystem profiles also define geographic priorities for grant making, based on an analysis of Key Biodiversity Areas (KBAs): sites that contribute significantly to the global persistence of biodiversity, identified using standard global criteria.

The funding now available for the United Republic of Tanzania is the result of financing from the EU, via AFD, focused on the Indian Ocean Islands, as part of the Africa, Caribbean, Pacific Small Island Developing States (ACP-SIDS) program. This financing will be guided by the CEPF investment strategy for the Madagascar and the Indian Ocean Islands (MADIO) Hotspot, which focuses on actions that address the twin nature and climate crises. More precisely, CEPF will engage civil society in conserving biodiversity and enhancing resilience to climate change, through targeted investments that impact the most important sites for biodiversity and ecosystem services, through capacity building and advocacy to improve national and regional policies and regulatory frameworks for sustainable biodiversity management, and through promoting exchanges and partnerships for environmental sustainability at the regional level. CEPF follows IUCN in placing these interventions under the term "ecosystem-system based adaptation" (EbA); that is, efforts that use biodiversity and ecosystem services to reduce vulnerability and build resilience to climate change.

Following the investment strategy, CEPF grants will focus on conserving and restoring coastal and marine ecosystems, such as mangroves, coral reefs, and seagrass beds, as well as terrestrial ecosystems that protect important water sources for irrigation and domestic

use. Grant-funded work will also protect coastal and marine ecosystems from land-based pollution and sedimentation. In this way, the grant portfolio will contribute to national, regional, and global efforts to conserve biodiversity, adapt to climate change, and combat land degradation, desertification, and drought.

## **Biological Importance, Threats and Conservation Outcomes**

The forests of Mafia, Unguja and Pemba include scrub, thickets, closed canopy forest and mangroves, and contain at least 14 globally threatened species of amphibians, birds, mammals and plants, including colobus monkeys, flying-foxes and tree hyrax. Further, notable parts of Unguja and Latham Island are important nesting and stop-over areas for multiple seabird and shorebird species, and Pemba is noted for being home 26 bird species and three endemic subspecies. The surrounding seas in the entire region are a center of endemism for sharks and rays. The condition of the coral reefs is generally good, when compared to the rest of the world, which further indicates the status of marine biodiversity in the area. The 1,100 kilometers of reef off Pemba represent as much as 45 percent of all reefs in the United Republic of Tanzania, while important fringing and patch reefs are found off Unguja and Mafia.

The islands include areas with global designations under multilateral environmental agreements: Mafia falls within Rufiji-Mafia-Kibiti-Kilwa Biosphere Reserve (RUMAKI); and Mafia Island Marine Park is a Ramsar site. On Unguja, Jozani-Chwaka Bay National Park is a UNESCO World Heritage Site. Separately, Kiwengwa-Pongwe Forest Reserve on Unguja and Ngezi Forest Reserve on Pemba have longstanding protected status. Marine protected areas adjacent to Unguja are Chumbe Reef Sanctuary, Menai Bay Conservation Area and Mnemba Island Marine Conservation Area, while adjacent to Pemba is Misali Marine Park. These marine sites protect corals, marine mammals, reef fishes and migratory birds.

The threats to these places and species are many, and include illegal and unsustainable fishing practices, population growth and related land-use change, pollution, and unregulated development, to name just some. The resilience of natural ecosystems is further imperiled by climate change, bringing changing patterns of rainfall, warmer oceans and stronger storms, altered growing seasons and reduced harvests, and changing marine biota.

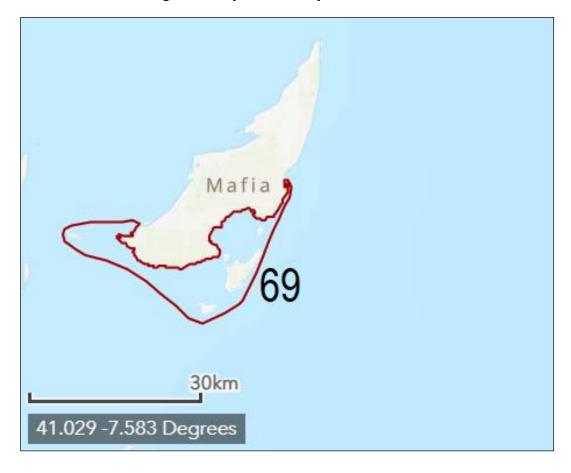
KBAs have been identified in the region based on their importance for the conservation of global biodiversity, which includes endemic and globally threatened bird and mammal species, as well as important populations of marine turtles, marine mammals, and reef fishes. The terrestrial KBAs and their associated globally threatened species are shown in the table and figures below.

