

A photograph of two women in a vast, golden-brown field of tall grass. The woman on the left is seen from the back, wearing a white tank top, a patterned headscarf, and a plaid skirt, carrying a large blue plastic water container. The woman on the right is facing her, wearing a bright green headscarf and a blue top, smiling. In the background, there is a dense line of green trees under a cloudy sky.

CONSERVATION AND DEVELOPMENT IN MOZAMBIQUE

LESSONS FROM THE TRANSFRONTIER
CONSERVATION AREAS PROGRAM AND NEW
PERSPECTIVES FOR THE MOZBIO PROGRAM



ANAC
AGÊNCIA NACIONAL DAS ÁREAS
DE CONSERVAÇÃO



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Environment & Natural Resources

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CONSERVATION AND DEVELOPMENT IN MOZAMBIQUE

Lessons from the Transfrontier Conservation Areas Program and New Perspectives for the MozBio Program

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Cover design: Teddy Ruge

FOREWORD

Government of Mozambique



Celso Correia

Minister of Land, Environment
and Rural Development
Mozambique

The transfrontier conservation initiative constitutes a valuable mechanism for minimizing the inefficiencies imposed on the ecology, the border delimitations between countries meanwhile fostering international cooperation. In this regard, the Government of Mozambique assumed the regional leadership of the transfrontier conservation context with the creation of a 15-year Transfrontier Conservation Area Program (TFCA).

This program aimed at developing conservation and tourism to stimulate local employment and promote opportunities and subsistence alternatives to rural communities as well as ensure improved nature conservation. The various important results achieved

with the implementation of the TFCA Program paved the way for improving the institutional basis for conservation in the country, strengthening the management of conservation areas and helped to transform the concept of Transfrontier Conservation Areas into centres for sustainable rural development.

Despite government actions the current reality, characterized by a growing search for illegal elephant ivory and rhino horns, raises great challenges that deserve new and more effective action on the fight against wildlife poaching. Efforts are needed from the Government, Communities, Civil Society and the Private Sector. Wildlife poaching is today, the greatest threat to conservation and to the development of rural communities.

As such an innovative approach is necessary, which will expand the existing experiences, and lead to a new dynamic of the national

Conservation Areas system. This will be piloted through the MozBio Program, whose first part will be the MozBio I Project (2014-2019). The MozBio Program will implement a new institutional framework for conservation, strengthening the capacities of the recently established ANAC, the Conservation Areas, the Foundation for Biodiversity Conservation (BIOFUND) and the Management Authorities of CITES. Furthermore, MozBio will stimulate the development of nature-based tourism, improving the investment climate in conservation areas through financing development of priority infrastructures.

It is estimated that the Project will directly benefit more than 11.200 families most of them whom are found in the poorest areas of Mozambique. It is intended that the benefits will reach the communities by a series of means which will include: i) sharing of 20% of the State revenues generated by the use of wildlife; ii) creation of employment in tourism and conservation activities; iii) increase of economic benefits resulting from community initiatives financed by the project; iv) diverse range of training and capacity development; and v) improvement of institutional capacities of ANAC, BIOFUND and Conservation Areas.

An important factor associated with the MozBio Project is that it will bring an innovative sustainable forest management approach, with a landscape dimension. This approach will be implemented in the context of reducing greenhouse gas emissions, desertification and environmental degradation. This will be piloted in the Provinces of Cabo Delgado and Zambézia in partnership with the Technical Unit of REDD+. This will further nurture the sustainability of biodiversity conservation and strengthen the sustainable rural development agenda.

FOREWORD

World Bank

For almost two decades, the World Bank has been engaged in the conservation and development nexus in Mozambique. The collaboration started as a response to a growing interest within the southern African region to collaborate on conservation. This was intended to tap on the immense opportunities of nature-based tourism to protect valuable natural resources while lifting rural communities out of poverty.

The Transfrontier Conservation Areas (TFCA) Program, launched in 1996, marks the beginning of a successful collaboration between the Government of Mozambique, the World Bank, and the Global Environment Facility (GEF). It has transformed the conservation agenda in the country and raised it to a core development priority.

The two-phased, 15-year Program has boosted the conservation of the most precious biodiversity in the region while contributing to jobs and livelihood opportunities in rural areas. The TFCA Program expanded conservation areas, reintroduced wildlife, and developed potential for nature-based tourism – all benefitting rural communities and the country as a whole. It has also led to instrumental changes, improved institutional arrangements, strengthened policies for conservation, and innovative international partnerships.

The significant changes generated on the ground are evidence that conservation, nature-based tourism, and sustainable development can go hand-in-hand to create new opportunities for rural poor. This is especially true

in countries like Mozambique that are experiencing population growth, economic growth, large-scale extraction of natural resources, and a wildlife poaching crisis. The need for continued and strengthened conservation efforts is fundamental to the sustainable growth and development of the country's economy.

This booklet shows that the sustainable management of natural resources and biodiversity is no longer an option – it is a necessity. It illustrates the complexity of integrated conservation efforts; it makes the case for the development of nature-based tourism as a long-term process; and it exposes how a landscape approach to conservation can stimulate local economic development.

Sustainable resource management is key to reducing poverty and promoting shared prosperity. This is why we are proud to launch MozBio, a new and ambitious endeavor that builds on the achievements of the TFCA Program.

The World Bank continues to be committed to working beyond the traditional boundaries of natural resources management, conservation, agriculture, forestry, and development. We hope that these results will provide a basis for expanding global discussions on the nexus of conservation and sustainable development.

The World Bank looks forward to working with the Government of Mozambique to promote rural development, conservation and the sustainable use of natural resources.



Mark Lundell
Country Director
Mozambique, Madagascar,
Comoros and Seychelles
World Bank



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OVERVIEW AND MAIN MESSAGES

This booklet presents the main achievements and lessons learned during the 15 years of implementation of the Transfrontier Conservation Areas (TFCA) Program in Mozambique and how they led to the 2015 launch of the new MozBio Program.

The following major themes capture the overall vision for improving conservation and natural resource management within the overriding objectives of poverty reduction and shared prosperity. They draw on Mozambique's experience and on the World Bank's know-how.

Economic Growth and Rural Development

The sustainable management of resources and biodiversity conservation have significant potential to contribute to economic growth and rural development. Nature-based tourism, sustainable forest and fisheries, wildlife management, and payment for ecosystem services can generate income for rural communities and contribute to the national economy.

Landscape Approach

The achievement of long-term sustainable use of natural resources requires a landscape approach that promotes linkages between different types of land uses and between land actors and creates institutional arrangements to promote coordination.

Innovative Partnerships

Innovative partnerships are promising governance models for the sustainable and long-term management of CAs. These include partnerships between national and local governments, private sector, NGOs and communities around natural assets, tourism and wildlife management entities.

Legal Frameworks

Legal frameworks and well-funded local and national institutions with clear mandates are needed to advance the conservation agenda, ensure long-term funding, and achieve national conservation goals.

