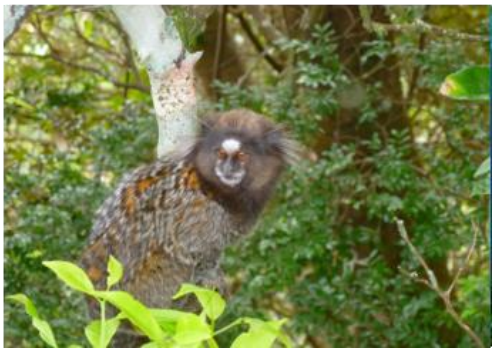
South -South Knowledge Exchange Mission On Rural Development and Biodiversity Conservation to Brazil

August 27 to September 1, 2018

FIELD VISIT REPORT





CONVENED BY:
Mozambique's Integrated Forest and Landscape

WORLD BANK GROUP

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Overview

Background Information

Countries around the world are increasingly recognizing the importance of improving the conservation and enhancement of renewable natural resources, such as biodiversity, forests and fisheries, while promoting rural development. The southern African countries of Angola, Botswana, Mozambique, Tanzania and South Africa, all part of the Southern Africa Development Community (SADC) are actively testing and implementing different models to achieve these twin goals.

Brazil is often used as a role model for other developing countries dealing with challenges related to conservation area management, sustainable natural resource management and community initiatives that bring economic benefits to local communities in and around Protected Areas (PAs). The country is home to one-third of the world's tropical forests, 20% of the world's fresh water and the Cerrado, a tropical savanna with the highest level of biodiversity in the world. A significant part of Brazil's economy relies on the use of natural resources. Moreover, Brazil's forests hold enormous carbon sinks and are an important asset to maintain the global climate in balance.

With years of experience in addressing challenges similar to those currently facing the SADC countries, Brazil is well suited to share its knowledge and lessons learned. To that effect, Brazil and Mozambique signed a Memorandum of Understanding (MoU) in May 2017, which spans a broad range of issues, from land management and biodiversity to climate change mitigation and adaptation. The World Bank is supporting the Programmatic South-South Collaboration, and has recently helped scale up the initiative to include other countries in the southern Africa region.

Under this umbrella, a knowledge exchange mission on rural development and biodiversity conservation to the Federal Republic of Brazil, took place between August 27 to September 1, 2018. The delegations to the country were comprised by participants from Angola, Botswana, Mozambique, South Africa and Tanzania, who worked with the Brazilian countreparts and visited the states of Rio de Janeiro, Federal District and Goiás.

The mission took place over 5 days and included visits to relevant institutions and parks, as previously decided jointly with participants and representatives of the World Bank in Washington, Mozambique and Brasilia and local government and institutions representatives.

Objective

The main objective of the south-south learning trip was to promote knowledge exchange on rural development and biodiversity conservation across the five SADC countries. The specific learning objectives were to:

- Strengthen knowledge and create space for discussion on innovative and sustainable financing models for Protected Areas (PAs);
- Expose participants to firsthand experiences on successful models for management of PAs, including results based management, and community engagement initiatives;

- Connect participants to key stakeholders engaged in conservation that could transform into long-lasting partnerships;
- Share experiences on different types of partnerships with private operators, NGOS and communities that lead to improved management and biodiversity conservation results;
- Share knowledge related to the establishment and success of Transfrontier Conservation Areas.

The exchange will support the preparation and implementation of several initiatives in the respective countries that relate to improving the management of conservation area landscapes and enhancing the living conditions of communities in and around these areas.

"The weeklong exchange is just one piece of a larger programmatic south-south knowledge exchange initiative, which started with Mozambique and Brazil, and is now being scaled to other countries in Africa."

"South-South Exchange can be a powerful tool for technical assistance in complex issues such as renewable natural resources management, rural development, and inclusive value chains".

André Aquino, World Bank Senior Natural Resource Management
at the World Bank office in Mozambique

List of Participants

Mozambique		
ANAC	National Administration for Conservation Areas	Mateus José Mutemba
		Armindo João Araman
BIOFUND	Foundation for Biodiversity Conservation	Luis Bernardo Honwana
FNDS	National Sustainable Development Fund	Agostinho de Nazaré Mangueze
FFP	The Fishing Promotion Fund	Miguel Micas Langa
South Africa		
PPF	Peace Parks Foundation	Moscow Marumo
Tanzania		
TANAPA	Tanzania National Parks	Allan Herbert Kijazi
Angola		
Min Amb	Ministry of Environment	Aristófanes Romão da Cunha Pontes
Botswana		
BTO	Botswana Tourism Organization	Tafa Gobe Tafa

World Bank		
WB	Mozambique	André Aquino
		Bartolomeu Soto
WB	Tanzania	Daniel Mira-Salama

The delegation during a visit to the Protected Area of Guapi-Mirim and the Guanabara Ecological Station (ESEC)