KBA	Site Name	Area	Globally Threatened Species			
Code	Site Name	(ha)	Common Name	Scientific Name	Status	
Tanzania mainland						
69	Mafia Island	115,000	Legume sp.	Baphia kirkii	VU	
			Coffee sp.	Coffea costaifructa	VU	
			Eastern tree hyrax	Dendrohyrax validus	VU	
			Ebony sp.	Diospyros shimbaensis	EN	
			Soursop sp.	Mkilua fragrans	VU	
			Mrora forest toad	Stephopaedes howelii	EN	
			Citrus sp.	Zanthoxylum lindense	VU	
55	Latham Island	<3	Globally significant congregations of bird species			
Zanzibar - Pemba						

Table 1. Terrestrial KBAs in Mafia, Pemba and Unguja

77	Makongwe Island	400	No information		
116	Panza Island	2,800	No information		
117	Pemba Island including Ngezi		Amani screeching frog	Arthroleptis xenodactylus	EN
			Eastern tree hyrax	Dendrohyrax validus	VU
					Gree
		101,400	Green Pigeon	Lamprotornis	n
				corruscus vaughani	Pigeo
					n
			Russet Scops Owl	Otus pembaensis	VU
			Pemba flying fox	Pteropus voeltzkowi	CR
			Bedstraw sp.	Vangueria pallidiflora	VU
153	Verani Southwest	10	No information		
Zanzi	ibar - Unguja				
	Jozani Forest Reserve	1,100	Aders' duiker	Cephalophus adersi	EN
			Eastern tree hyrax	Dendrohyrax validus	VU
22			Red colobus monkey	Procolobus kirkii	EN
			Mrora forest toad	Stephopaedes howelii	EN
			Tomb bat	Taphozous hildegardeae	VU
142	Tumbatu Island	2,300	Eastern tree hyrax	Dendrohyrax validus	VU
158	Zanzibar (Muyuni)	<10	Euphorbia sp.	Micrococca scariosa	VU
159	Zanzibar Island-East Coast	10,000	Globally significant congregations of bird species		
160	Zanzibar Island-South Coast	4,000	Globally significant congregations of bird species		