Engaging Communities

The conservation of natural resources and biodiversity are closely linked to the well-being of local communities and vice-versa. The sustainable management of Conservation Areas (CAs) should focus on providing economic alternatives, clarifying communities' land rights on areas adjacent to CAs, and offering incentives for better management of resources.

1

SETTING THE SCENE:

Conservation, Biodiversity, and Development in Mozambique

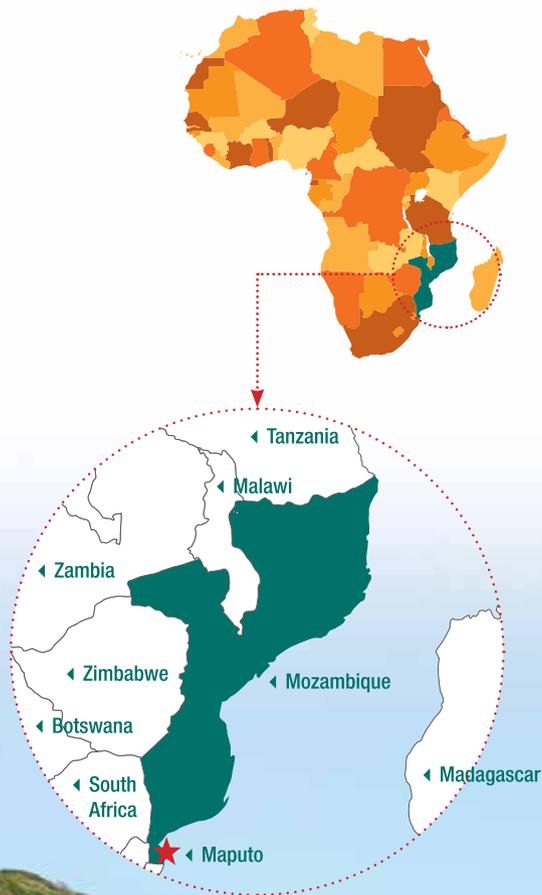
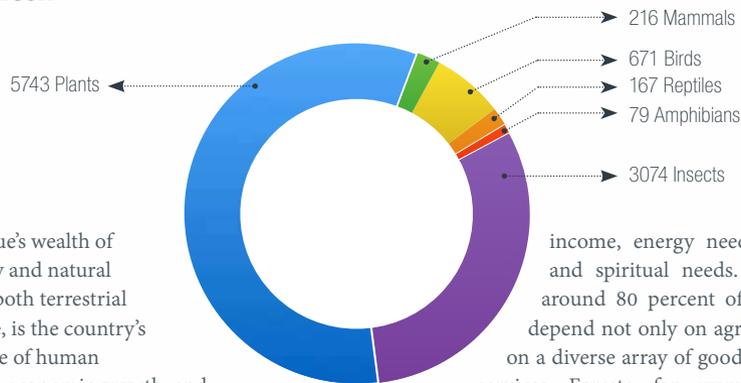


Figure 1: Biodiversity in Mozambique

▶ Source: MICOA



Mozambique's wealth of biodiversity and natural resources, both terrestrial and marine, is the country's main source of human livelihoods, economic growth, and development, especially in rural areas.

Mozambique has a landmass area of 800,000 km², a population of 25 million, and remarkably rich and diverse species (Figure 1). The country hosts a wide diversity of habitats, including montane, woodland, wetland and coastal/marine ecosystems. The country is internationally recognized for its ecological richness and its biodiversity hotspots with high levels of endemism.¹

Historically, the people of Mozambique have always **lived off the land and forests** for their livelihoods, cash

¹ A species is said to be endemic when it is found only in one place or specific region. The high level of endemism indicates that certain world regions are unique for their fauna and flora and represent particularly valuable conservation areas.

income, energy needs, and cultural and spiritual needs. In rural areas, around 80 percent of the population depend not only on agriculture but also on a diverse array of goods and ecosystem services. Forests, for example, are highly important for the collection of traditional and modern medicines, and, around 20 percent of the population rely on fisheries for part of their income and even more may rely on the sector for subsistence and food security.

However, increasing pressures on the environment are making poor households even more vulnerable and are further degrading their habitats. Some of the current threats include agricultural encroachment, climate change, hunting, overfishing, and illegal logging and mining.

Mozambique's challenge will be to foster economic development while maintaining the productivity of the resource base upon which most of the population depend directly for their livelihoods.





◀ Colleen Begg



◀ Colleen Begg

▲ Mozambique is home to magnificent animals such as elephants and hippos. While a relatively large number of hippos, elephants have become increasingly threatened by habitat loss, human-elephant conflict, and illegal hunting for meat and ivory. Since the early 1970s, the elephant population has declined by about half to 22,000 according to the World Conservation Society.



▲ Mozambique's coastline is unique in the East African Marine Region in terms of the uniqueness, and diversity of its species, including some of the most spectacular coral reefs of the world.



▲ Forests, woodlands and other vegetation cover about 70 percent of Mozambique's surface. The Miombo Forest (seen above) is one of the predominant forest ecosystems.



◀ Colleen Begg

▲ The Pied Kingfisher is one of Mozambique's 671 recorded bird species..



▲ The Maputo Special Reserve has kilometers of pristine beaches, home to various marine mammals, marine turtles, rare and endangered species. The coastal forests along the coast boast a high level of endemic species and are one of the four centers of plant endemism.



▲ Mozambique has the second largest mangrove cover area in Africa – over 350,000ha, known to contain globally significant carbon pools. Mangroves in Quirimbas National Park are shown above.

1

BAZARUTO NATIONAL PARK
(1,430 km²)

Established as a park in 1971 to protect dugong and marine turtles and their habitats. Group of six islands with abundant marine life and some of the most diverse coral reefs in Mozambique.

2

POMENE NATIONAL RESERVE (50 km²)

Established in 1972, to protect a small but very rich estuary zone, which hosts a diversity of marine and terrestrial species. In addition to coral reefs, seahorses, dugongs and birds, Pomene has wonderful beaches.

3

GORONGOSA NATIONAL PARK (4,086 km²)

Established in 1960. Composed of a mosaic of distinct ecosystems, including rain forests and plateaus of miombo and montane forests. Abundant wildlife, such as the 'Big Five'.

4

LIMPOPO NATIONAL PARK (11,233 km²)

Established in 2001. Part of the Great Limpopo TFCA, linked with South Africa and Zimbabwe. It is dominated by mopane forest vegetation and a diverse animal life.

5

MÁGOÈ NATIONAL PARK (3,745 km²)

Established in 2013 to boost wildlife and tourism with buffer areas designated for hunting. The area offers a rich combination of fauna, interior savanna landscapes and riverbanks.

6

QUIRIMBAS NATIONAL PARK (9,013 km²)

Established in 2002. Situated in the Quirimbas archipelago and internationally recognized for its rich marine and terrestrial ecosystems and biodiversity, as well as its extensive mangrove coverage.

7

MARROMEU COMPLEX (6,800 km²)

Includes the Marromeu National Reserve (MNR) and surrounding hunting blocks. MNR established in 1960 and proclaimed as a 'wetland of international importance' under the Ramsar convention in 2004.