Agenda

ACTIVITY	PLACE
• Visit to FUNBIO – Welcome and initial introduction • Working session on PA financial sustainability (Funbio + Botswana Tourism Organization) • Visit to the National Park of Tijuca Forests (Meeting with park managers & concessionaries) • Visit to Arraial do Cabo	Rio de Janeiro (FUNBIO)
Overnight in Arraial do Cabo	
Tuesday - August 28	
• Visit Arraial do Cabo Marine Extractive Reserve	Rio de Janeiro
Overnight in Arraial do Cabo	
Wednesday – August 29	
• Visit Protected Area of Guapamirim and ESEC Guanabara • Boat ride • Trip to Brasilia	Rio de Janeiro
Overnight in Brasilia (Hotel Vision)	
Thursday – August 30	
• Visit to ICMBio, discussion on Brazil's Protected Areas System, and ICMBio management • Meeting with World Bank Brazil team	Brasilia
Overnight in Brasilia (Hotel Vision)	
Friday – August 31	
• Visit to FunBiop: Workshop on Results-Based Conservation Management • Panel 1 – Management models of Protected Areas Mozambique + Tanzania + Min. Environment of Brazil + ICMBio • Panel 2 – Concession and co-management (SEMEIA Institute + IPE + South Africa) Presentation GITEC/NEXUCS – Results Management Program (PGR) • Transfer to Chapada dos Veadeiros National Park	Brasilia
Overnight in São Jorge (GO) (Hotel Pousada Camelot)	
Saturday - September 1	
• Visit to Parque Nacional Chapara dos Veadeiros • Return to Brasilia	Chapada
Overnight in Brasilia (Hotel Pousada Camelot)	
Sunday – September 2	
• Departure of the delegation	Brasilia

This Report summarizes the main topics covered, and is divided into the following sections:

1) Overview of the Protected areas and biodiversity in Brazil;
2) Financial sustainability of biodiversity conservation;
3) Conservation benefits to local communities;
4) Concessions in Protected Areas;
5) Results-based Management of Protected Areas.

1) Overview of the Protected Areas System and Biodiversity in Brazil

Brazil is one of the world's most biodiverse countries. Its rich variety of biomes, ranging from tropical dense forests, dry forests, wetlands, savannas, to grasslands, is home to over 70% of the world's catalogued animal and plant species, and with a high level of endemism.

Brazil signed the Convention on Biological Diversity (CBD) in 1992, which was the starting point for the subsequent establishment of a system of protected areas to protect biological diversity. Brazil's National System of Protected Areas (Sistema Nacional de Unidades de Conservação, SNUC) was established in 2000 (by Law No. 9985/2000) and currently includes 2,201 Conservation Units (CUs) at different government levels (federal, state and municipal), covering 2,554,917 km2 or 18% of the national territory (which represents an area large as the combined size of Germany, France, Spain, Italy, the UK, Sweden and Portugal). The system encompasses all biomes: Amazon (tropical rainforest), Caatinga (semiarid dryland), Cerrado (savanna), Atlantic Forest (coastal rainforest), Pampa (grassland), Pantanal (wetland), and the coastal and marine areas.

The SNUC is divided into two classification categories: i) strictly protected areas (PIs); ii) sustainable use. One of the main objectives of the SNUC, is the effective participation of local populations in the creation, implementation and management of the CUs.

The SNUC is managed by Brazil's Ministry of Environment (MMA) and the Chico Mendes Institute for Biodiversity Conservation (ICMBio), which was created in 2007, as an independent agency, linked to the MMA. ICMBio's mandate is to promote biodiversity conservation through research, education, and promoting ecologically sound management practices. It is responsible for proposing, implementing, and managing and monitoring CUs primarily at the federal level.

The system of CUs receives a combined 10,7 million visitors each year. Yet challenges facing the SNUC include lack of sufficient coordination and integration between the systems' CUs; difficulties in creating new CUs in biomes with low representation; gaps in integrated planning efforts and insufficient dissemination of the environmental, social and economic importance of CUs to the general public.

Although some CUs have seen an increase in funding and access to financing through new innovative measures for increasing financial sustainability, many PAs also still struggle with insufficient funding to generate effective management.

Key Takeaways:

- Brazil has developed a clear vision for how biodiversity and protected areas should be managed through SNUC. SNUC has guided several investment projects, which contributed to its ambitious goal. Having a clear vision for the future of biodiversity in the country is key to ensure coordination of efforts across levels and sectors of governments, and coordination with other civil society and private sector entities.
- Brazil has developed an intricate network of partnerships to support the management of PAs, and the sustainable development of surrounding communities. Government institutions at different levels, academia, private sector, civil society organizations, volunteers, all come to the table for discussions and decision-making, and play their respective roles for the benefit of the areas.
- Brazil is piloting a new way to prepare general management plans. Instead of the more traditional lengthy, very technical processes that usually give rise to comprehensive, but also academic plans with little appropriation by stakeholders, abbreviated plans are now being pursued. Key stakeholders decide on main topics of the plans, and the specifics are decided in sub-plans by working groups.

"A key aspect of what we did in the Amazon through the "Amazon Protected Areas Project" was to strengthen rights of local communities to land and to natural resources, particularly through the establishment of Extractive Reserves (RESEX). It is almost a land reform project disguised as conservation!"

