



Republic of Mozambique
Ministry of Land and Environment

KEY BIODIVERSITY AREAS (KBAs) AND RED LISTS OF SPECIES AND ECOSYSTEMS

INNOVATIVE TOOLS FOR SUSTAINABLE NATIONAL DEVELOPMENT



Supporting the Policy Environment for Economic Development (SPEED+)

BACKGROUND

Mozambique has a notable abundance of natural resources and biodiversity which are vital pillars for the country's development. The Mozambican population, especially the rural one, depends on biodiversity and ecosystem services for their livelihoods. However, the ongoing over-exploitation of biodiversity and habitat loss, accelerated by pollution, alongside with the introduction of exotic species and the effects from climate change, has led to the degradation of the country's unique species and ecosystems. The Mozambican State is committed to preserving its biodiversity through adherence to various international agreements and conventions, such as the Sustainable Development Goals (SDGs), the Convention on Biological Diversity (CBD) and the Nairobi Convention (NC). National policies have been aligned with these commitments, with several priority actions defined, such as:

- Ensure integration of the Green-Blue Economy and the green growth agenda in the national development priorities, ensuring conservation of ecosystems, biodiversity and the sustainable use of natural resources;
- Improve spatial planning and strengthen monitoring;
- Establish a network of protected areas (PAs) representative and balanced in terms of ecosystems and species;
- Establish PAs in poorly represented ecosystems (e.g. mountains, islands, marine ecosystems, biodiversity hotspots);
- Guarantee the protection of rare, endemic and threatened species inside and outside PAs. In addition, updating the list of protected species and develop and enforce specific legislation;
- Map and characterize the degradation of critical ecosystems;
- Catalog the distribution and abundance of threatened species;
- Assess the conservation status of Forest Reserves;
- Incorporate biodiversity conservation aspects into territorial planning (PNDT¹, POEM²);
- Define and implement a system of areas of high value for the biodiversity conservation (in agricultural, forest, fishing, mining areas, etc.).

At a global level there are tools to support the conservation and management of biodiversity, such as:

IUCN RED LIST OF SPECIES AND ECOSYSTEMS

- an initiative that allows determining the level of threat that species and ecosystems are subject to, therefore, being a critical indicator of the state of biodiversity, allowing authorities to direct conservation efforts to species and ecosystems that are priority. Red Lists are used worldwide to inform policies and government actions, international agencies and the private sector. They are regularly updated at a global level and can also be applied at regional and national levels.

KEY BIODIVERSITY AREAS (KBAs)

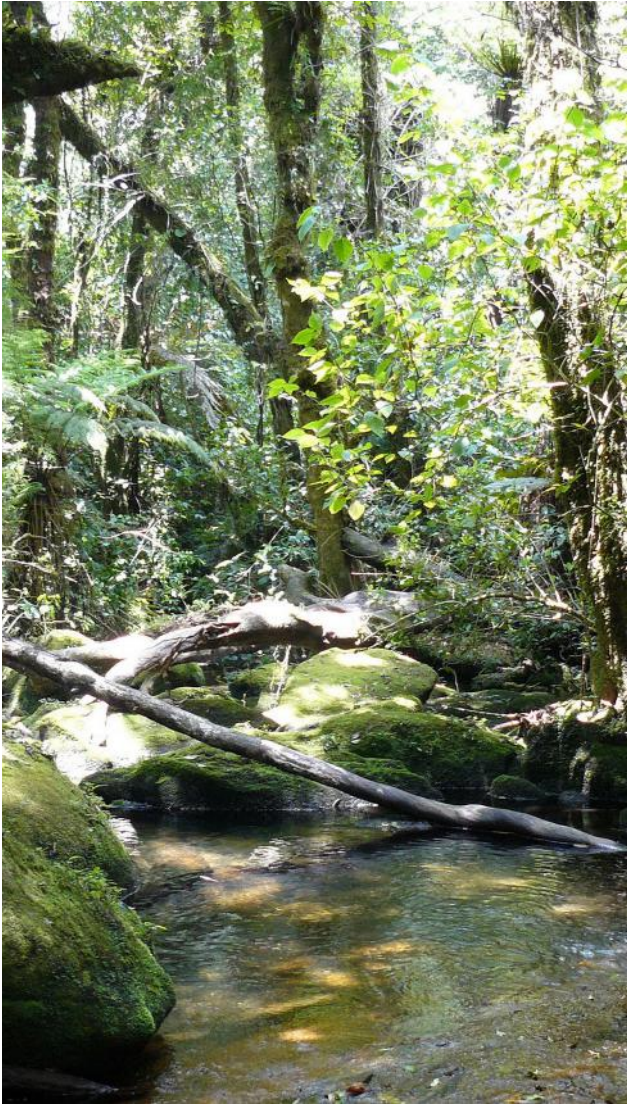
- are sites contributing significantly to the global persistence of biodiversity, both in terrestrial, freshwater, marine and underground systems, and are identified based on internationally accepted scientific criteria. KBAs are indicators for CBD Aichi Targets 11 and 12 (Aichi Goals 2011-2020) as well as for SDGs 14 and 15.