8

INHACA BIOLOGICAL RESERVE (52 km²)

Established in 1965 and contains important habitats and coastal vegetation. A museum and research center on the island conducts research on the natural life/vegetation of the island.

9

PONTA DO OURO PARTIAL MARINE RESERVE (678 km²)

Established in 2009 to conserve and protect marine and coastal species and their habitats. Includes rich and well preserved coral reefs and its beaches are important nesting sites for two species of sea turtles.

10

MAPUTO SPECIAL RESERVE (1,040 km²)

Established in 1960, with valuable coastal forests that are part of the Maputoland regional centre of endemism. Part of the Lubombo TFCA, linked with parks in Swaziland and South Africa.

11

MALHAZINE ECOLOGICAL PARK (5 Km²)

Former military ammunitions depot located in the outskirts of Maputo. Established in 2013 to protect and preserve local natural resources. The plans for the 'Ecological Park' comprise establishing research facilities and introducing wildlife.

12

BANHINE NATIONAL PARK (7,250 km²)

Established in 1973 and part of the Great Limpopo TFCA. Comprises open savannah with mopane and miombo forests and inland wetlands, which attract rich birdlife.

13

PRIMEIRAS E SEGUNDAS ENVIRONMENTAL PROTECTED AREA (10,409 km²)

Established in 2012. Africa's largest marine reserve, characterized by extensive coral reefs, mangroves and breeding grounds for its rich bird life.

14

ZINAVE NATIONAL PARK (4,000 km²)

Established in 1973 to protect giraffes and roan antelopes. It is part of the Great Limpopo TFCA. Features diverse flora such as the riverine forest along the Save River.

15

NIASSA NATIONAL RESERVE (42,000 km²)

Established in 1954. One of Africa's largest reserves and the biggest CA in Mozambique, with largest concentration of animals and extensive miombo forests, savannas, wetlands and inselbergs.

16

LAKE NIASSA PARTIAL MARINE RESERVE (478 km²)

Established in 2011 to conserve habitats and species of Lake Niassa, Africa's third largest lake. Also holds an enormous tourism potential.

17

GILÉ NATIONAL RESERVE (2,861 km²)

Established in 1960. Contains one of the most well preserved dry forest, known as Miombo forest. Unique due to granitic inselberg habitats which are inside or around the Reserve.

18

CHIMANIMANI NATIONAL RESERVE (655 km²)

Established in 2003. Mountainous areas with rich biodiversity and part of the Eastern Afromontane biodiversity hotspot.

2

THE TRANSFRONTIER CONSERVATION AREAS PROGRAM



The TFCA Program was established not long after Mozambique's 15-year civil war ended. During the war, the country's fauna had been heavily affected, the CAs' infrastructure destroyed, and large numbers of animals killed for food and ivory. To regenerate and conserve the country's natural assets and stimulate local development for the rural poor, the Government of Mozambique emphasized the promotion of nature-based tourism.

Nature-based tourism development was seen as a priority, but the preconditions were limited by inadequate infrastructure and basic services, non-conducive environment for private sector involvement and degradation of the fauna and flora.

The TFCA Program was established in response to Mozambique's limited ability to promote nature-based tourism. The first phase started in 1996 with financing from Mozambique and a US\$5 million GEF¹ grant. The second phase, TFCA II, was launched in 2005 and ran until 2014. The US\$35.1 million World Bank financed project included a grant of US\$10 million from the GEF and additional parallel financing of US\$2.2 million from Peace Parks Foundation (PPF) and African Wildlife Foundation (AWF).

The TFCA Program targeted the five CAs (Chimanimani National Reserve, Zinave National Park, Banhine National Park, Maputo Special Reserve and Limpopo National Park) which are located near international

¹ The Global Environment Facility (GEF) is an independent funding mechanism that, since 1991, has brought together governments, international institutions, nongovernmental organizations and the private sector, to provide important grant financing to developing countries for projects across a variety of environmental areas, including biodiversity, with the aim of benefitting the global environment, as well as promoting sustainable livelihoods.

frontiers and share biodiversity and with ecological linkages with CAs in neighboring countries. The long-term objective of the Program was to link transfrontier CAs and parks in order to conserve the biodiversity and natural ecosystems; and to promote economic growth based on the sustainable management of natural resources by local communities, especially through nature-based tourism.

Key achievements of TFCA Program, explored in this booklet, include:

- a. international cooperation;
- b. strengthening of policy, legal and institutional arrangements for conservation;
- c. expansion and improvement of conservation areas and reintroduction of wildlife;
- d. community benefits;
- e. development of the nature-based tourism sector; and
- f. innovative partnerships.



INTERNATIONAL COOPERATION

One of the main achievements of the first phase of the Program was the formal establishment of three TFCAs: the Great Limpopo, Chimanimani and Lubombo. TFCAs are defined areas that share frontiers between two or more countries, and they cover large-scale natural systems encompassing various conservation areas, thus establishing a permanent link between the CAs in bordering countries. Trans-border cooperation on this area is seen to create environmental, social, economic and political benefits and has therefore also been called Peace Parks.

Under the second phase of the TFCA Program, Mozambique signed three international management protocols for the joint cooperation and management of the TFCAs with South Africa and Swaziland for the Lubombo TFCA, with South Africa and Zimbabwe for the Great Limpopo TFCA and with Zimbabwe, Zambia for the ZIMOZA agreement.

The TFCA Program has created confidence among these neighboring countries in raising the issue of conservation to a higher political level. Together, they hold regular ministerial meetings and a high-level forum for governments to discuss conservation issues beyond ecosystem protection.

The Program led to the conception of Peace Parks in southern Africa. Two examples are the Futi Corridor (see page 14) and Ponta do Ouro-Kosi Bay, Africa's first and largest transfrontier marine Conservation Area connected to South Africa's Maputaland Marine Reserve in the iSimangaliso Wetland Park, a World Heritage Site.



▲ Limpopo TFCA



▲ Lubombo TFCA



▲ In December 2002, the Mozambican Minister of Tourism, Fernando Sumbana; the South African Minister for Environmental Affairs, Valli Moosa; and the Representative of the Zimbabwean Ministry of Tourism and Environment cut a section of the fence that divides South Africa's Kruger Park and Mozambique's Limpopo National Park to symbolize the establishment of the Great Limpopo TFCA.

b

STRENGTHENING OF POLICY, LEGAL, AND INSTITUTIONAL ARRANGEMENTS FOR CONSERVATION

One of the major achievements of the second phase of the TFCA program was a new conservation policy. Adopted in 2009, it brought a progressive vision for conservation in Mozambique, and paved the way for other major policy and institutional accomplishments. In May 2011, the government established the Administração Nacional das Áreas de Conservação (ANAC) as an autonomous public agency tasked with the management of all conservation areas in Mozambique.



The creation of ANAC was an important step toward a more sustainable management of the conservation areas in our country. Within its framework, ANAC can be the initiator and mediator for important collaboration between the government, private investors, and local communities. These can spur innovative nature-based economic activities that will generate revenue for the long-term sustainability of our conservation areas.

