



Ministry of Environment and Tourism
Republic of Namibia

**Mainstreaming Biodiversity into Development:
Draft Strategic Diagnostic Discussion Paper
- Namibia -**

April 2016

Table of Contents

1. METHOD FOR THE COUNTRY DIAGNOSTICS	1
2. MAPPING THE DEVELOPMENT LANDSCAPE FOR BIODIVERSITY	2
2.1 DEVELOPMENT-BIODIVERSITY LINKS	2
2.1.1 DEPENDENCE OF DEVELOPMENT ON BIODIVERSITY AND AVAILABILITY OF RELEVANT SCIENTIFIC, SOCIAL, SPATIAL AND ECONOMIC INFORMATION	2
2.1.2 VULNERABILITY OF DEVELOPMENT TO BIODIVERSITY PROBLEMS	2
2.1.3 DEVELOPMENT IMPLICATIONS OF CHANGES IN BIODIVERSITY	3
2.1.4 NEW POTENTIALS OF BIODIVERSITY	4
2.2 DEVELOPMENT POLICY AND PLANNING PROCESSES RELEVANT TO BIODIVERSITY	5
2.2.1 CORE DEVELOPMENT PROCESSES ADDRESSING BIODIVERSITY	5
2.2.2 RECIPROCAL MAINSTREAMING' TO DATE – PRIORITIES / CONSTRAINTS REFLECTED IN NBSAP AND NDP	5
2.2.3 USE OF BIODIVERSITY SAFEGUARDS AND RELATED PROCEDURES	6
2.2.4 DEVELOPMENT INFORMATION AVAILABLE ON BIODIVERSITY	6
2.3 DEVELOPMENT DEBATE CONCERNING BIODIVERSITY	7
2.3.1 BIODIVERSITY VALUES OF DIFFERENT DEVELOPMENT STAKEHOLDERS – DO ANY PARTICULAR BUSINESSES, CIVIL SOCIETY GROUPS AND DEVELOPMENT AUTHORITIES STRONG EXPRESS PARTICULAR VALUES OF BIODIVERSITY? HOW DO THEY DO THIS (E.G. IN BOTH ECONOMIC AND NON-ECONOMIC TERMS)?	7
2.3.2 PROGRESSIVE 'POLICY SPACE' FOR MAINSTREAMING BIODIVERSITY	7
2.4 DEVELOPMENT IMPLEMENTATION AND FINANCING AFFECTING BIODIVERSITY	9
2.4.2 GOVERNMENT EXPENDITURE	9
2.4.3 FISCAL POLICY AND PROCEDURES	10
2.5 STAKEHOLDERS AND THEIR CAPACITIES	12
3. FOCUSING THE APPROACH FOR MAINSTREAMING – PLANS AND TARGETS	14

1. Method for the Country Diagnostics

This report contributes to Namibia's implementation of the project "*National Biodiversity Strategies and Action Plans 2.0: From Policy to Practice*", which is being executed by the Ministry of Environment and Tourism of Namibia with support from the International Institute for Environment and Development (IIED) and United Nations Environment Programme's World Conservation Monitoring Centre (UNEP-WCMC). It contributes in particular to activity 1.3 of the workplan of the project, which provides for country reports of development processes, entry points and mainstreaming plans.

This strategic diagnostic discussion paper has taken the form of a self-assessment, conducted through a small working group involving staff members from the Ministry of Environment and Tourism and supporting projects with the assistance of a local consultant. This was considered the most appropriate method in Namibia to identify the work that has already been done in the field of biodiversity mainstreaming and to build on ongoing in-country initiatives through this project.

As per the "Mainstreaming biodiversity into development diagnostic tool", this report includes two main parts on mapping the development 'landscape' for biodiversity and the selection of one or two strategic development processes, sectors or issues from those identified in the mapping exercise through the application of a small set of strategic criteria.

2. Mapping the Development Landscape for Biodiversity

2.1 Development-biodiversity links

2.1.1 Dependence of development on biodiversity and availability of relevant scientific, social, spatial and economic information

Biodiversity and ecosystem services are of particular importance to the tourism, agriculture and fisheries sectors in Namibia, which alongside mining, form the basis of the Namibian economy. Around 70 per cent of Namibia's population also depends on the natural resource base their income; food; medicinal needs; fuel and shelter. Biodiversity and maintaining healthy ecosystems is thus of paramount importance to Namibia's rural communities and the societal and individual well-being.