KBA PARTNERSHIP

Launched in September 2016, comprised of thirteen of the world's leading nature conservation organizations, including WCS, and aims to promote the identification, documentation and protection of KBAs.

1 National Territorial Development Plan
2 National Marine Spatial Plan

ROLE OF KBAs



- Contribute to the achievement of international and national targets (2, 5, 6, 7, 11A & 12) of the National Strategy and Action Plan for the Conservation of Biological Diversity in Mozambique, plus the High Ambition Coalition
- Compile and systematize updated data on species and areas to be used by the Government to report to the Secretariats of the International Conventions
- Provide detailed information on existing biodiversity at sites included on international conventions, such as the RAMSAR or Convention on Migratory Species (CMS);
- Support spatial planning (PNDT and POEM) and the definition of conservation priorities;
- Support the strategic expansion of the national network of Protected Areas;
- Inform environmental safeguard policies for the private sector;
- Providing work and income opportunities to local communities: jobs and financial benefits from performance-based payments.

KBAs CONTRIBUTIONS TO THE SDGs

- KBA conservation contributes to the health and well-being of the population that depends on the ecosystem services they provide
- Protect watersheds and drinking water;
- Significant income generation potential for communities (e.g. ecotourism and payments for ecosystem services);
- Contribute to carbon retention and CO² emissions reduction;
- Allow the conservation of important fishing areas;
- Contribute to the conservation of life on earth.

By conserving KBAs, Mozambique will be contributing to the global effort to stop and avoid the biodiversity loss in Africa and across the planet.

PROJECT APPROACH

The Ministry of Land and Environment (MTA), through the National Directorate of Environment (DINAB), in partnership with the Wildlife Conservation Society (WCS) and with USAID funding through the SPEED+ program, implemented the project “Red List of Threatened Species, Ecosystems, Identification and Mapping of Key Biodiversity Areas (KBAs) in Mozambique”, with the following objectives:

1. Establish the National Coordination Group (NCG) for the Key Biodiversity Areas, the Red List of threatened Species and Ecosystems and promote its use in spatial planning and decision-making;
2. Conduct global Red List assessments for endemic and near-endemic species of amphibians, reptiles, freshwater fish, butterflies and ecosystems
3. Identify and map KBAs according to the 2016 IUCN’s Global Standards.
4. Build national capacity to identify, prevent and mitigate impacts on priority biodiversity (threatened species and ecosystems and KBAs)

WHAT IS THE NATIONAL COORDINATION GROUP (NCG) FOR KEY BIODIVERSITY AREAS, AND THE RED LIST OF THREATENED SPECIES AND ECOSYSTEMS?

Established in December 2019, this group is the platform responsible for coordinating in an inclusive, representative and transparent way, the process of identifying, documenting and mapping KBAs, including supporting plans and activities for their management, monitoring and protection, as well as threatened Species and Ecosystems. Informs the Mozambican State on the state of the country’s biodiversity.