—Dr. Bartolomeu Soto, Head of ANAC



In a response to the need for increased funding for conservation areas, The Foundation for the Conservation of Biodiversity (BIOFUND) was created in 2011, under the leadership of the World Wide Fund for Nature (WWF) and the financing of the French Development Agency (AFD) and the German Development Bank (KfW). A conservation endowment fund is being established now to fund the management costs of CAs.

Through innovative financing tools such as this endowment fund and biodiversity offsets, BIOFUND will play a significant role in ensuring the long-term financial sustainability of parks and reserves, in contributing to the much needed conservation and in benefiting the unique biodiversity in Mozambique.

—Luis Honwana, Executive Director, BIOFUND

In 2014, the Conservation Areas Law was approved, providing a clear and strong legal foundation for conservation management in the country. This law aligns Mozambique's conservation interventions with recent international approaches. It introduces more clearly the need to adopt a participative management of CAs in order to guarantee the ecological, social, and economic benefits. It also stresses the need to ensure the sustainable use of natural resources to provide the benefits and services necessary for the development of local communities.

Some key additions brought by this new law include:

- participation of citizens and local communities in the management of biodiversity and conservation areas;
- categorization of the conservation areas; and
- prison sentences and heavier fines for offenders to protected and endangered wildlife species.

The Conservation Law and Conservation Policy provide the legal and institutional frameworks for the long-term management and sustainability of Mozambique's CAs. They will help promote sustainable methods of financing and provide incentives for more partnerships with communities and private sector.

—Regina Cruz, Head, IUCN Mozambique

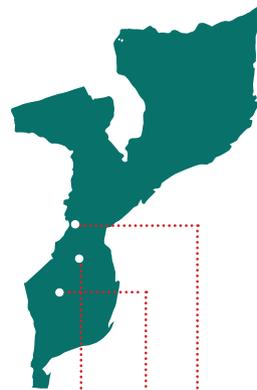


EXPANSION AND IMPROVEMENT OF CONSERVATION AREAS AND REINTRODUCTION OF WILDLIFE



▲ On February 21, 2014 the headquarters of the Maputo Special Reserve was inaugurated, which include entrance gates at Futi and at Gala, both with a reception office, boom gate, kiosk and restrooms for visitors (shown in picture). The head office complex includes 11 offices, while housing comprises two houses for senior staff and dormitories for female and male field rangers.

With TFCA Program support, the government increased the area of formal conservation areas by 340,000 hectares through the establishment of two new, highly relevant Protected Areas: Ponta do Ouro Partial Marine Reserve and the Futi Corridor, part of the Maputo Special Reserve (see page 14). This effort also included the realignment and expansion of the boundaries of three CAs within Chimanimani National Reserve and the Great Limpopo TFCA, including Banhine and Zinave National Parks (see maps below).

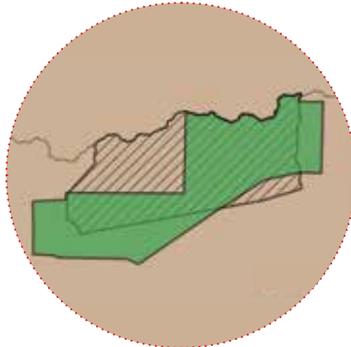


In addition, the program helped improve the management of CAs through a series of investments in infrastructure, equipment, and capacity building activities. It also helped reintroduce a wide range of important species (see box 2).

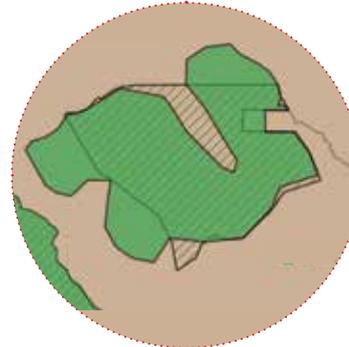
The infrastructure improvements, upgrading of accommodations, such as the Chemucane Lodge, along with wildlife reintroductions in the Maputo Special Reserve are all foundational developments for a sustainable nature-based tourism industry.

— Armando Uleva Guenha, Park Warden, Maputo Special Reserve

 Old limits
 New limits



▲ Zinave National Park



▲ Banhine National Park



▲ Chimanimani National Reserve

Box 1: New Protected Areas established under the TFCA Program



Futi Corridor

The declaration of the Futi Corridor as an integral part of the Maputo Special Reserve was done to protect areas within the Maputaland-Pondoland-Albany Biodiversity Hotspot, one of the Earth's 25 richest biologically and most endangered terrestrial ecoregion.

The corridor was created to secure land for the well-documented movements of elephants in the region. It allows them to safely wander along the Futi River watercourse, between the Maputo Special Reserve and the Tembe National Park in South Africa.

Ponta do Ouro Partial Marine Reserve

In 2009, the government proclaimed the Ponta do Ouro Partial Marine Reserve, the first marine TFCA in Africa. The marine protected area is home to a rich diversity of marine life and holds impressive tourism potential. The government has successfully promoted tourist facilities and concessions in the area and managed to balance the negative impacts of nesting turtles harassment and driving on the beaches.

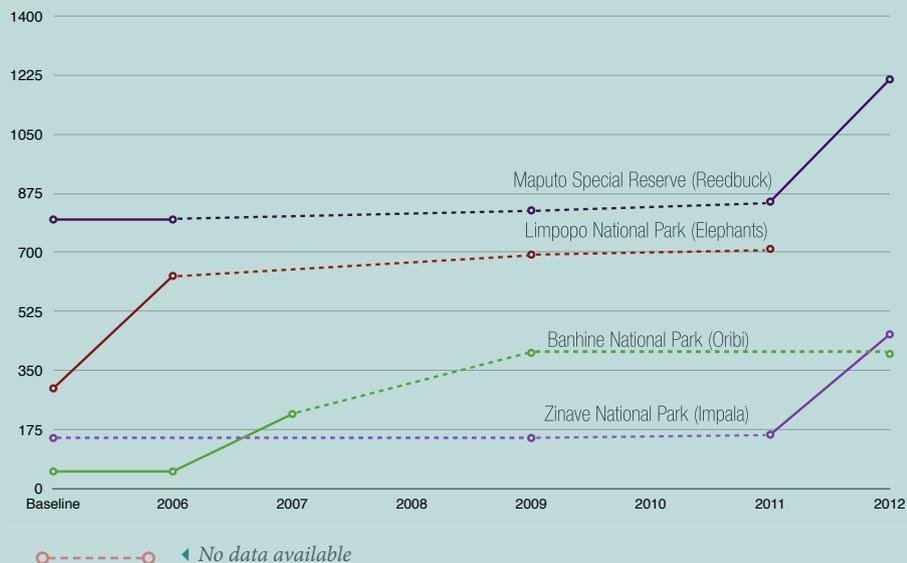
Over the past years, Ponta do Ouro has been transformed into a tourism hub for African and international tourists. The rapid tourism development has generated many important social and economic benefits. Yet, as opportunities increase, so do potential pressures on the ecological environment. In the future, it will be important to continue to implement mechanisms that promote conservation efforts and encourage an integrated development of the area. This will bring a balance between tourism growth and protection of the ecological richness.