Adriana Moreira, Senior Natural Resources Management Specialist
at the World Bank office in Brasilia

The case of the APA Guapi-Mirim – How Integrated Management maximizes resources and improves management and conservation results

At the end of the 1970s, Guanabara Bay had serious pollution problems caused by the historic disorderly occupation of its banks by industries and people. To halt the pollution of the bay, the Brazilian Society for the Advancement of Science (SBPC) together with civil society started a movement in 1978, for the creation of a Conservation Unit to protect the area. Since then, the main objective of the APA Guapi-Mirim CU has been to protect the remaining mangroves located in the Guanabara Bay reservoir as well as to preserve the human populations that maintain a traditional lifestyle in a close relationship with the environment.

In an effort to preserve mangroves in the APA Guapi-Mirin, the federal government created the Guanabara Ecological Station (ESEC) in 2006, which is a CU of complete protection. ESEC focuses on research and environmental education and it covers around 2,000 hectares, in both the municipalities of Guapimirim and Itaboraí. The establishment of ESEC has enabled successful conservation efforts of the Guanabara Bay, which now presents ecological and biological characteristics compatible with mangroves that are free of human and aggressive intervention. It is the last area of the Guanabara Bay that holds scenic features similar to those prior to the colonization of the country.

The successful biodiversity conservation efforts in the APA Guapi-Mirim and ESEC are due to the integrated manner in which the two adjacent areas are managed. The integrated management model entails sharing of technical, material and financial resources, which has led to an optimization of resources, the joint responsibility to tackle any deficiencies in the two areas and an overall cohesive approach to achieving management goals.

Key Takeaways: An area under severe urban pressure such as the Guanabara Bay can be managed for multiple uses, and even be restored (case of mangrove restoration) with proper management, staff capacity and financial resources. Participation of different stakeholders and research is key.

2) Financial Sustainability of Biodiversity Conservation

Scaling up and diversifying funding for biodiversity conservation and Protected Area Management is a challenge in most countries, and for Brazil. Innovative financing mechanisms and approaches are required to generate the additional funding required for many CUs to ensure conservation efforts.

Funbio, the Brazilian Biodiversity Fund, is a highly innovative financial mechanism that has transformed management and financing for biodiversity conservation in Brazil. It was created in 1996, through a donation of USD $20 million from the Global Environment Facility (GEF) to a group of representatives of the Federal Government, academia, civil society and the business sector. Since then, Funbio has managed to mobilize and disburse more than USD $600 million and supported 284 projects in all Brazilian biomes. Funbio's innovative approach to increase conservation funding include:

- Through vigorous partnership-building and outreach efforts, Funbio leverages national and international donations, including private donations and resources from bilateral and multilateral agreements with the Brazilian government;
- It makes use of legal obligations to maximize additional streams of financing. This includes for example environmental compensation deposits for companies, offset measures, fines, and environmental licensing conditions formalized through terms of commitment or conduct adjustment agreements (consent decrees). Currently FunBio is used as the fiduciary institution to receive the money paid for biodiversity compensation. The money is then in coordination with ICMBIO directed to implement activities. Although the payment for compensation is regulated to serve the purposes of conservation, there are no Government mechanisms to guarantee that the money is directed to conservation, therefore the ICMBIO agreed with FunBio to host the funds;
- Through 'Special Projects', Funbio conducts financial environment diagnostics to CUs and projects, and thereafter helps design mechanisms and instruments that can operationalize new and sources of funding for conservation projects.

Key Takeaways:

- To reduce dependency on public budget and international donations, PAs need to explore alternatives financing sources and among the ones most discussed at the exchange include endowment funds, environmental offsets, donor funding, private sector funding (blue fund).
- A high-capacity, low-cost, innovative national institution can help mobilize significant financing. Clear rules for funds allocation is fundamental to ensure funds generate results on the ground. Demonstrating results is needed for further funding from different sources.

3) Conservation Benefits to Local Communities

Ensuring inclusive and sustainable long-term benefits to communities in and around Protected Areas is a high priority for all countries engaged in conservation. In Brazil, many protected areas are inhabited by traditional communities, who rely on natural resources for their livelihoods. Therefor meaningful economic opportunities for these communities usually need to be part of conservation efforts. In Brazil innovative types of government-community collaborative management regimes are being tested – one example is Extractive Reserves. The RESEX Model entails that traditional populations living in biodiverse areas, in forests or along the coast and rivers can apply for the creation of a RESEX. If accepted the government cedes the rights of use of land and sea and the population receives a collective title for land use. The concession also guarantees access for future generations of the local community.

The delegation visited one of the Marine Extractive Reserves, Arraial do Cabo, which was established in 1997 to protect the coastal area and its natural resources while sustaining local livelihoods of communities. As a RESEX, the area is categorized as a Protected Area for sustainable use, including for livelihoods that are based on extraction, subsistence agriculture and small-scale animal raising. The model is entirely built on the long-term participation of resource users. Management Plans are for example being developed in participatory manners including the affected and relevant groups of stakeholders such representatives from communities and fishermen, the local public sector and tourism and trade actors.

Key Takeaways:

- RESEX is a governance and land use model that could be used in other contexts as a way to fully establish and implement 'Community Conservancies' in Mozambique, or Community Trusts in Botswana, that can bring tangible benefits to communities.
- Volunteering programs have the potential to work in southern African countries as cost-effective ways to address certain challenges in PAs and to achieve conservation results, while also engaging young people and broadening the awareness of biodiversity conservation.
- Brazil systematically includes community leaders and civic society representatives in the management councils of PAs. Paraphrasing government managers of PAs, this results in heated discussions during meetings, but stronger, more robust agreements and better implementation.