At the broadest level, Namibia's economy is also highly dependent on the provision of water and electricity, both of which are currently in short supply. This has prompted considerable discussion and debate around alternative sources of supply and demand side conservation, which could help to reduce stresses on water catchments and greenhouse gas emissions caused by fossil fuel generated energy.

Relatively good information exists in Namibia about the status of biodiversity, including the populations and health of species from a range of taxonomic groups, particularly mammals, plants, fish and birds. Information on the populations of invertebrates and protista; arachnids; insects; reptiles; and amphibians is however considerably more limited. Furthermore even though over 45% of Namibia's landmass is now under some form of conservation management, there is limited information available on the biophysical health of the environment and the trends thereof. Namibia has committed to developing a Desertification, Land Degradation and Drought (DLDD) monitoring system in its Third National Action Programme for implementing the UNCCD (NAP3) (2014-2024). It also commenced with a pilot Land Degradation Neutrality (LDN) Project in 2015, which is putting in place structures to measure the land cover change, land productivity and carbon stocks. These are recognized as indicators that are also highly relevant to the CBD and UNFCCC.

Good information is also available on social and economic issues in Namibia, although this is typically available infrequently. For example, the National Household Income and Expenditure Surveys are usually conducted on a five-year basis, while the National Labour Force Survey is now produced on an annual basis. The evidence suggests that the frequency of these kinds of reports is increasing since the establishment of the Namibia Statistics Agency. Natural Capital Accounts (for wildlife, water, minerals and fisheries resources) are also produced on an irregular basis. The previous Wildlife Accounts was published in 2009 and this made use of data from 2004.

In spite of this, there is relatively limited information available about the explicit dependence of different stakeholder groups on biodiversity in scientific, social, spatial and economic terms. An integrated poverty mapping and Namibia Index of Multiple Deprivation (NIMD) was undertaken in 2015. This exercise brought together the linkages between poverty and environmental linkages by linking the poorest areas of the country with a number of environmental-related indicators including frequency of droughts, food insecurity, biomes and vegetation types, and protected areas and different land uses.

2.1.2 Vulnerability of development to biodiversity problems

With water availability recognized as a critical limiting factor to economic development, the provisioning services offered by the environment are highly important to Namibia. Given the high level of dependence of the population on the natural resources base, the fisheries, agriculture and tourism sectors are particularly vulnerable to biodiversity problems. In terms of specific biodiversity-related problems and their impact on sectors, enterprises and stakeholder groups, there are concerns about:

- The impacts of climate change. The country is likely to experience:
 - Increased drought and flood events, which has implications for farmers and rural communities in particular as well as planning and infrastructure development;
 - Shifts in vegetation types and species distribution, which will impact upon Namibia's tourism sector and farming industry;
 - Effects on vulnerable ecosystems such as the Benguela Current Large Marine Ecosystem (BCLME), brought about by shifts in sea surface temperatures, currents and the frequency and extent of fog events. This will impact on the fishing industry, bird populations and habitats, while changes in the frequency and extent of fog events could have serious impacts on the arid western escarpment zone, which is home to two global biodiversity hotspots and high levels of biodiversity endemism.
- The spread of invader bush in Namibia's rangelands. It is estimated that around 26 million hectares of rangeland are affected by bush encroachment and economic losses incurred have been estimated to be up to N\$ 700 million per year. The invader bush depletes groundwater resources, reduces habitat quality for cattle and other animals and out-competes many native tree species.
- Increased instances and sophistication of poaching activities. Namibia has seen a dramatic increase in the poaching of Elephant and Rhino in recent years. This is considered a major threat to its successes in conservation and the broader tourism sector.
- Increasing anti-trophy hunting pressure from international animal-rights groups, and a general trend towards the international banning of trophy hunting. In Namibia's experience, the sustainable utilization of wildlife, including through trophy hunting, is the key to successful conservation and benefit-sharing from biodiversity. Any ban on trophy hunting would undermine the sustainability of the communal conservancy programme and cause a massive reversal in conservation gains in terms of both wildlife populations and conservation as a viable land use.
- The impact of mining and exploration activities and broader development in the coastal zone on coastal and marine biodiversity.

2.1.3 Development implications of changes in biodiversity

Target 13 under Namibia's NBSAP II states that "by 2020...restoration programmes have been initiated for degraded ecosystems covering at least 15% of the priority areas." The main priority ecosystems in need of restoration are rangelands, forests, croplands and wetlands. The occurrence of significant mining activity in protected areas and ecologically sensitive areas is also a concern.