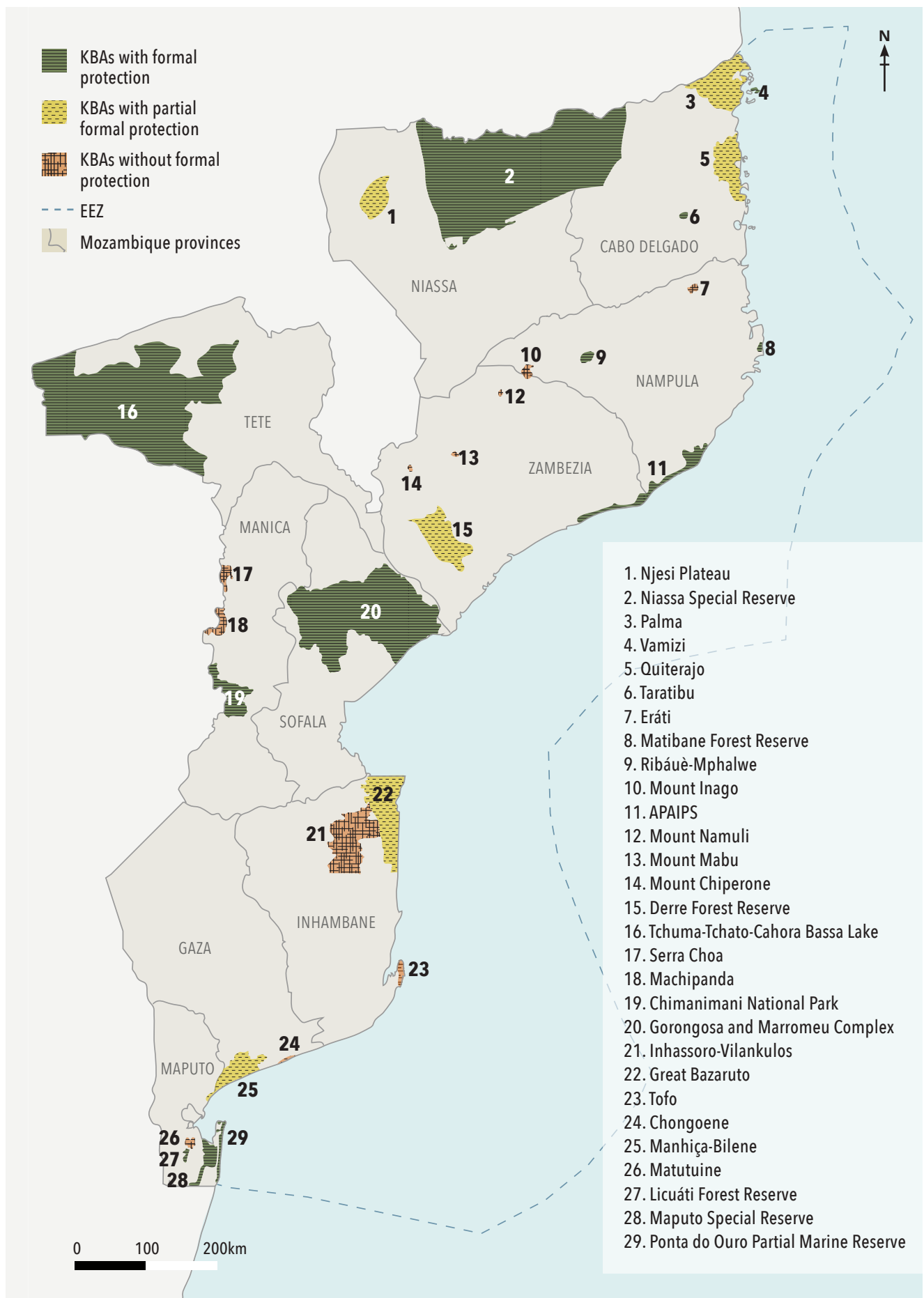
ACHIEVED RESULTS



- **Collaboration of more than 20 national institutions** from the government, research, education, conservation partners, civil society and the private sector, with the contribution of more than 100 national, regional and international experts for KBAs identification and delineation.
- **3 workshops were held in 2019, involving about 130 people, to train Mozambican specialists on Red List criteria, identification and delineation of KBA boundaries.** Several meetings were also held in person and remotely to share information.
- **4 meetings were held to establish the National Coordination Group for the KBAs and the Red List, which includes 20 national institutions; of those 8 are from Government, 5 research entities, 4 Civil Society Organizations and 3 from the private sector.** The Group is chaired by DINAB and vice-chaired by the National Institute of Fisheries Research (IIP).
- **29 KBAs were identified and delineated, covering a total area of about 139.947,05 km², with 25 (86%) covering an area of 134.019,16 km² in land and 4 (14%) occupying 5.927.89 km² in the marine environment.** The terrestrial KBAs occupy 17% of Mozambique's continental territory and the marine 1% of the country's Exclusive Economic Zone (EEZ).
- **67 species of fauna were assessed, 47% of which are at risk of extinction, and conservation initiatives are necessary to reverse this trend.**
- **Mapping of Mozambique's historical ecosystems, including a first exercise to run a Red List assessment of terrestrial ecosystems**
- **Guidelines on "Business and KBAs: Managing Risk to Biodiversity", translated into Portuguese.** These identify good environmental practices that development projects must follow when implemented in or around KBAs.