— Miguel Gonçalves, Park Warden, Ponta do Ouro Partial Marine Reserve

Box 2: Monitoring and increasing wildlife populations

An important activity under the TFCA Program was the monitoring and increase of wildlife populations. In the Maputo Special Reserve and the national parks of Banhine and Zinave, aerial surveys were carried out to monitor wildlife and obtain valuable data and information. Another activity was the translocation of wildlife with a special focus on the Limpopo National Park (4,700 animals since 2008), the Maputo Special Reserve, and the Zinave National Park. As the TFCA Program reintroduced a wide range of important species, CAs had a ten percent increase in bio indicator species (see figure 2).

Figure 2: Increase in species in CAs



▲ The figure indicates the population count of species in some of the areas targeted by the Program. Although the censuses were infrequent, the estimates reveal an overall growth trend for the indicator species selected in each of the CAs.



▲ In Zinave National Park the program helped establish a wildlife sanctuary and reintroduce giraffes, which was the reason for the creation of the park.



▲ In the Chimanimani National Reserve, the collaring of elephants was done in the Moribane Forest to identify their movements, estimate group numbers, and classify their preferred habitat through different seasons. These were used to determine seasonal variations and collect data that could decrease the incidence of human-wildlife conflict and support tourism by creating walking trails.

The program generated positive impacts on local households and communities living within and around the supported CAs.

Local communities benefited from employment in civil works, such as construction, technical training on horticulture; irrigation and water management; conservation agriculture; carpentry; electricity; financial management; and accounting.

PPF



Tiago Nhazilo

Formal and informal employment in conservation and tourism activities were created for 2,000 local residents.



PPF

The establishment of community projects such as the boreholes in semiarid Banhine and Zinave National Parks and Maputo Special Reserve had widespread benefits within the community.



In Chimanimani and Maputo Special Reserves, the program supported local farmers to have alternative sources of income and access to markets for local products like honey.



Valdemar Casimiro

From 2006 to 2013, overall annual CAs revenue increased by more than 120 percent, from US\$187,400 to US\$426,977. As per Mozambique's conservation law, communities received 20 percent of the revenue.

Box 3: Community enterprise projects under the TFCA Program

The following community enterprise projects under the TFCA Program developed entrepreneurship, created jobs, and generated meaningful revenue for local communities.

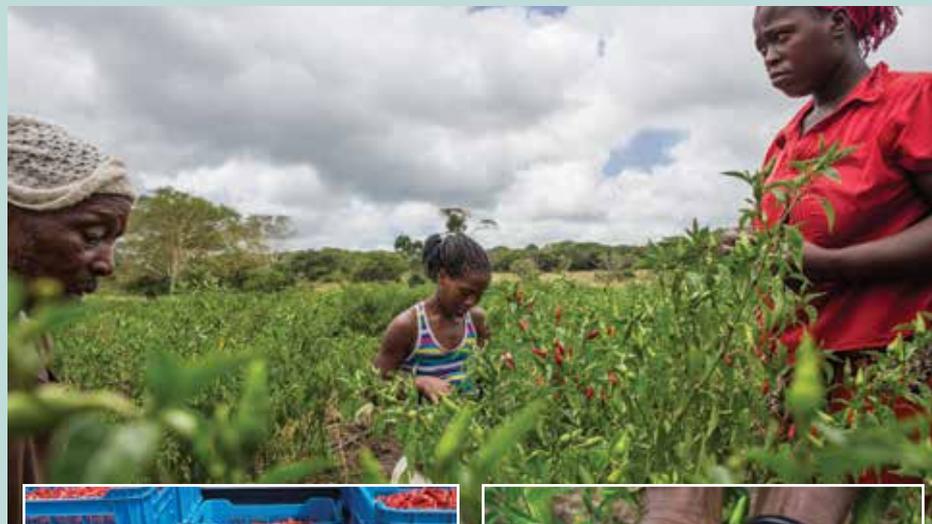


◀ Milagre Nuvunga

The Ndzou Camp in Chimanimani is a pioneering example of a community eco-lodge developed as a joint venture between the social enterprise Eco-MICAIA Ltd and a local community association Associação Kubatana Moribane, which owns 60 percent equity and employs only the local population. Built with the community with local materials and solar energy, the camp aims to be a learning center for visitors to get a deeper understanding of the Moribane Forest ecosystem.

The Ndzou Camp is a successful example of how we can value and preserve precious ecosystems while strengthening local economies and building healthy, vibrant communities. Using an inclusive business model, MICAIA created an opportunity for communities to collectively own and manage a viable tourism enterprise. Though still a small business, Ndzou Camp is the pride of the Mpunga community. It's already fully sustainable and set for growth.

— Milagre Nuvunga, Director, MICAIA



◀ Tiago Nhazilo

In the Maputo Special Reserve, the TFCA Program supported the Matchia Chili Project, which helps small-scale farmers of the Matchia community improve and scale up local chili production. Through organizational training and technical assistance on sustainable chili production and with support from Piri Piri Elefante Moçambique, a chili growing and trading company, the Program created diversified income-generation opportunities for the communities.



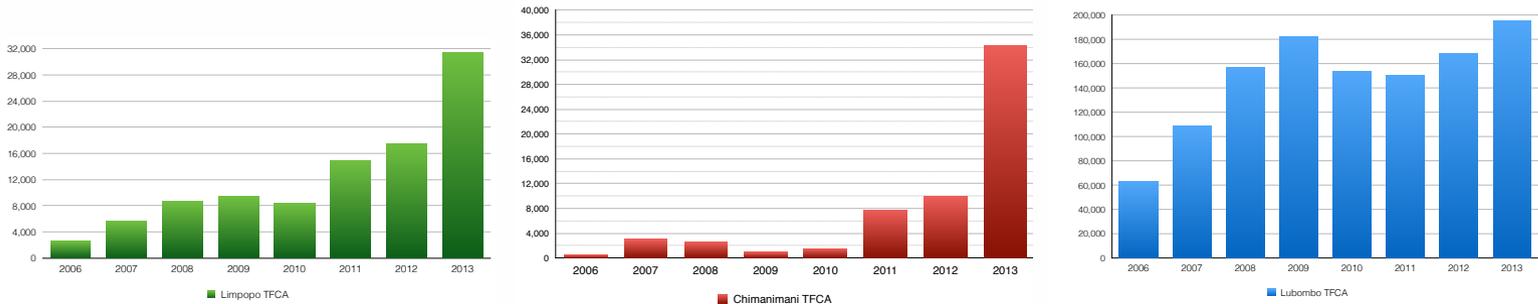
The project helped us understand the importance of conservation and how it is linked to the lives of the communities. Today, the community of Matchia is a reference in the Matutuine District because of its conservation-based chili production. I have improved my house, some have bought cattle and others are building brick houses.

— Marcelina Mahlango,
Matchia community member



DEVELOPMENT OF THE NATURE-BASED TOURISM SECTOR

Figure 3: Number of visitors and bed-nights in tourism facilities in the target districts



Under the TFCA Program, there was a substantial growth in nature-based tourism in Mozambique. Much of the increased tourism occurred in the southern and coastal parts of the country, especially in Lubombo, which includes the Maputo Special Reserve and Ponta do Ouro Partial Marine Reserve.