There is good information available on the state of bush encroached land in Namibia and its ecological and economic impacts. De-bushing this land was also identified as a priority under NDP4 and for employment creation under the Targeted Investment Programme for Employment and Economic Growth. There is relatively limited information available on the bio-physical health of Namibia's crop producing areas, particularly those in the northern communal areas. Anecdotal evidence suggests declining crop yields and productivity and increased deforestation levels in these areas, which are dominated by subsistence farmers and are home

to some 60% of the population. This is a concern considering the importance of crop cultivation for livelihoods and food security in these areas.

Namibia has embarked on a Land Degradation Neutrality (LDN) Programme to prevent degradation and restore degraded rangelands, croplands and forested areas. The following LDN targets were identified in phase I of the project:

- Reforest and increase the productivity of 13.8km² (1,380 ha) forests that have been converted into croplands or shrubs, grasslands and sparse vegetation by 2040.
- Improve the productivity of the 414km² (41,430 ha) forest area currently showing early signs of decline and having declining productivity by 2030.
- Improve the productivity of 104,013 km² (10.4 million ha) of shrubs, grasslands and sparsely vegetated areas currently showing signs of declining productivity by 2040.
- Improve the productivity of 14,849 km² (1.5 million ha) of cropland by 2035.
- Reduce bush encroachment on 18,880km² (1.9 million ha) by 2040.
- Maintain the current soil organic carbon levels beyond 2040: Forests at 17 t/ha; Shrubs, grasslands, sparsely vegetated land, Cropland at 14 t/ha; Wetlands at 16 t/ha.

Phase II of the project is now under implementation and is conducting a detailed analysis of land degradation in the Otjozondjupa Region.

Wetlands are of particular ecological and economic importance to Namibia given the high levels of aridity in the country. Water is recognized as a critical constraint to economic development and Namibia is also home to five Ramsar Wetland sites of international importance. There is increasing concern about the health of Namibia's wetland ecosystems ranging from ephemeral river catchments to perennial river catchments, coastal lagoons and pans. The main pressures on wetlands include:

- Over-exploitation of wetland resources due to human population growth and poverty
- Poor integrated planning and inadequate sectoral cooperation
- Increasing demand for water
- Over-abstraction of groundwater
- Pollution from domestic, agricultural and industrial sources
- Physical alterations to natural water courses (dams, reservoirs, etc.)
- Alien and invasive species
- Urban, coastal and hydropower developments
- Erosion caused by deforestation and overgrazing
- Climate change

2.1.4 New potentials of biodiversity

The Namibian government does recognize the role of biodiversity in economic development, particularly as a driver of the fast-growing tourism sector but also increasingly with regard to the role of communal conservancies in stimulating local economic development as well as with regard to value addition and fair and equitable value chain development linked to indigenous natural plants.

Namibia is undertaking a concerted drive to promote value addition and Access and Benefit Sharing (ABS) compliant value chain development of nature-based businesses under the umbrella of biotrade. This is primarily based on its rich populations and diversity of indigenous natural plants. It was estimated in 2012 that biotrade contributes 4.5% of the country's GDP and the same report suggested that the contribution of biotrade could increase to 7% of the country's GDP over the following 10 years. As part of drives to expand the biotrade sector, Namibia is currently in the process of establishing a research and development center for the implementation of ABS and biotrade. It is envisaged that this will cement the links between the

sustainable utilization of biodiversity and economic diversification, employment creation and poverty eradication.

2.2 Development policy and planning processes relevant to biodiversity

2.2.1 Core development processes addressing biodiversity

Namibia's fourth National Development Plan (NDP4) (2012-2017) adopted three overarching goals:

1. High and sustained economic growth
2. Employment creation
3. Increased income equality.

NDP4 further identified the following priority sectors for economic growth: agriculture, tourism, manufacturing and logistics. Relevant strategic initiatives linked to biodiversity in NDP4 include the promotion of conservation agriculture, programme on debushing bush-encroached land, maintenance and development of national parks, and increased investment through tourism in communal areas. NDP 4 also emphasizes the importance of the country maintaining a clean environment and the need for businesses to adopt the precautionary approach as well as initiatives to promote greater environmental responsibility and the development and diffusion of environment-friendly technologies.