KBAs and Red Lists contribute to achieving the goals of the National Biodiversity Strategy and Action Plan

KBAs IDENTIFIED BY THE PROJECT



2. NIASSA SPECIAL RESERVE

ADMIN REGION: Niassa





KBA AREA: 42,707.52 km²

CURRENT PROTECTION CATEGORY:
Special Reserve, Buffer Zone

KBA CRITERIA TRIGGERED:
A1a, A1b, A1c, A1d, B1

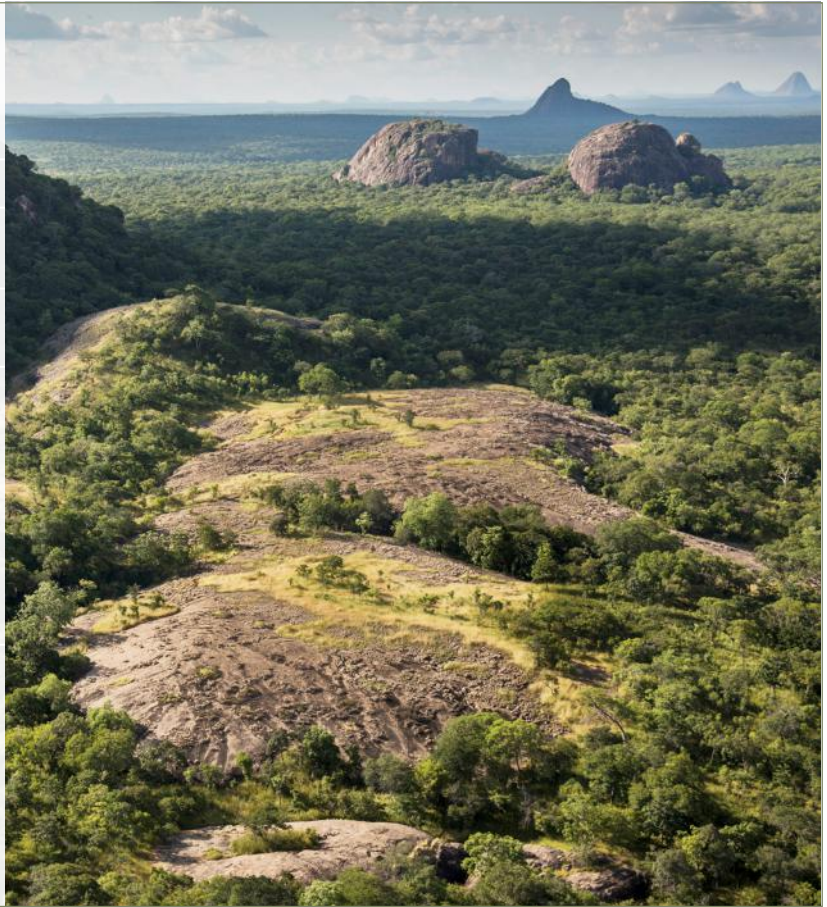
TRIGGER SPECIES:

7 species of which 2 endemic and 6 threatened

-  4 mammals (elephant, hippo, wild dog, lion)
-  1 tortoise
-  1 lizard
-  1 freshwater fish

MAIN THREATS:

Slash and burn shifting agriculture, alluvial mining of gold and rubies, bush meat snaring, poisoning for bush meat.