Figure 1. Key Biodiversity Areas in Mafia



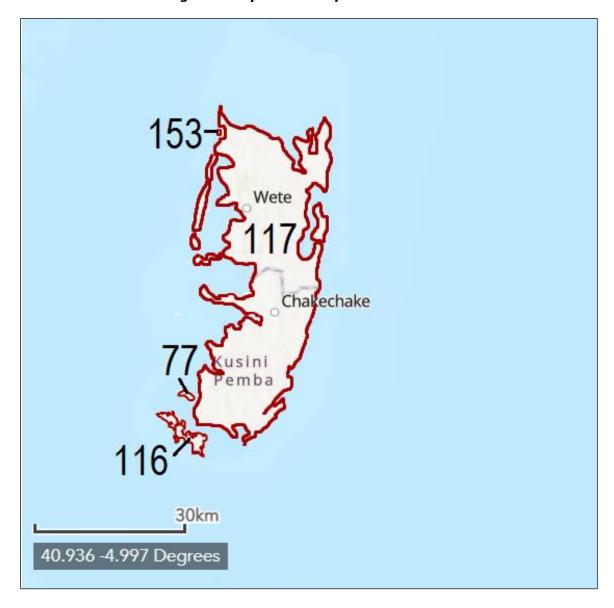


Figure 2. Key Biodiversity Areas in Pemba

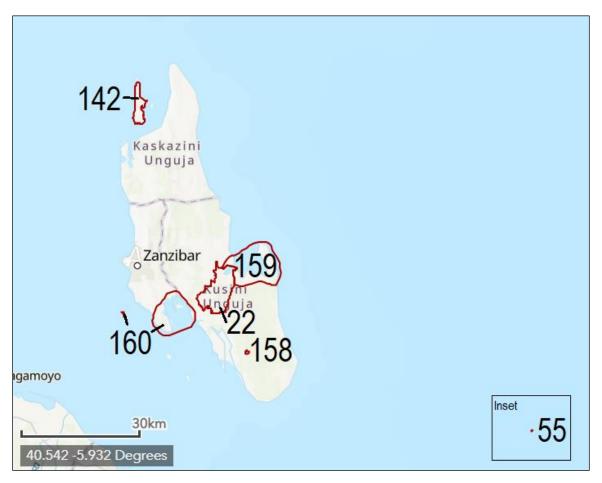


Figure 3. Key Biodiversity Areas in Unguja

Similar maps and tables do not exist for marine sites and species but are understood from the designated marine protected areas and associated reefs. Certainly, the region is home to globally threatened species, including green sea turtles, hawksbill turtles, and sperm whales, as well as iconic marine mammals like spinner dolphins, humpback dolphins, and humpback whales.

It is important to note that these KBAs are not prioritized. Any evaluation would consider not just species diversity and associated threats, but also how the KBAs deliver ecosystem services important to local people. Like all small islands. and coastal countries, these islands are extremely vulnerable to climate change. Their populations, agricultural land and infrastructure tend to be concentrated in coastal areas, where sea level rise and the increased frequency and severity of extreme weather events are the most damaging.

The combined effects of projected climate change mean that many people are at risk. While the populations and economies of these islands are highly dependent on ecosystem services, the natural ecosystems that provide these services are already under severe threat from human activities. As a result, the resilience and capacity of these ecosystems to provide the essential services necessary for people to adapt to climate change is diminishing, while their rich and often unique biodiversity is being lost.

#### **Investment Landscape and CEPF Response**

The Government of Tanzania (GoT) and the Revolutionary Government of Zanzibar (RGoZ), operating with domestic revenue and international donor funds, are the primary funders of conservation efforts in the relevant KBAs. Of course, the governments primarily work via their line agencies, although they do channel smaller amounts to civil society, typically community-based organizations. Somewhat less funding is available directly to civil society organizations (CSOs), but notable current funders for coastal resources management in Mafia, Pemba and Unguja include Germany's Blue Action Fund, which, over the period of 2019-2027, has committed approximately US\$13.7 million in grants to Fauna & Flora, Wildlife Conservation Society and World Wide Fund for Nature, which have raised an additional US\$2.3 million in co-financing. Further, the United States Agency for International Development (USAID) has an ongoing US\$25 million project, Heshimu Bahari (Respect the Ocean), running from 2022 to 2027, to enhance ecological and community resilience to conserve coastal marine ecosystems in mainland Tanzania and Zanzibar. As is standard with USAID contracts, the primary partner is the government but approximately US\$3 million of this will be awarded as subgrants to civil society organizations.

Identifying the targets and effectiveness of all government and donor funds on these islands is difficult, but the level funding for CSOs doing conservation work mirrors that found elsewhere in the world; namely, it is relatively low. That being said, the GoT and RGoZ are known for welcoming civil society engagement in the context of co-management of natural resources. Thus, CEPF grant making will support civil-society-led actions to restore and strengthen the management of KBAs that make the greatest contribution to the delivery of ecosystem services important to local populations. These actions will improve the resilience to climate change of the most vulnerable species, ecosystems and people in the region. CEPF will work through CSOs, and grant-making will be complemented by actions to help build their capacity and assist them in developing partnerships with the private and public sectors. Improving CSO capacity for engagement and partnerships with the public sector will contribute to stronger national and regional policy and regulatory frameworks for sustainable management and use of natural resources, notably in coastal and marine areas.

To ensure success, these efforts will be aligned with GoT and RGoZ policy priorities for biodiversity and climate change. Specifically, CEPF grants will contribute directly to:

- The Zanzibar Development Vision 2050, including its goals for agricultural production (focusing on sustainable and climate resilient production), tourism (focusing on youth employment and links with local supply chains), the Blue Economy (employing a framework of marine spatial planning, environmental conservation, and clear investment procedures), land utilization (including transparent, accountable, and participatory land governance), and the environment and climate change (with related targets on total terrestrial and marine area under protection, area made more resilient to climate change, and degraded area restored).
- The Zanzibar Blue Economy Policy of 2022, which recognizes that two thirds of the state's GDP comes from the maritime environment, including fisheries, aquaculture, trade, salt harvesting, seaweed farming, tourism, oil, gas, and marine mining, while recognizing that these resources must be used sustainably. Beyond CEPF support in the areas of artisanal fishing, small enterprise based on marine products, sustainable tourism, and conservation of mangroves, CEPF is particularly well placed to support the Blue Economy Policy's focus on empowerment of women and youth and its principles of ecosystem based management, climate resilience, the conservation of critical habitats, and, per the language of the policy, "tourism for all."