Multi-stakeholder Management Councils and Volunteering as ways to engage communities

In the Chapada dos Veadeiros National Park (655km2), located in state of Goias on the top of an ancient 1.8 billion years old plateau, the delegation learned about how participatory management models and volunteering could is bringing management benefits to the Park. The Park, which is a UNESCO World Heritage site close to Brasilia, is home to rich scenic biodiversity, including waterfalls and hiking trails. Yet tourism potential still remains untapped.

The Management Council of the Park is made up out of people that represent various local interests. The Council is an important forum for these stakeholders to convene, discuss issues related to the Park and to minimize the risk of conflicts in management of natural resources.

The Park also has a volunteer program, administered by ICMBio, which engages volunteers from both outside the Park and from other parts of the country, to engage in different management, research and restoration efforts. Volunteer activities range from tourism facilitation, which has greatly improved the visitation experience of the Park, often highlighted by tourists and visitors, park staff, drivers and by residents themselves, to addressing the challenges related to wildfires in the Park. By offering accommodation, and issuing certificates to the volunteers, it is an attractive opportunity for those who are interested in contributing to conservation efforts.

The Park provides ground for scientific research, environmental education and public visits. By partnering with universities and research institutions, to conduct specific research that aim to improve the Park, the development of the buffer zone, and explore tourism opportunities. Although the Management Plan currently doesn't allow establishment of any resort or accommodation inside the Park to benefit the hotel business in S. Joao a village next to the Park, the people in the village has small hotels with makes a good demonstration of the benefits that the Park provides to the local communities through eco-tourism.

4) Private Concessions in Protected Areas

The delegation learned about various approaches to promoting investments and concessions in PAs. Semeia, a non-profit institution, that supports facilitation between public and private sectors to develop innovative and sustainable management models in PAs presented their approach and lessons learned. The approach entails working on two different fronts. On the one hand, Semeia engages in a lot of the background and legwork needed to identify partnership opportunities, and help to identify the actions needed to improve the investment environment that would facilitate the concessions and partnerships. Once identified, Semeia support governments in structuring the partnerships and innovative management models.

Key aspects to improve the enabling environment to promote concessioning:

- Ensuring there is a clear visibility of business opportunities for investors, which entails first working to identify opportunities and then supporting the dissemination of these in a transparent broad manner;
- Creating a positive agenda for the sector, including addressing bottlenecks to investments and proposing concrete policies and actions that improve the investment climate;
- Strengthening the network of private actors that could potentially be interested in investing, through organizing networking events, bilateral meetings between private agents/potential investors.

The mission also was exposed to Instituto de Pesquisas Ecologicas (IPE). This institute is part in a co-management of federal protected areas of Amazonia. IPE's work covers the following: (i) Landscape and species conservation (ii) Community involvement and partnerships (iii) Environmental education and awareness (iv) Applied research and conservation (v) Subsidies for public policies. The IPE is working with ICMBIO to promote an integrated management of protected areas, supporting the development of corridors and manage them as a landscape. The facilitation also includes the inclusion of partners for conservation development of tourism and other economic activities. By partnering with local institutions and partners with different profiles, such as community associations, non-profit entities, government entities, companies and universities, CUs have experienced positive results in management and improved relationships with partners. Together with ICMBio IPE is also working with partners on institutional strengthening, administrative and financial management, and fund-raising, which means that the model also strengthens the local partners themselves, and helps develop the adequate activities needed to achieve the strategic objectives of the UC.

The following activities were also discussed as ways to strengthen partnerships once co-management arrangements are in place: different types of remuneration to those concessionaires that also develop other kind of value chains, particularly those that integrate local people; establishment of volunteer programs or environmental education campaigns to raise awareness; working with partners to engage in restoration activities of historical and architectural heritage; pilot a performance based compensation system for concessionaires, based on the quality of their biodiversity management.

Learning about concessions and co-management agreements in the Tijuca National Park

In the Chapada dos Veadeiros National Park (655km2), located in state of Goias on the top of an ancient 1.8 billion years old plateau, the delegation learned about how participatory management models and volunteering could is bringing management benefits to the Park. The Park, which is a UNESCO World Heritage site close to Brasilia, is home to rich scenic biodiversity, including waterfalls and hiking trails. Yet tourism potential still remains untapped.

Located in the heart of Rio de Janeiro, the Tijuca National Park protects the largest urban forest in the world, replanted by man, with an extension of 3,953ha of Atlantic Forest. It is the most visited National Park in Brazil, receiving more than 3 million visitors per year. Concessions to private operators have played a key role in boosting tourism, as they are the ones who have built essential tourism infrastructure, transportation inside the park and enabled and provided for leisure services such as hiking trails, picnic areas, climbing and other activities. The operators have also launched sensitization campaigns to increase awareness of visitors of the importance of conservation.