The increase in tourism can be measured by the significant growth in the number of bed nights in the three TFCAs (Figure 3). Fees collected from increased tourism have been a major source of Revenue. In 2013, Limpopo National Park collected US\$289,000 and the Maputo Special Reserve, US\$135,000. However much remains to be done to tap into the country's immense potential.





INNOVATIVE PARTNERSHIPS

The TFCA program included many innovative partnerships between the Mozambican government, the World Bank and stakeholders such as International Finance Corporation, AFD, Peace Parks Foundation, KfW, USAID as well as local non-governmental organizations, private sector entities, and communities. Together, they laid the foundation for an inclusive and participatory conservation and tourism agenda in Mozambique.

Box 4: Management of the Maputo Special Reserve co-financed by Peace Parks Foundation (PPF)

The Maputo Special Reserve was supported under the TFCA Program through a US\$6 million investment. The World Bank funded the upgrading of infrastructure and the construction of headquarters and accommodation facilities. An innovative co-financing agreement was also made with PPF, a non-governmental conservation organization, which provided technical and financial management staff as co-financing and became responsible for the development, management, and extension of the reserve. The partnership ensured long-term and sustainable management of the reserve and provided valuable lessons on public-private partnerships for the management of conservation areas.



Another important partnership between the World Bank and PPF is the annual Marine Turtle Monitoring Program in Ponta do Ouro Partial Marine Reserve, adjacent to the Maputo Special Reserve. This area is home to sensitive breeding grounds of leatherback and loggerhead turtles, currently under threat due to human encroachment and uncontrolled harvesting of their eggs. Through the program, which has been active since 2007, over 45 members of the Muvukuza community have been trained and employed as turtle monitors by the Associação para Investigação Costeira e Marinha. Their job includes daily foot patrols during the turtle nesting and hatching season between October and March.

and private sector for the promotion of peace, prosperity, and stability for generations to come. The Peace Parks Foundation has been working with the government of Mozambique and other partners on two important TFCAs—the Great Limpopo TFCA and the Lubombo TFCA. In the latter, the program worked with communities to collect baseline information on the nesting, tagging, and mortalities of marine turtles, and provide quantitative data essential to the protection of turtles. These activities were extremely useful to the program as they provided the data needed and generated income for communities. This truly demonstrates the opportunities and benefits of how communities can be engaged to help protect conservation areas and their delicate flora and fauna.

TFCAs are an approach to jointly manage natural resources across political boundaries and to foster partnerships between governments

—Werner Myburgh, CEO,
Peace Parks Foundation



◀ PPF

◀ Community members trained to work as turtle monitors



INNOVATIVE PARTNERSHIPS

Anvil Bay Lodge in Ponta Chemucane (Maputo Special Reserve)

This nature-based tourism lodge represents an innovative joint venture between a private sector investor, The Bell Foundation, and a local community association, Ahi Zameni Chemucane (AZC). The process was initiated by the Government who scoped, planned and procured investment via a competitive tender facilitated by IFC. Meanwhile, the communities within the Chemucane were assisted in the creation of a legal entity in order to create a joint venture company.

The community received US\$500 000 from the World Bank and a US\$500 000 interest-free loan from the Ford Foundation, via the African Safari Foundation, which enabled AZC to obtain a 40 percent share in the joint venture. It was the first time that Mozambique gave long-term concession rights to a local community for a prime tourist site in one of the country's major nature reserves. The lodge was built and operated by local communities and has generated jobs, social benefits and local growth in communities with few opportunities for formal employment.

What seemed a dream is now transforming into reality. Some of us already work in Chemucane and our families are benefiting from this project. Now, we think as future businessmen. We want to take this opportunity and improve our lives. Conservation is our greatest partner; without it no one will come to our lodge. Today, we value the animals and the beach because without them we will have no business.

— Usseni Juma, President of community association Ahi Zameni Chemucane

The Chemucane Lodge represents a unique partnership between a private investor and the local community to jointly develop a tourism enterprise in a Protected Area. This pilot initiative promotes the active participation of local communities in the tourism industry—an important economic sector in Mozambique—and generates revenues supporting nature conservation. IFC assisted the government in building the process and structures needed to bring in investments. This is indeed a replicable model that can be used to promote inclusive economic growth in other Protected Areas in Mozambique and in the region.

— David Bridgman, Practice Manager, Trade & Competitiveness Global Practice, World Bank Group

The Chemucane Lodge was one of the first attempts to involve rural communities in both conservation and the tourism economy. The project took community involvement in the rural tourism value chain to another level, making the AZC community association become a substantial shareholder in the company.

— Steve Collins, African Safari Lodge Foundation representative for Mozambique



▲ Lance Giles



◀ IFC

3

LESSONS LEARNED FROM THE TFCA PROGRAM

Government leadership is crucial:

The support of the leadership is crucial to establish transfrontier collaboration agreements, enable concessions for tourism investment, and expand limits of CAs. With increasing pressures on conservation from other sectors, transparent and high-level discussions are needed to ensure that conservation goals are achieved and maintained.

Promoting tangible benefits and development for communities around CAs is essential:

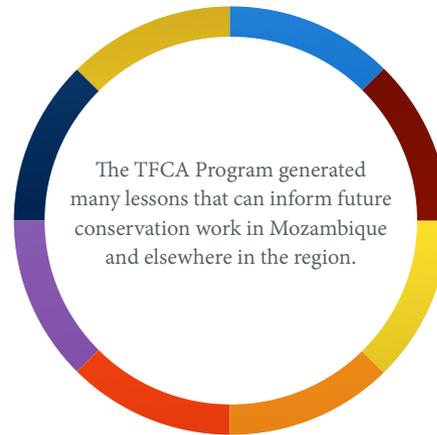
As community-related outcomes emerge slowly sometimes, it is important to have long-term programmatic phased programs that foster continuous institutional changes and human capacity development for communities. Linking community projects to government programs is also a proven strategy to achieve sustainability.

Nature-based tourism is not the only means to generate sustainable financing for CAs:

Although remote terrestrial areas with limited wildlife and infrastructure have less tourism potential in the short-term, they generate significant local and global environmental services. To ensure their protection, continued public and other financing mechanisms such as biodiversity offsets, payments of environmental services, and forest carbon programs such as REDD+ (see page 25) are needed.

Integrated landscape management approaches are essential for effective environmental, social and economic results within and outside CAs:

Since CAs covers areas with different types of land and threats to the integrity of biodiversity often come from outside the CAs, their management requires collaboration across several entities and multiple stakeholders including local governments, communities, smallholders, and large-scale private land owners.



Nature-based tourism is an important opportunity for Mozambique but it is not a silver bullet:

Developing and maintaining the assets needed for tourism, in particular infrastructure and wildlife, is a long-term process. To maximize tourism opportunities, tourism development should be focused on areas with most potential. In Mozambique these have found to be the marine CAs, at least in the short term.