- The Zanzibar Biodiversity Finance Plan 2022-2026, with its 13 finance solutions, particularly in relation to innovative methods (like crowdfunding and payment for ecosystem services) for supporting community forest management areas, and for mangrove restoration, beach and reef restoration.
- The goals outlined in the *State of the Coast for Zanzibar* of 2023, which establishes baselines across several sectors and identifies strategic actions for donor support.
- The United Republic of Tanzania's commitments under the Nairobi Convention for the Protection, Management, and Development of the Coastal and Marine Environment of the Western Indian Ocean region.
- The United Republic of Tanzania's National Climate Change Response Strategy for 2021-2026, particular in terms of the goal of promoting gender-responsive climate change adaption and mitigation interventions.
- The United Republic of Tanzania's *Guidelines for the Development of Marine Spatial Plans*, which, in turn, supports the country's 2021 Environmental Policy, where CEPF can lend particular support to stakeholder participation mechanisms.
- The United Republic of Tanzania's National Biodiversity Strategic Action Plan. The 2015-2020 plan is currently being updated, but assuming certain targets remain, CEPF can support eco-friendly practices, reduction in degradation, reduction in anthropogenic pressures on marine resources, and promotion of ecosystem resilience activities.
- The Marine Parks and Reserves Strategic Plan for 2023-2028, which highlights objections on improving the functioning of marine ecological systems, engagement of coastal communities and participatory management activities.

#### **Investment Strategy**

CEPF will award grants in line with its existing investment strategy for the MADIO Hotspot, which itself complements the goals of the GoT, RGoZ, and civil society stakeholders on the islands of Mafia, Pemba and Unguja. The table below outlines the strategic directions and investment priorities that will guide the award of grants. The table also shows overall indicators for the funding provided by EU ACP SIDS program, with the presumption that grants in Mafia, Pemba and Unguja will contribute toward these. (The indicators column below shows anticipated results for the entire Indian Ocean region and, in parentheses, targets for grants made in Mafia, Pemba, and Unguja.)

This investment strategy, combined with CEPF's approach on targeting grants around KBAs, allows for a range of possible interventions.

- KBA National Coordinating Groups (NCGs) have been recently created for mainland Tanzania and Zanzibar to identify, refine, and delineate new marine KBAs and terrestrial KBAs that are "manageable units," which is particularly relevant for Pemba. Projects that use EbA within the context of KBAs may be supported.
- Support for species actions, particularly amphibians or other markers that demonstrate EbA is improving the management of intact forests or coastal ecosystems.

- Creation of marine or terrestrial protected areas, or upgrading the protection status
  of existing ones (such as land currently under Community Forest Management
  Agreements), is possible in the context of enhancing the management of intact
  ecosystems, restoring degraded areas, or creating climate-resilient buffer zones.
  This extends to formalizing legal documentation, better understanding how ecological
  processes function in these areas and how to maintain them, and raising awareness
  among users and surrounding communities.
- In the context of enhancing civil society capacity and engaging civil society in decision-making for EbA, area and even island-wide planning could be supported. Creating the enabling conditions for EbA could entail promoting a shared set of goals and actions, creating coalitions between civil society, government, and the private sector, and identifying sites for protection, restoration, and production.