12. MOUNT NAMULI

ADMIN REGION: Zambezia

KBA AREA: 52.64 km²

CURRENT PROTECTION CATEGORY:
N/A

KBA CRITERIA TRIGGERED:
A1a, A1b, A1e, A1d, B1, B2

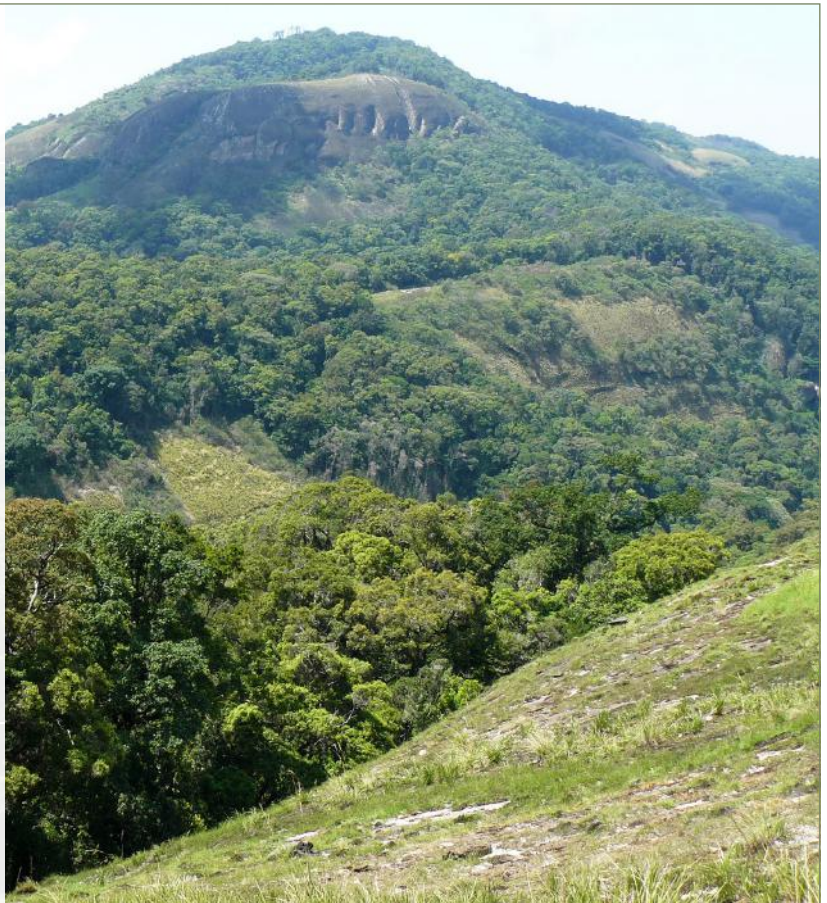
TRIGGER SPECIES:

30 species of which 16 endemic and 19 threatened

-  1 bush squirrel
-  3 birds
-  1 snake
-  3 chameleons
-  3 amphibians
-  5 butterflies
-  14 plants

MAIN THREATS:

Agriculture expansion, uncontrolled fires, logging, impacts of domestic livestock.



19. CHIMANIMANI

ADMIN REGION: Manica

KBA AREA: 2,370.62 km²

CURRENT PROTECTION CATEGORY:
Includes a National Park, Buffer Zone,
Forest Reserves