The fifth National Development Plan (NDP5) will commence in April 2017 and the process of its drafting will commence in mid-2016. The integration of biodiversity issues within NDP 5 is identified as a key performance indicator in Namibia's Second National Biodiversity Strategy and Action Plan (NBSAP II) in line with Target 2, which targets that biodiversity and priority ecosystem services are quantified, monitored and mainstreamed to support national and sectoral policy-making, planning, budgeting and decision-making frameworks.

2.2.2 Reciprocal mainstreaming' to date – priorities / constraints reflected in NBSAP and NDP

Namibia's development priorities, as identified in NDP4, are closely reflected in the NBSAP II document, which has as its vision for *“Namibia's biodiversity to be healthy and resilient to threats, and for the conservation and sustainable use of biodiversity to be key drivers of poverty alleviation and equitable economic growth, particularly in rural areas.”* Namibia's third President, Dr. Hage Geingob, elected in 2015, has also declared an all out war on poverty and committed the country to pursuing poverty eradication by 2030. This provides opportunities to further increase the role of biodiversity in poverty alleviation through enhanced conservation, sustainable utilization, value addition and the development of fair and equitable value chains for biodiversity-based businesses.

Nine leading threats to biodiversity were identified in NBSAP II, including:

1. Unsustainable Water Uses
2. Expansion of urban areas and increasing industrialization
3. Threats and impacts of climate change
4. Mining and prospecting
5. Unsustainable land management practices
6. Uncontrolled bush fires
7. Alien Invasive Species
8. Illegal harvesting and trade of wildlife and forest and plant resources
9. Human Wildlife Conflict

Each of these threats is addressed in NBSAP2 through dedicated strategic initiatives within the Strategy and Action Plan, as well as key performance indicators and activities. It is clear that addressing these threats requires a balanced approach, which does not jeopardize socio-economic development through industrialization.

2.2.3 Use of biodiversity safeguards and related procedures

The Environmental Management Act of 2007 provides for a process of assessment and control of activities, which may have significant effects on the environment. The regulations of the Act, which were gazetted in 2012, list the activities, which may not be undertaken without an Environmental Clearance Certificate. These include:

- Energy Generation, Transmission and Storage Activities
- Waste Management, Treatment, Handling and Disposal Activities
- Mining and Quarrying Activities
- Forestry Activities
- Land Use and Development Activities
- Tourism Development Activities
- Agriculture and Aquaculture Activities
- Water Resource Developments
- Hazardous Substance Treatment, Handling and Storage
- Infrastructure
- Other activities including construction of military demonstration and testing sites, cemeteries, camping, leisure and recreation sites.

The Environmental Management Act also stipulates that environmental assessments are required for policies, plans and programmes. This has encouraged government and private institutions to undertake voluntary SEAs for their plans and programmes so as to ensure that environmental systems are maintained and that harm to the natural environment is minimized. Examples of SEAs undertaken include:

- Rapid SEA on NDP4
- SEA on biofuels in the north-eastern regions
- SEA on Uranium mining in Erongo Region
- SEA for the coastal areas of the //Kharas, Hardap, Kunene and Erongo regions
- SEAs on the Integrated Regional Land Use Plans for //Kharas Region and Zambezi Region
- SEAs of the tourism sector in the Greater Sossusvlei-Namib Landscape, Windhoek Greenbelt Landscape and Greater Waterberg Landscape

In addition, concepts have been developed to integrate ecosystem services and climate change into the SEA process. This was piloted through the Ministry of Land Reform (MLR) in 2014, during the preparation of the SEA for the Zambezi Integrated Regional Land Use Plan.

2.2.4 Development information available on biodiversity

Biodiversity values are most prominently captured in Namibia's natural capital accounting processes. The Ministry of Environment and Tourism has had a dedicated natural resources economics programme in place since 1995, which has provided analysis of the micro-economics of tourism, CBNRM, as well as the value of fish, minerals, water and wildlife to the macro economy through natural resource accounting and tourism satellite accounting. It has been able to demonstrate the economic efficiency of investment in parks, wildlife and tourism in terms of job creation and income generation. The cumulative effect of this work has been to contribute to raising awareness in, and to motivate for the allocation of resources to, the CBNRM, wildlife and tourism sectors, among others.