Table 2. Logical Framework for CEPF Program in Mafia, Pemba and Unguja

Strategic Direction	Investment Priorities	Indicators	
	1.1. Implement Ecosystem-based Adaptation (EbA) actions, including agroforestry, "climate smart agriculture," eradication of Invasive Alien Species (IAS), restoration of degraded watersheds and coastal ecosystems (including wetlands, mangroves, reefs and seagrass beds), and promotion of sustainable management of coastal and terrestrial ecosystems	Overall Indian Ocean Island indicators shown first. Indicators for Mafia, Pemba, and Unguja shown in parentheses.  1. 16,500 (165) women and 16,500 (165) men with increased income as a result of ecosystembased livelihood activities (sustainable fishing, nature-based tourism, harvesting natural products, etc.).  2. 152,500 (1,525) women and 152,500 (1,525) men with non-monetary benefits other than formal training, as a result of strengthened ecosystem service delivery.  3. 20 (2) economic models to improve the resilience of local communities to climate change developed and implemented.  4. 610,000 (6,100) hectares of intact coastal ecosystems with enhanced management.  5. 300,000 (3,000) hectares of degraded coastal ecosystems restored.  7. 1,000 hectares (100) of degraded watershed forest ecosystems restored.  8. 1,000 hectares (100) of climate-resilient agroforestry systems implemented.  9. 1,000 hectares (100) of small island ecosystems where invasive alien species have been eliminated or reduced.	
1. Empower communities and civil society to implement actions to improve the resilience of species, ecosystems, and human populations to climate change in priority Key Biodiversity Areas (KBAs)	1.2. Support the establishment and development of economic models that improve the resilience of local communities to climate change and support value chains for natural products, while strengthening ecosystem services that contribute to EbA		
2. Support local communities and civil society to strengthen the integration of the EbA approach, ecosystem resilience and biodiversity conservation into	2.1. Develop engagement strategies with private sector actors for the integration of EbA into their activities, and also for the conservation and sustainable use of biodiversity and renewable natural resources	<ol> <li>6 (1) government, private sector and/or civil society actors formally adopt KBAs critically important for ecosystem services as priorities for EbA.</li> <li>2. 12 (2) communities, businesses and/or public</li> </ol>	
political and economic decision- making processes and education	2.2. Support civil society to disseminate information and influence political and economic decision-making processes in favor of biodiversity	sector institutions use EbA tools, techniques and/or instruments developed under CEPF grants.	

	conservation priorities, ecosystem services and EbA	3. 2 (1) strategies for engagement with private sector actors for mainstreaming EbA into
	2.3. Support civil society in the development and implementation of disaster risk reduction measures	business practices are prepared. 4. 3 (1) knowledge products (manuals, videos, etc.) on the theme of ecosystem services and/or EbA prepared and disseminated in the region.
3. Strengthen the capacities of local communities and civil society at regional and local levels to enhance adaptive capacity and reduce exposure to climate change risks	3.1. Strengthen the technical, administrative and financial capacities of local civil society organizations (CSOs) with missions related to the environment and the fight against climate change 3.2. Promote exchanges and partnerships (at the national and regional levels) among CSOs working in priority KBAs, to strengthen technical, organizational, management and fundraising capacities  3.3 Support the emergence of a new generation of conservation professionals and organizations specializing in biodiversity conservation, ecosystem services and climate change by supporting, with small grants, technical and practical training and exchange visits	1. 5,500 (8) women and 5,500 (8) men from local CSOs have benefited from technical, administrative or financial capacity building. 2. 12 (4) local CSOs with an institutional capacity score of 80 percent or higher on the CEPF Civil Society Tracking Tool. 3. 7 (1) CSO training courses and/or exchange visits carried out at the national or regional level.

## Eligibility, Schedule, and Processes

CEPF grants are available only to CSOs. CEPF uses a broad definition of civil society to include non-government organizations, community groups, Indigenous people's organizations, universities, women's groups, private companies, school-based organizations, and religious organizations, among others, provided they are legally registered. CEPF does not make grants to government agencies, with the understanding that they have access to international conservation funding through other mechanisms. Government-owned enterprises or institutions are eligible, provided they have a legal personality independent of any government agency or actor, have the authority to apply for and receive private funds, and if they are not able to assert a claim of sovereign immunity.

CEPF expects to make awards in time for work to begin by January 2025 and end by December 2027.

CEPF will make awards based on its standard two-part process. This will entail release of an open call for letters of inquiry, review and selection among those by a Consultative Committee, and invitations to top-ranked groups to submit full proposals for final review and negotiation by the CEPF Secretariat. The Consultative Committee that selects from submitted letters of inquiry will include a representative of the Indian Ocean Commission, at least one representative from the GoT, at least one representative from the RGoZ, and subject matter experts from universities and civil society organizations.

CEPF will commit the full funding of \$850,000 via a single call for letters of inquiry and subsequent proposals. CEPF expects to make between 6-10 awards with a maximum value of \$200,000.

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