Key Takeways:

- Concessions to private operators usually play a key role to fill the financial and technical gap of the public sector to really protect, develop and maintain tourism assets in Parks and add the extra services needed for increasing visitors and boosting tourism;
- Concessions can bring innovation and services to tourism that regular government activity would struggle to provide. Concession contracts can be prepared in a way such that benefits the surrounding communities and the Government's plans and agendas;
- Co-management arrangements do not happen overnight, but are developed over time, in a trust-building environment where active measures are taken to address investment promotion constraints. Co Management can also be defined for specific field of management of a Park eg: research; community involvement etc. Although many governments agree that creating partnerships and concessioning arrangements are fundamental to accelerating tourism and improved management in PAs, they usually need support to implement their partnership programs;
- Clear rules and regulations for concessioning are needed to manage expectations of all parties, and govern the relationship once it is happening.

5) Results-Based Management of Protected Areas

There are several different approaches and models that aim to improve management of PAs. As many countries of the visiting delegation are looking to, or are in the process of introducing or reforming their PA management systems, there are a number of common issues and challenges that can be actively shared and learned from, particularly in Results-based management.

The GITEC-NEXUCS presented their model for Results-based management for CUs, which they have worked with ICMBio to implement for the Brazilian protected area system. They have a Program that engages Managers from various levels of CUs to improve their managerial skills. The training program spans the whole field of management, including theory and history to practical applicable exercises. It also delves into social aspects of management and consultative processes, providing capacity building on leadership, team building, organizational culture and organizational change management as well as performance measurement systems and results. The Program started in 2006 and since then four training cycles have been completed, with 84 managers trained. All the CUs from which managers have participated have seen management improvements.

Results based management also plays a key role in how ICMBio manages federal CUs; CUs have a largely independent decision-making power, execution capacity and responsibility at the level of each CU. ICMBios Centers for Science and Research for conservation are also encouraged to perform applied scientific research, that is aligned with the specific biodiversity goals of each CU.

The Institute for Ecological Research (IPE) shared their experience on an innovative approach to CU management, based on managing CUs through a network of diverse partners. By partnering with local institutions and partners with different profiles, such as community associations, non-profit entities, government entities, companies and universities, CUs have experienced positive results in management and improved relationships with partners. Together with ICMBio IPE is also working with partners on institutional strengthening, administrative and financial management, and fund-raising, which means that the model also strengthens the local partners themselves, and helps develop the adequate activities needed to achieve the strategic objectives of the UC.

Key Takeaways:

- Results-based management can significantly improve the management of protected areas;
- This management philosophy requires high commitment from top management and a change in organization culture, and particularly among civil servants;

- Annual work plans, with clear indicators and milestones are the cornerstone of results-based management;
- HR decisions should be based on staff performance, which can be measured through RBM.

6) Presentations from the Visiting Delegation

An overview of Mozambique's biodiversity and National System of Conservation Areas:

- Mozambique is home to rich biodiversity and has a network of conservation areas (CAs) that cover around 23% of the country's land surface. The system consists of 7 national parks, 10 national reserves, one environmental protection area, 17 controlled hunting blocks (coutadas), over 50 privately run game farms (fazendas de bravio), and two community reserves. CAs are further classified into two different types; a) Areas of Total Conservation, which includes the Nature Reserves, National Parks and Natural and cultural monuments, and then b) Sustainable Use Conservation Areas which include Special Reserves, Environmental Protection Areas, Official Coutada (hunting blocks), Community conservation areas, Sanctuaries, Game Farms and a municipal ecological park.
- Mozambique has an excpetionaly rich flora and fauna, with more than 10,000 species of flora and fauna cataloged, including 5,743 plant species, of which 250 are endemic, and 4,271 species of terrestrial fauna, including insects, birds, mammals and amphibians.
- Mozambique has a strong legal and regulatory framework around CAs, with several laws, policies and regulations that govern the existence of CAs. The CAs have a clear mandate to: ensure the conservation of national biodiversity and the contribution to economic growth and the eradication of poverty in the country.
- The management of the National CA System depends on several actors. The National Protected Areas Administration (Administração Nacional das Áreas de Conservação, ANAC) is the main entity in charge of managing CAs and of overseeing the work of entities in charge of co-managing CAs in partnership with ANAC. It was established in 2011 as a parastatal and is guided by its Strategic Plan 2015–2024 which has the following strategic objectives:

- Institutional Development - Raising national capacity for conservation
- Biodiversity Conservation - Establish a network of conservation areas
- Economic-Financial - Economic Sustainability of CA and contribution in the country's Economy
- Community Development - Contribute to improving the living conditions of local communities

- BIOFUND (The Foundation for the Conservation of Biodiversity) is a private foundation established in 2011 to promote conservation in Mozambique. BIOFUND manages a Conservation Endowment Fund to ensure long-term financing of biodiversity conservation as well as sinking funds that provide operating resources to the CA system.
- BIOFUND works against three strategic pillars, which aim, to BIOFUND being an effective and efficient institution in the financing of conservation and the National System of Conservation Areas in Mozambique. BIOFUND has had an impressive performance since its inception in 2014 and now manages an endowment of US$24 million, making it a key institution for Mozambique's biodiversity conservation efforts.
- CAs in Mozambique face several challenges that threat their long-term integrity and sustainability, including the following: insufficient funds and low financial sustainability of CAs; low institutional capacity and human resources to address the needs of the diverse areas; uncontrolled wild fires; slash and burn agriculture; human encroachment and poverty around CAs, illegal hunting, and illegal mining in CAs.
- CAs receive minimum levels of funding and are severely underfinanced. The average state funding of US$34 per km2 is well below the average in the region. The ideal financing would be between USD 63-135 million per year for optimized management. The Government strongly recognizes partnerships and co-management arrangements as mechanisms to attract the technical capacity and finance needed for its conservation strategy.