A dedicated project “*Resource Mobilization for effective implementation of Namibia’s updated Biodiversity Strategy*” project, supported by the German Government for the period 2014-2017 is building on these initiatives and seeks to strengthen capacity for natural capital accounting, incorporate the value of ecosystems into national accounts and develop a resource mobilization strategy for NBSAP II. A first ever Inventory of Ecosystem Services in Namibia was developed in early 2016, which contains a roadmap on priority ecosystem services and a proposal on how to advance the economic valuation of ecosystem services.

2.3 Development debate concerning biodiversity

2.3.1 Biodiversity values of different development stakeholders

It is one of the main objectives of the Ministry of Environment and Tourism to promote environmental sustainability across all other ministries, the private sector and non-governmental organisations. Therefore the Ministry plays a leading role in expressing values of biodiversity, both in economic and non-economic terms. The generation and publication of natural capital accounts is a key activity of the Ministry in this regard. The Ministry also coordinates a number of cross-sectoral committees, which aim to mainstream environmental issues among other sectors. These include committees on biodiversity, desertification and climate change.

The Environmental Investment Fund, established in 2012, is now operating as a dedicated Fund to support environmental conservation, community-based environmental projects and Namibia’s green economy transition. The Fund keeps and publishes information annually on the loans provided and their target areas as well as the employment created through these and other interventions.

Namibia is also home to an active civil society and academic community, particularly on environmental issues. Civil Society Organizations have played a particularly prominent role in the development and implementation of the country’s CBNRM Programme. The production of annual “state of community conservation” reports provide detailed information in terms of the importance of biodiversity for economic and social development.

2.3.2 Progressive ‘policy space’ for mainstreaming biodiversity

Namibia is known for its participatory approach to policy development. In line with efforts of the new Government to eradicate poverty, a series of town hall meetings were held nationwide to hear the challenges and priorities of communities in 2015. The outcomes from these meetings resulted in the publication of the Harambee Prosperity Plan (2016-2020), which aims to lay a foundation for prosperity and to identify short-term goals to be pursued with vigour in the areas of effective governance and service delivery; economic advancement; social progression; infrastructure development; and international relations and cooperation. Climate change and the conservation of biodiversity are explicitly mentioned in the Plan and the Ministry of Environment and Tourism is planning to contribute to its attainment through (i) the conservation and sustainable utilization of biodiversity as a vehicle for poverty eradication and (ii) by mitigating and adapting to climate change in support of infrastructure development in the energy and water sectors and through climate smart agriculture.

The planning process for the development of Namibia’s 5th National Development Plan (NDP5) (2017-2022) will also commence in mid-2016 and will provide a progressive policy space for the mainstreaming of biodiversity.

The Sustainable Development Advisory Council was also inaugurated in 2013 in line with the Environmental Management Act of 2007. The Council represents a progressive “policy space”

as it is a cross-sectoral body made up of four government representatives and four non-governmental representatives. The Environmental Commissioner is an ex-officio member of the Council. The Council serves to advise the Minister of Environment and Tourism on environmental issues linked to sustainable development (primarily on policy matters) as well as to promote cooperation and coordination on these issues. Since its inauguration, the Council has provided guidance on a range of issues and has instituted a Sustainable Development Awards Programme and is overseeing the development of a second Integrated State of the Environment Report.

The ongoing discussions on environmental fiscal reform and the introduction of environmental levies is also an important space, which has engaged industry stakeholders and officials from the Ministry of Finance on core environmental issues.

Namibia's domestic legislation on ABS is also in its final stages. This has brought this issue to prominence at the national level and drawn attention to the need for communities to derive improved benefits from the biodiversity and natural resources they manage on a daily basis. The draft bill prompted intense debate among Parliamentarians and was referred to the Parliamentary Standing Committee on Natural Resources for further scrutiny. This process was completed in February 2016.

Other consultative processes were also recently finalized for biodiversity relevant legislation including the Integrated Coastal Zone Management Bill and for the regulations of the Biosafety Act of 2006.

The current debate around marine phosphate mining is also a progressive "policy space" for mainstreaming biodiversity. A moratorium was placed on marine phosphate mining in Namibia in 2013 pending the outcome of a study on its environmental impacts. This represents a good example of the application of the precautionary principle and a cabinet committee has been put in place to decide on the way forward with regard to this important development decision.

The national level application of the SDGs is another progressive "policy space" that is being spearheaded through the National Planning Commission. The possibility of shaping Namibia's second Integrated State of the Environment Report as a strategic document including baselines, indicators and targets linked to the environment-related SDGs is a further interesting "policy space".