KBA CRITERIA TRIGGERED:
A1a, A1b, A1e, B1

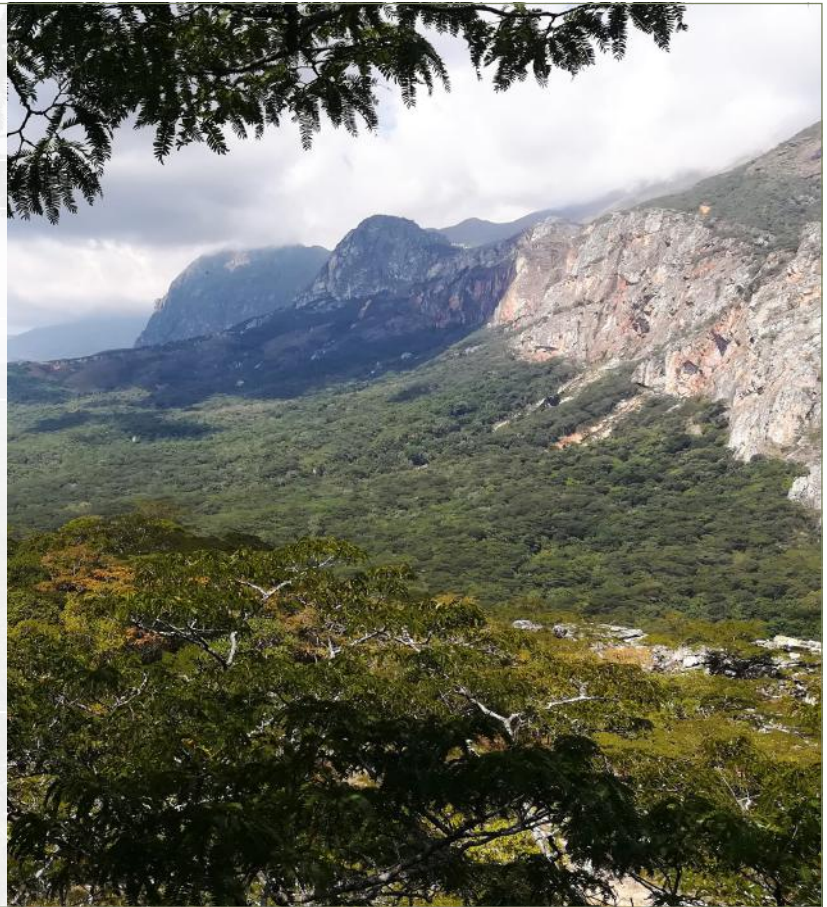
TRIGGER SPECIES:

41 species of which **33 endemic** and
36 threatened

-  1 mammal
-  1 chameleon
-  1 lizard
-  2 frogs
-  2 butterflies
-  34 plants

MAIN THREATS:

Gold mining, invasive species,
uncontrolled fires



22. GREAT BAZARUTO

ADMIN REGION: Inhambane




KBA AREA: 5,236.36 km²

CURRENT PROTECTION CATEGORY:
Partially covered by a National Park
and Sanctuary

KBA CRITERIA TRIGGERED:
A1a, A1b, A1c, A1d, B1

TRIGGER SPECIES:

6 species of which **4 endemic** and
3 threatened

-  2 marine mammals (dugong,
Indian Ocean humpback dolphin)
-  3 lizards
-  1 plant

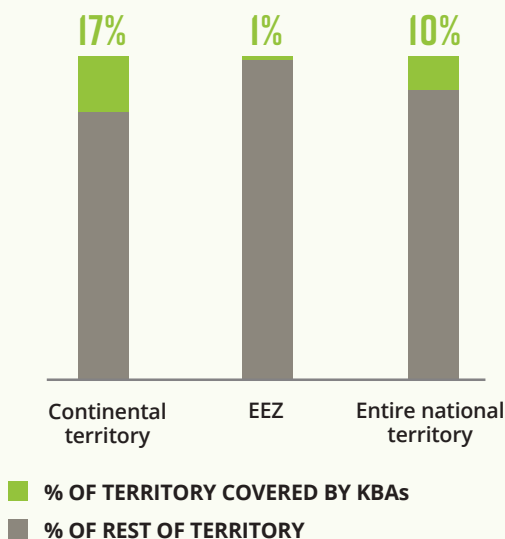
MAIN THREATS:

Overexploitation by artisanal fisheries,
slash and burn shifting agriculture



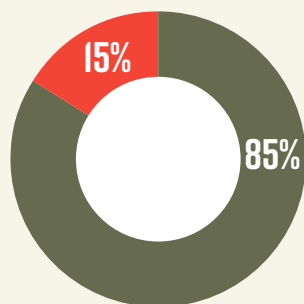
COVERAGE OF KBAs IDENTIFIED IN MOZAMBIQUE

KBAs cover 10% of the entire national territory, with terrestrial, and freshwater KBAs covering 17% of the continental territory and marine KBAs covering 1% of the Exclusive Economic Zone



% OF KBA AREA UNDER FORMAL PROTECTION

Around 85% of the total area covered by KBAs is under some type of formal protection, including: i) 20% (n=6) that overlaps with forest reserves, corresponding to a total area of 2,430.06 km²; and ii) 17% (n=5) of sites designated by international conventions, such as Ramsar sites and World Heritage Sites (Biosphere Reserve), corresponding to a total area of 5,436.45 km². About 15% of the total area covered by the KBAs' identified during this project is not under any form of formal protection.