"Stressed that it is possible to maintain the commitment to conservation despite the difficulties that may arise in the process of establishment of protected areas and their management. We are interest in learning more on the compensation of biodiversity, as Mozambique has little no experience although it is part of its legal framework."

Mateus Mutemba, head of Mozambique's
National Administration for Conservation Areas (ANAC)

The role of CBNRM in Botswana:

- CBNRM as applied in Botswana and elsewhere in the southern Africa Region is a rural development strategy that provides incentives for biodiversity conservation. CBNRM was introduced in Botswana to address the following:

- The threat of species extinction due to over utilization of wildlife resources and poaching;
- The inability of the central government to protect its declining wildlife populations;
- Land use conflicts between rural communities and the Government; and
- The need to link wildlife conservation and rural development

- The objectives of CBNRM in Botswana are to:

- Promote sustainable use of natural resources and biodiversity conservation; encourage communities to develop skills and experiences to sustainably run their projects; create opportunities for enterprise development and income generation; and promote good governance by that community based organizations (CBOs) must be accountable, participatory and democratic and protects the rights of all members.

- CBNRM in Botswana was established through Government allocating communities especially in Wildlife Management Areas in Northern Botswana, concessions to provide incentives for management and protection of natural resources, with certain rights being devolved to them to access and use wildlife for economic gain.
- The devolution of rights to communities was done through Registered Accountable Legal Entities termed Community Based Organizations or Community Trust (formed around 1985). These were permitted access and use of natural resources (Primarily wildlife through trophy hunting and/or photographic tourism).
- There are different types of CBOs, with differing activities and focus. Some of the main ones include:

- CBOs who enter into joint venture partnership or joint venture agreements with safari companies to earn income mainly from photographic rights and land rentals.
- CBOs where members harvest veld products process and package them and thereafter also markets and distributes them.
- CBOs where members market the heritage or monument sites and earn income mainly from photographic rights and camp sites.

- There are different ways in which communities with Concessions charge the lease fees, including the following three options:

- Percentage of gross revenue earned from commercial activities (Consumptive/Non-Consumptive)
- Fixed fee (usually with an annual escalation)
- Hybrid of the above two, with the latter becoming payable if the % turnover falls below an agreed threshold.

- The overall benefits of the CBNRM model in Botswana include Employment, Community Upliftment, Social Safety Nets and Increased protection of wildlife resources.
- Challenges still remain, including some poor management of CBOs, lack of entrepreneur skills, fragmented coordination, political interference, funds misue and weak joint venture partnerships. These are actively being addressed and some of the main lessons learned include:

- The lack of realization of opportunities and benefits to the ordinary person; Fixed fees that are not adequate for all; participation through being beneficiaries alone is not enough; the management of the fact that not all can be employed within the concession.

Overview of Tanzania's network of Protected Areas and the challenges and opportunities of tourism:

- Tanzania National Parks and Ngorongoro Conservation Area do not receive any funding from the Government. They instead generate own funds and pay dividends and taxes to the Government
- Tanzania Wildlife Authority, Tanzania Forest Services and Marine Parks and Reserves receive subsidies from the Government
- Tanzania is richly endowed with biodiversity and has successfully network of conservation areas, where most national parks are ecologically intact. Currently there are 16 National Parks, with 5 more areas soon to be upgraded to National Park status. Only three of the 16 existing National Parks are financially stable, due to increasing number of tourists and revenue. The rest of the National Parks are "subsidized" by the revenues created by those three.
- The PAs still struggle with challenges related to:

- High population growth that leads to land use conversion, disappearance of wildlife and livestock incursion in protected areas.
- Climate change is also affecting availability of water and forage/habitat change, coupled with high population growth it leads to increased Human-wildlife conflicts
- Invasive alien plant species suppress and sometimes replace native or indigenous species hence negatively affect biodiversity, and ecosystems functions and processes
- Poaching for commercial and subsistence purposes is threatening Tanzania's elephant population which has always been documented to be one of the continent's largest. Elephant population declined

from 109,051 in 2009 to 43,330 in 2015, while the birth rate is 5%. Poaching is aggravated by habitat shrinkage.

- High concentration of tourism in the northern sector despite potential in the southern and western circuits

- Inadequate scientific data for policy and management purposes entails that funding for wildlife research activities is limited, thus making it difficult to make informed decisions
- The Strategies to address these challenges include:
- Disappearance of corridors: by partnering with communities to provide alternative uses of the corridors (conservation compatible activities)
- Alien Invasive Species-TANAPA has been taking various actions to deal with IAS, with varying success levels. Ongoing prevention, detection and control/eradication for these species is ongoing, while trial programs and research continue. Guidelines for addressing the challenge in order to provide actions that are desirable, feasible and acceptable have been developed.
- Climate change: working with local authorities to map and develop strategies to protect water catchments
- Human-wildlife conflicts: establishing a fund for mitigating impacts of destruction
- Anti-poaching: To address commercial poaching, community engagement and intelligence networks are strengthened and to address subsistence poaching the guidelines for local tourism hunting are being revised to make them affordable, as well as facilitating establishment of Wildlife Management Areas
- High concentration of tourism in the northern circuit: improving infrastructure in the southern and western circuits, partnering with the private sector to increase number of accommodation facilities and increase marketing efforts. As currently only two National Parks generate surplus for managing eleven National Parks, a product diversion strategy has been developed to package products in a much better way to improve competitive edge and optimize revenues
- Inadequate scientific data: establishing research fund from tourism revenues in order to increase financial capacity for the Tanzania Wildlife Research Institute

"One of main objectives in the strategic plan of TANAPA is to restore degraded areas to their original state, but there is limitation in financing and in technical expertise and we can learn from Brazil on how they are doing this."