2.3.3 Challenging 'policy space' that could threaten biodiversity

There is currently no explicit "challenging policy space" that could threaten biodiversity in Namibia. Namibia is concerned with the international anti-hunting movement to ban trophy hunting across the world. Any ban on trophy hunting in Namibia would have a severe negative impact, both on local communities and private farmers. It will reduce income and reduce incentives to conserve wildlife.

At the national level, Namibia's planning is guided by the vision for it to be a prosperous and industrialized nation by 2030, and industrialization continues to gather pace. The pathway chosen for industrialization is of paramount importance and is something of a contested space. For example, in terms of ensuring future electricity supply, a variety of options exist including coal and oil fired power stations, development of a hydro-electric plant in the remote north-west, gas power station powered by off-shore gas reserves in the south west, as well as renewable energy sources, particularly solar and wind. From the environmental perspective, renewable energy is being strongly promoted but the ultimate electricity supply mix chosen will depend on a number of other factors.

Infrastructure development (including the expansion of the port at Walvis Bay), mining activity, urbanization and construction of housing and other properties continues to grow rapidly. This development can of course threaten biodiversity and needs to be carefully managed and regulated.

2.3.4 Public commentary on biodiversity in development

There is a high level of interest among civil society and the media in broader environmental issues. Many newspapers contain dedicated weekly columns on environmental issues and these issues are also prominently covered on television.

Civil society opinion is strongly supportive of the state policy concerning the sustainable utilization of wildlife and other forms of biodiversity for the benefit of Namibians. Namibia has lobbied strongly against the European Union's proposed wholesale ban on the import of trophies. It is felt that this will damage the economy and conservation efforts. The civil society sector, including the Namibian Association of CBNRM Support Organizations (NACSO) and communal conservancies have prominently advocated against this proposed ban.

2.4 Development implementation and financing affecting biodiversity

2.4.1 Business models and development control processes

It cannot be said that there are particular sectors, enterprises or instruments that routinely fail to incorporate biodiversity interests in their planning and activities. The Environmental Management Act of 2007 has a particularly important role to play in this area by regulating development through Environmental Impact Assessments and Strategic Environmental Assessments. The Act also calls for the application of 12 principles of environmental management for all activities or planned activities, which may have a significant impact on the environment. These principles are expected to apply to government institutions as well as private companies and individuals. Since the gazetting of regulations for this Act in 2012, structures have been put in place and its implementation is now in full swing. However awareness of the Act and its required procedures is limited and addressing this is an ongoing priority of the Ministry.

There is also considerable scarring of the landscape caused by activities undertaken prior to the coming into force of the Environmental Management Act. This particularly includes un-rehabilitated mining sites as well as burrow pits left behind from sand mining for use in construction of roads and buildings. There is also inadequate infrastructure in place for the environmentally-sound management of waste in the country.

2.4.2 Government expenditure

Namibia conducted a study in 2014, which estimated expenditure on biodiversity conservation for the period 2008 – 2013 from a range of different sources. In this study, Government biodiversity expenditure was estimated to have increased from N\$533m in 2007/08 to N\$791m in 2011/12, before decreasing to N\$710m in 2012/13. The Ministries of Environment and Tourism (MET); Agriculture, Water and Forestry (MAWF); and Fisheries and Marine Resources (MFMR) accounted for more than 90% of biodiversity expenditure in the 2007/08 to 2012/13 period.