Partnering with NGOs can be critical to complement the management capacity of CAs:

Collaborating with thematically and geographically specialized NGOs can be useful to leverage funding, bring in specialized skills and secure communities' interests. Yet, the roles and responsibilities of these partnerships should be clarified from the onset to avoid conflict among the different parties managing the CAs.

Despite the TFCA Program's great efforts some urgent challenges remain:

One of the challenges is the current spike in the illegal poaching of wildlife across Africa. Mozambique's elephants are mostly threatened and future conservation efforts should focus on stronger monitoring, protection and law enforcement to protect wildlife. The other challenge to be addressed is illegal logging that is a large threat to the habitats of animals.

Professional business facilitation is often needed for the public sector to attract private investment into CA concessions:

Facilitation is fundamental to create trust, reduce the risks perceived by all parties and bring consensus. The approach used must include using professionalism and strong negotiation skills to convince the private sector of the potential in investing in CAs.

4

THE MOZBIO PROGRAM:

Paving the Way for Landscape Conservation and Rural Development



Building on the lessons learned from the TFCA Program, the Government of Mozambique has launched the ambitious long-term MozBio Program. The first phase, MozBio 1, was launched in March 2015 and is implemented with support from a US\$40 million grant funded by the World Bank and a US\$6 million GEF grant. The program will address the threats to the conservation of Mozambique's natural capital, contribute to poverty reduction around CAs and take full advantage of the potential tourism growth in Mozambique. MozBio 1 will be implemented through four components:

Strengthening institutions for CA management

The institutional and policy framework for conservation in Mozambique's CAs is still new and requires support to ensure that the new laws, policies, and institutions are fully implemented. MozBio therefore has a strong emphasis on building the capacity of ANAC and strengthening CITES authority in Mozambique. MozBio will also assist in the capitalization of the BIOFUND endowment fund, increase its capacity to attract and develop private sector partnerships and support innovative financing for CAs.

Promoting nature-based tourism in CAs

MozBio aims to address barriers to nature-based tourism development. It will strengthen government capacity and regulations and support tourism infrastructure in targeted CAs with high tourism potential. MozBio will also include efforts to better manage sport hunting through the provision of training and technical assistance. These include advisory services for the creating of a system to manage the revenues collected from sport hunting, improving data collection on hunting activities and developing sport hunting plans.

Improving CAs management

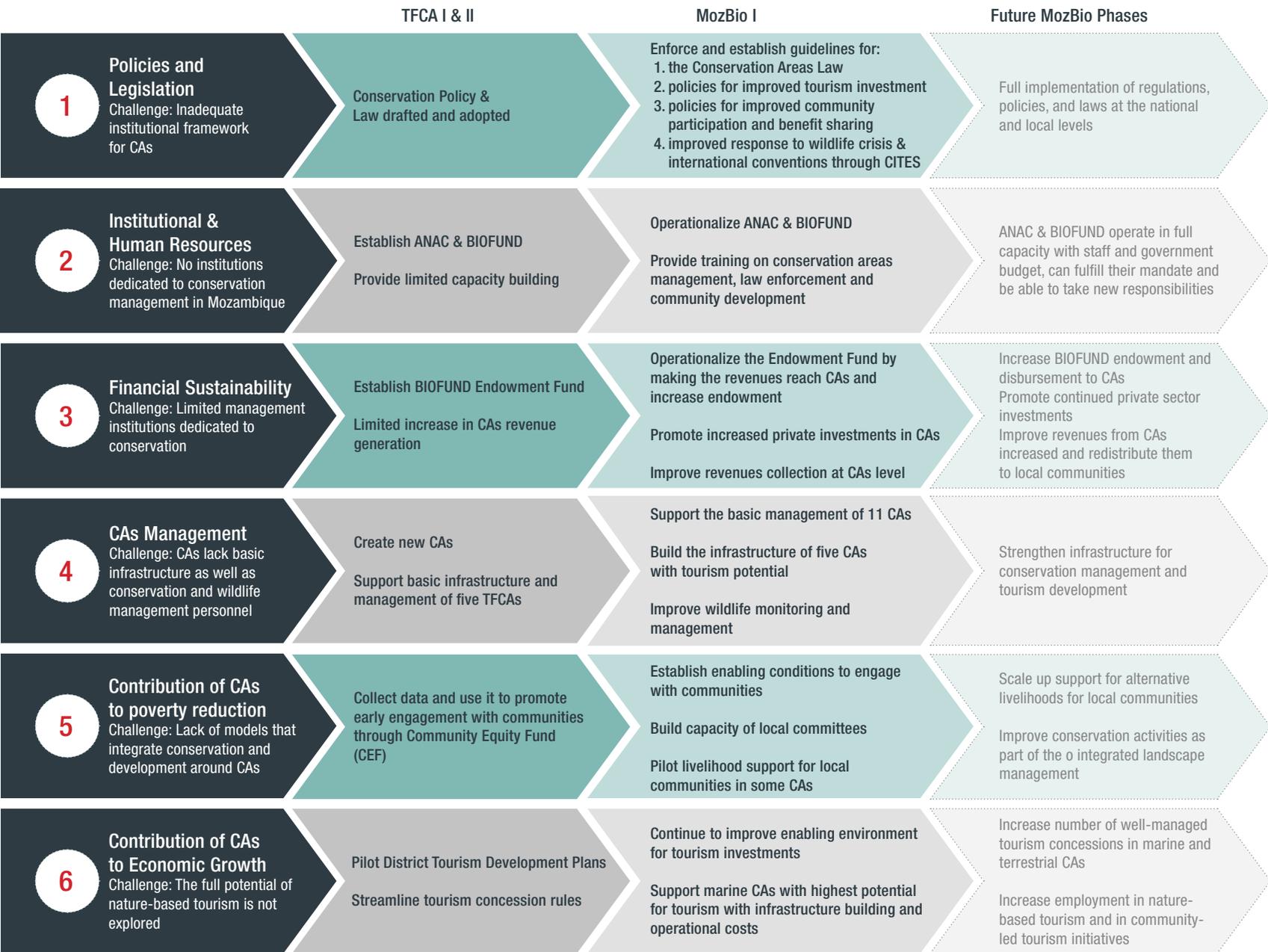
MozBio will cover a much wider range of CAs than the TFCA Program. To strengthen the management of these areas, activities such as construction,

rehabilitation and maintenance of important infrastructure will be implemented as well as provision of training, equipment, and operational budget. MozBio will also support wildlife surveys assessing the status of wildlife populations in terrestrial and marine environments, including elephants, lions, leopards, hippos, crocodiles, and key marine species.

Supporting sustainable livelihoods of communities

MozBio will strengthen communities' rights to land and resources and promote alternative livelihood to local communities through a broader landscape approach by promoting activities within and around the CAs. Through the provision of technical advisory services, training, and capacity building of local community members and community-based organizations, MozBio will support enabling conditions for communities to carry out activities related to sustainable natural resources management. MozBio will also offer matching grants to income-generating activities in targeted CAs. These will allow communities to implement a broader menu of integrated conservation-development interventions such as conservation and climate-smart agriculture, community forestry, fisheries, and appropriate wildlife management. Engaging communities in the sustainable use of natural resources within and around CAs aims to ensure broader benefits to communities and healthier landscapes where biodiversity can flourish.