Allan Kijazi (TANAPA)

The Community Development Approach of Peace Parks Foundation, South Africa:

- PPF has a vast experience of community development in Transfrontier Conservation Areas (TFCAs). The business development approach for TFCAs is focused on working across four focal areas;

- Ensuring Commitment for the TFCA in terms of support from Governments and secure of land and investments to TFCAs;
- Doing conservation at scale, focusing on ecosystem functionality and habitat integrity,
- Commercial development focused on wildlife economy, tourism growth and mobilizing investments
- Community development focusing on improving socio-economic conditions, growth in the local economy, social cohesion and resilience and security.

- Four experiences of PPFs work was presented and discussed:

- Herding for Health (Great Limpopo TFCA) which is based on addressing issues related to rangelands, animals, people, policy, and entails creating opportunities to use livestock for the regeneration of landscapes.
- Conservation Agriculture (Kavango-Zambezi TFCA) in which farmers are provided training over several years on more sustinable agricultiure practices, which lead to increase in food production, less stress on land, as less is required - from 8ha per household to 0.5ha. It also leads to reduced deforestation for both agriculture purposes and for alternative income purposes, siuch as charcoal, etc.
- Wildlife Economy (Kgalagadi TFCA) which focuses on supporting the whole economy around sustainable eco-toruism that benfits communities, entailing support to community ranches, improving multi-partnerships and fundraising, support to CBNRM efforts, promotion of eco-tourism and efforts to restore the biodiversity and tourism assets through for example wildlife translocations.

""Brazil's success in promoting multi-stakeholder participation in protected-areas management and this is something South Africa has a lot to learn from as we grapple with the consequences of apartheid, which influenced our people's perception of conservation. It was refreshing to hear from the fisherman himself what participating in the management councils mean, particularly as he spoke about the conflicts related to the use of marine resources."

Moscow Marumo
Peace Parks Foundation Member

Angola's commitment and increasing efforts for biodiversity conservation:

- The responsible Ministry for conservation is the Ministry of Environment (MINAIB), which has established a National Strategy and Plan of Action for Biodiversity that aims to conserve natural resources and raise the level of protection of ecosystems throughout the country;
- Currently around 13% of Angola (156,909.9km2) is under formal protection, through 9 National Parks, 2 Integral Natural Reserves, 1 Regional Natural Park and 2 Partial Reserves. Angola is also part of 4 TFCAs.
- The rich biodiversity of Angola spans rainforest, equatorial forest, desert, savannas and steppes. Its long coastline encompasses different types of marine ecosystems. It is home to 8,000 plant species of which 1,260 are endemic, and to 275 species of Mammals; 78 species of Amphibians of which 19 are endemic, 915 avifauna species and 227 species of Reptiles.
- Angola is currently ramping up its efforts to conserve its biodiversity and improve management of its Protected Areas. Some of the efforts include the development of Laws for Environmental Crimes; the Review and Development of New Laws on Biodiversity Management; Creating partnerships with National and International Scientific, Public and/or Private Institutions for the creation of the database that captures Angola's rich biodiversity; the Creation of a National Force to Combat Environmental Crimes; the roll-out of a protocol on Ecotourism in Conservation Areas; and management improvements to CAs.

- Some of the activities that have already been successfully rolled out includes: training of park inspectors and rangers; provision of equipment for park staff; rehabilitation of park infrastructure; elaboration of a community study; the completion of Wildlife surveys; elaborations of Park Management Plans; Exchanges with Namibia on conservation; Preparation of a Strategic Plan for the National Institute for Conservation Areas (INBAC) (in progress); an assessment of the current status and preparation of rehabilitation plans for 6 parks (in progress); development of community tourism (in progress).
- The main challenges facing Angola's CAs include poaching and illegal trafficking of species, illegal logging and other wildlife crimes, deforestation, Illegal fires and human encroachment.
- Angola is actively working to address these barriers through reinforcement of legislation and legal proceedings; Reinforcement of fiscal staff and equipment; Integration of local communities; and the shared and sustainable use of natural resources; and increasing the overall monetization of CAs.
- MINAMB has the highest commitment to continue working to:

- Train and encourage local communities to use good practices as a reliable coping mechanism to address food shortages;
- Work with public information and communication agencies to sensitize populations on more sustainable practices and customs in natural resource management well as the importance of species conservation;
- Ensuring a sustainable use and balance of ecological systems that will ensure the conditions for a long-term renewal of resources for the country's development in a responsible manner.