■ % TOTAL AREA OF KBAs UNDER FORMAL PROTECTION
■ % TOTAL AREA OF KBAs WITHOUT FORMAL PROTECTION

MOST RELEVANT PROJECT CONTRIBUTIONS

- National Coordination Group established to promote the identification, long-term monitoring and conservation of species and Key Biodiversity Areas;
- Identified 67 endemic or near-endemic threatened species that can be used to develop a list of protected species for Mozambique (Article 46 of the Conservation Law - 5/2017)
- Historical map of Mozambique's ecosystems and Red List of terrestrial ecosystems elaborated
- 29 KBAs identified, mapped and available to inform spatial planning programs by Government and the private sector: the Manual for implementing projects around KBAs was translated into Portuguese
- Up-to-date species data compiled and ready to be used by the Government to inform decision making and conventions reporting;
- Mozambican fauna specialists integrated on the IUCN Regional Species Survival Commission;
- Young Mozambican biologists trained in the process of organizing data and conducting Red List and KBA assessments;
- Developed the Terms of Reference for the Biodiversity Portal of the Ministry of Land and Environment.



CONCLUSIONS

The 29 KBAs that have been identified and mapped can be used to guide terrestrial and marine development and spatial plans from the local to the national level (District Land Use Plans – PDUT – Provincial Territorial Development Plans – PPDT – National Territorial Development Plan – PNDT) – National Marine Spatial Plan (POEM). They thus contribute to minimize the impact of infrastructure and development projects and to support the strategic expansion of the national network of PAs, strengthening the framework of conservation policies towards the achievement of the CBD Aichi Targets 11 and 12 and SDGs 14 and 15.

The update of the Red List provides information about the conservation status of species occurring in Mozambique that are globally threatened, facilitating their monitoring and management. The information produced directly contributes to the achievement of the CBD’s Goal 12, which encourages countries to ensure protection of all endemic, rare and threatened species. The Red List of ecosystems determine which ones are most at risk of loss and degradation, allowing targets to be set for the new global biodiversity framework for 2030.

KBAs are a valuable resource for global conservation prioritization analyzes and, in many countries, have been particularly influential in establishing new PAs, thus contributing to CBD’s Goal 11. Therefore, when KBAs are subject to threats that can compromise their triggering elements, its protection should be considered. However, not all KBAs have to be designated as PAs if that is not necessary to conserve their triggering key biodiversity elements. On the other hand, it is normal for Mozambique to have PAs that do not qualify as KBAs, which does not mean that these sites are not important for conservation. In other words, there are areas that, due to their characteristics, are important at the national level, but do not meet the KBA criteria to be considered as areas of global importance. In any case, PAs that are KBAs increase their visibility and, international prestige, gaining potential access to more sources of funding. In addition, the conservation of KBAs attracts international funding and contributes to safeguarding biodiversity at global level.



RECOMMENDATIONS



- Formalize, at Ministerial level, the National Coordinating Group for KBAs and Red Listing to be the official forum to deal with these issues, contributing to support the implementation of the conventions and National Strategy and Action Plan on Biological Diversity
- Integrate the map of the 29 KBAs into spatial development plans (national, provincial and district) and marine spatial plans (situation and allocation plans).
- Develop national legislation to recognize KBAs as areas of high biodiversity value that have to be managed in order to safeguard the biological elements that triggered them.
- Continue the identification of KBAs, obtaining updated information for areas in terrestrial and marine environments.
- Continue to assess the global conservation status of species and ecosystems and, in the medium term, contribute to regional assessments and promote national assessments.
- Integrate KBAs in the review of the National Biodiversity Strategy and Action Plan.
- Use KBAs in initiatives to expand the current national network of conservation areas, either by changing the limits or creating new PAs.
- Introduce guidelines for Environmental Impact Studies to consider KBAs as areas of high importance for biodiversity that must be safeguarded or avoided.
- Use KBAs as preferred areas for receiving biodiversity offsets.
- Use the KBAs as the reference areas for the initiation of a national biodiversity monitoring program, which allows for regular reassessment of their status
- Urgently publish on-line a National Biodiversity Portal, making available KBAs and Red Lists information and integrate it in reports to CBD and other international conventions.
- Promote training and institutional capacity to carry out assessments on Red List (global, regional and national) and KBAs.

Key Biodiversity Areas (KBAs): most important places in the world for species and their habitats.

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