MozBio's Six Strategic Pillars to Ensure the Sustainable Development of Mozambique's CAs and their Contribution to Poverty Alleviation and Growth



INTEGRATED LANDSCAPE MANAGEMENT INITIATIVES

Through the MozBio Program, integrated landscape management initiatives will be implemented in the Zambezia and Cabo Delgado Provinces, around the Gilé National Reserve and the Quirimbas National Park, respectively (see pages 25-26). These initiatives seek to bring together a large number of stakeholders with direct impact on land use around a common vision for the landscape and rural development. This entails strengthening decision-making bodies and promoting a host of activities, such as conservation agriculture, sustainable forest management, fisheries and wildlife management. These initiatives will generate lessons in Mozambique's efforts to access financing from REDD+ (Reduced Emissions from Deforestation and Forest Degradation)(see box 5).

The integrated landscape management approach is an opportunity for new paradigms for conservation that promotes various alternative revenue-generating opportunities for communities living in and around the CAs, which can improve their livelihoods and reduce their dependence on slash-and-burn agriculture and other traditional and unsustainable natural resources practices.

— Afonso Madope, MozBio Project Coordinator

Box 5: Climate Change and Forests in Mozambique: Challenges and Opportunities

Since 2008, Mozambique has been engaged in strengthening its capacity to reduce the loss of forest cover and associated greenhouse gas emissions. This is expected to generate global as well as national level benefits – given the role of forests as a source of income for a significant part of the rural population and as a main habitat for Mozambique's rich fauna and flora. REDD+ could also be an instrument to generate financial

resources. The Forest Carbon Partnership Facility (FCPF) is currently supporting Mozambique through a US\$3.8 million grant to prepare its national REDD+ Strategy and build its capacity to address the drivers of deforestation at the central and local levels. Other donors, particularly the Japanese Development Agency (JICA), are supporting the country to strengthen its capacity to monitor its forest cover.



The Zambezia Integrated Landscape Management Initiative



◀ IGF

▲ Zambezia is home to 13 percent of the country's forest and one of the most well preserved tracts of Miombo forests (Gilé National Reserve) and is the fourth most deforested province in Mozambique.

The Zambezia Integrated Landscape Management Initiative includes the five districts of Gilé, Ile, Pebane, Alto Molocue, and Maganja da Costa, which spread over 4 million hectares, with 60 percent covered by forests.

This area is a deforestation hotspot with an annual deforestation rate of 0.71 percent, driven mainly by smallholder slash-and-burn agriculture, charcoal making, and illegal logging.

The Initiative, implemented in collaboration with Mozambique's technical REDD+ Unit (UT-REDD) addresses the main drivers of forest loss and aims to improve livelihoods by:

- promoting conservation agriculture (cassava, maize, groundnut, pigeon pea, sesame, and pineapple);
- promoting better forest management in private forest concessions;
- promoting reforestation and restoration of degraded miombo;
- improving forest governance in the area; and
- improving the management of the Gilé National Reserve and associated hunting block.

The Initiative also promotes a sustainable supply of cashew nuts by supporting smallholder farmers to increase the productivity of their farmsteads and linking them to international buyers willing to pay a premium price for “deforestation-free” cashew nuts. Integrating them into such supply chains could improve their livelihoods significantly and reduce their reliance on slash-and-burn agriculture, which causes deforestation and GHG emissions.

The UT-REDD is currently seeking additional funding for the Initiative, including potential carbon payments from the FCPF.

The Zambezia Integrated Landscape Initiative is an ambitious program to address the drivers of environmental degradation through activities across a large number of sectors (forests, agriculture, and wildlife management) and policies (land use planning, better law enforcement). Its success will require strong coordination among land actors using a landscape approach and strong political will. The program will attempt to demonstrate how a well-functioning Conservation Area can be guaranteed by promoting rural development opportunities in the surrounding communities, and by working with local and provincial authorities around a common vision on the management of the landscape.

— André Aquino, Senior Natural Resources Management Specialist, World Bank

The Quirimbas Integrated Landscape Initiative

In the Quirimbas National Park, MozBio will implement a range of initiatives to address the increasing environmental pressures of shifting cultivation, deforestation, settlement expansion and illegal logging for commercial use and for charcoal making. The following areas are to be considered:

- Supporting new planting and agroforestry techniques and improving smallholders' market access for local products (such as endemic coffee), could help local communities diversify their income streams while promoting sustainable agroforestry practices and reducing forest fires.
- Supporting sustainable charcoal production and transformation, through for example the introduction of efficient biomass-making kilns and technology, could significantly improve forest management and tree regeneration.
- Given the area's potential for producing high-quality hardwood products, MozBio could support the production of sustainable wood supply. It could also support the processing of valuable Non-timber forest product (NTFP) processing, such as natural oils and bee products, that can be consumed directly by rural households, sold in local markets, or even exported. Local processing is desirable because it generates higher revenues and creates more employment for local communities.

The landscape-focused conservation approach in Quirimbas will aim to integrate biodiversity protection with alternative income-generating activities, ranging from nature-based tourism to reducing deforestation and environmental degradation. Full involvement and collaboration with communities in and around the park, in the relevant activities, will be fundamental to securing a prosperous and living landscape.

— Baldeu Chande, Park Manager,
Quirimbas National Park



CONCLUSION

Mozambique, with its relatively low population density, world renowned biodiversity, and dynamic national economy, has the opportunity to have a truly sustainable development that meet the needs of its population and maintain the integrity of its resource base. Earlier phases of the TFCA Program allowed Mozambique to undertake important legislative and institutional changes and expand its CAs network, creating a framework for the future.

Investments in tourism development showed both weaknesses and strengths, but led the way to more focused efforts in follow-up programs and in diversifying sources of conservation funding by tapping into funds such as the BIOFUND endowment fund, and climate financing, including REDD+. Community outreach contributed not only to a more favorable legislative environment, but also to more effective community development

efforts. The inclusive process made stakeholders more aware that biological richness cannot thrive in the face of extreme human poverty.

Meeting the sustainability challenges of the next years will require coordinated efforts over multiple sectors. This is the most enduring lesson of the TFCA Program. The MozBio Program will expand conservation efforts from transfrontier areas to Mozambique's entire CAs network. In parallel, attitudes and approaches to conservation are expected to shift towards integrated landscape management that focuses on governance, community development and sustainable business practices.

This is the approach MozBio will embrace to sustainably develop Mozambique's natural resources and boost rural development.

My friends, it is not only about bringing together tourism and conservation. It is about bringing together agriculture, forestry, livestock, and all forms of governance with the changing reality of Mozambique and the world. Indeed, it is about bringing together interventions from the central government with the rural reality.

— Mia Couto, Mozambican Writer and Environmentalist from *Pensatempos – Conservação Faunística: arca sem Noé?* (2005)









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