"As a country starting the development of its environment and conservation institutions, Angola can learn a lot about past errors and successes, and benefit from Brazil's capacity to strengthen ours."

Aristófane Pontes, head of the Angola's Biodiversity Institute

Concluding Remarks

The overall outcome of the trip was very positive, with all countries reaffirming its commitment to continue to work w ith each other to establish concrete follow-up collaboration activities that can boost progress in the countries' existing conservation related initiatives. The mission was particular helpful in achieving some of the following results, among others:

- To establish and improve relationships between conservation professionals of SADC and Brazil on both an individual and an institutional basis, which will enhance future exchange of knowledge and experiences;
- To strengthen collaboration among the African countries and promote similar types of exchanges in the Southern Africa region;
- To identify potential training opportunities that Brazil and South Africa, as countries with advanced experiences in some areas, can offer training for African countries in terms of planning, results-based management, mobilizing and applying environmental compensation, contracting and managing concessions
- To share experiences on community development in transfrontier conservation areas, including how to engage communities in business opportunities (particularly presented by the PPF).

Next Steps

The World Bank is already actively working with all of the countries on initiatives that protect natural capital and biodiversity and we therefore look forward to continue building on the lessons from this Exchange with the Governments of Angola, Botswana, Mozambique, South Africa and Tanzania and other stakeholders.

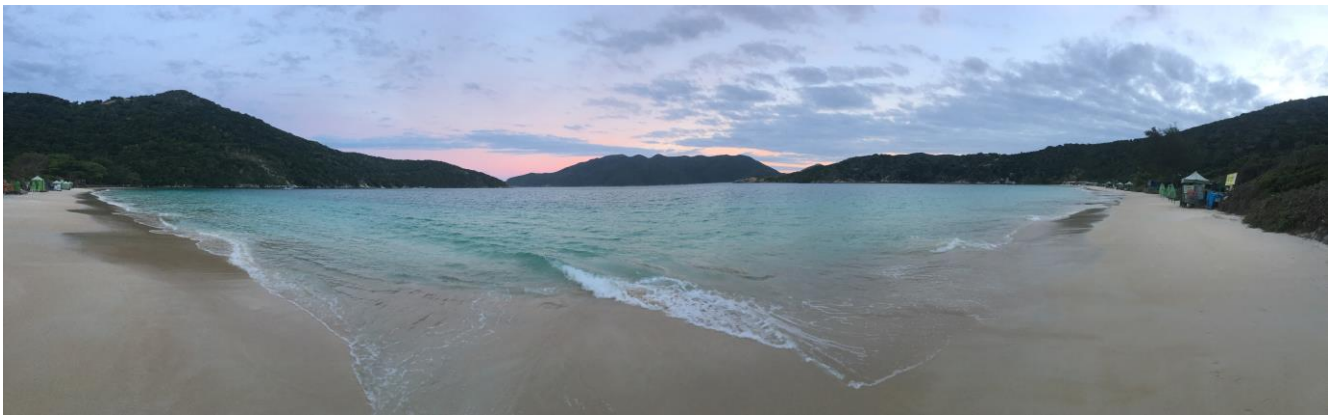
In **Mozambique**, lessons will feed directly into the implementation of the Mozbio 2 Project, in which similar activities to those explored in Brazil will be piloted, for example the support to multi-stakeholder Management Councils. Mozbio 2 will also establish a Conservation Leadership Program that aims to increase the cohort of skilled professionals in biodiversity conservation expected to work for the different organizations in Mozambique's CA system. One of the main features of the program will be to continue these kinds of south-south partnerships, including between ANAC and ICMBio for training purposes, including on concessioning, with Botswana's Tourism Organization to learn lessons related to tourism promotion and marketing, with PPF for community development approaches as well as with other regional partners such as South Africa's Parks (SANParks) and the Southern Africa Wildlife College (SAWC).

In **Angola**, the Bank is engaging in the preparation of an investment project to support biodiversity conservation and rural development.

In **Botswana**, the Bank is discussing a potential project to promote CBNRM nationally, and analytical work about the tourism sector.

In **South Africa**, the Bank has been discussing how to advance the Biodiversity Economy through investments in inclusive value chains based on natural resources.

In **Tanzania**, a new World Bank-financed biodiversity and Protected Areas project has just begun, the Resilient Natural Resources Management for Tourism and Growth (REGROW). The project includes interventions at all levels, from strengthening of TANAPA to promotion of PPPs, rural development and creation of opportunities for alternative livelihoods. Several of the lessons learned in Brazil are particularly relevant for TANAPA, and REGROW will explore ways to test them out. These include: (i) how to design and implement effective and collaborative frameworks for engaging stakeholders in conservation; (ii) innovative financing options, such as public and private funds, since currently there is no framework for Tanzania to ensure leverage of resources for conservation; (iii) development of effective planning tools, such as the abbreviated general management plans; (iv) development of research priorities, funding mechanisms for them and developing capacity for researchers so that they can do research meaningful for decision making; (v) learn experiences of the volunteers programs in Brazil, and explore their applicability in Tanzania; (vi) community-based natural resources management: what are other leading countries in the region doing? How can the approach be tailored to Tanzania; (vii) concessions, how they are prepared and what are some of the lessons learned value added to surrounding communities.



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