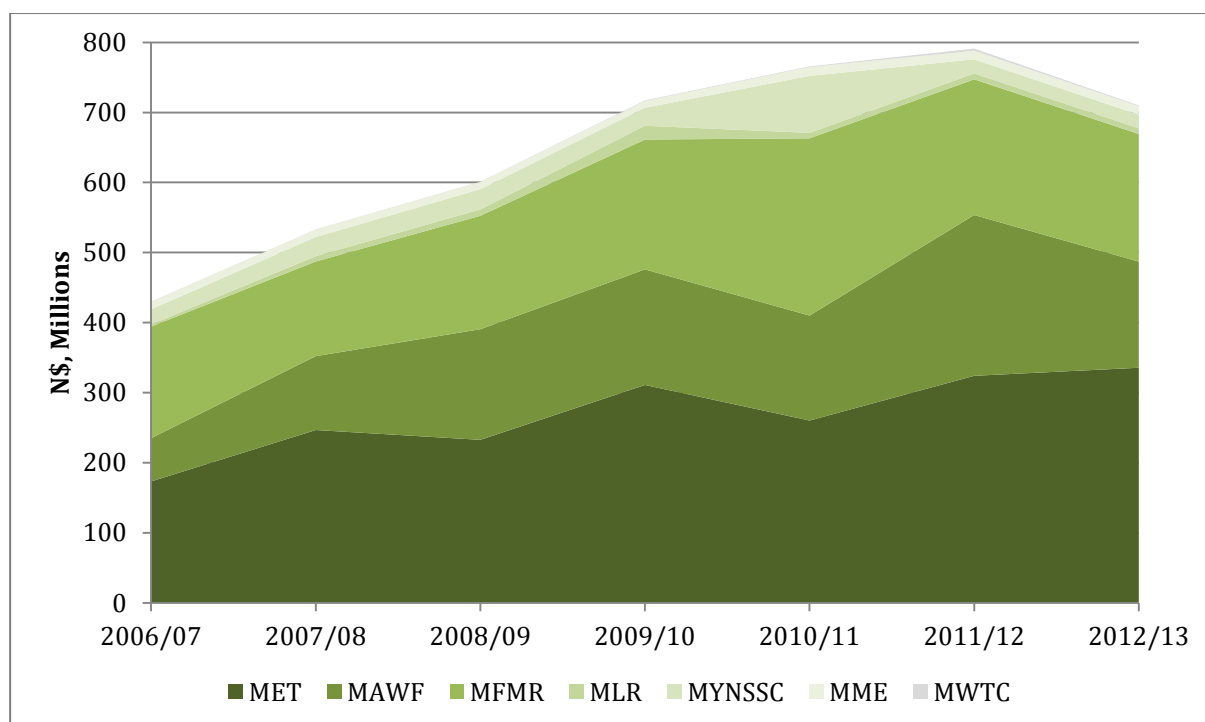


Figure 1: Real GRN Biodiversity Expenditure, 2006/07 – 2012/13

This study extracted information from the country's Medium Term Expenditure Framework (MTEF) programmes. The main programmes included¹:

Main biodiversity-related MTEF Programme	Responsible Institution
1. Wildlife and protected area management	MET
2. Protection and management of key species and natural resources	MET
3. Community-based natural resource management and tourism	MET
4. Regulation of environmental protection and sustainable resource management	MET
5. Infrastructure development and maintenance (mainly for protected areas)	MET
6. Integrated Water Resources Management	MAWF
7. Forestry	MAWF
8. Crop production and horticultural development	MAWF
9. Livestock production, improvement and animal health control	MAWF
10. Surveys and stock assessment	MFMR
11. Monitoring, control and surveillance	MFMR
12. Promotion of marine and inland aquaculture	MFMR
13. Policy and economic advice	MFMR
14. Environmental Protection	MME
15. Land usage	MLR

2.4.3 Fiscal policy and procedures

A number of sources of government revenue depend directly on the status of biodiversity. These include:

¹ In some cases, the complete budget allocation for each programme was not used but only the projects of specific relevance to biodiversity.

- Park entrance fees
- Registration of professional hunters and culling teams
- Tourist concessions
- Wildlife registration and licenses
- Wildlife utilization permits
- Sales of furs and wools
- Game and game produce
- Sale of forestry products and permit fees

An assessment of the impacts of different subsidies on the conservation and sustainable use of biodiversity is yet to be undertaken in Namibia. The “*analysis of existing and identification of potential incentives to encourage biodiversity conservation and sustainable use and discourage activities that impact negatively on biodiversity*” is included as a strategic initiative under NBSAP II and this is expected to be an important step towards removing or reforming harmful subsidies and for the development and application of positive incentives.

The process to develop an Environmental Fiscal Reform Framework is underway in Namibia, part of which is aiming at the introduction of environmental taxes and levies for environmentally harmful activities and the generation of market-based revenue streams as a source of long-term and sustainable funding for positive environmental investments. This will form a key part of the process to develop positive biodiversity incentives. Levies are currently under consideration for:

- Plastic bags
- Lubricant oils
- Detergents
- Electronic and electrical appliances
- Possibly park entrance fees to compensate for the impact of tourists on protected areas

2.4.4 Investment in biodiversity, foreign and domestic

Domestic expenditure on biodiversity is covered under section 2.4.2.

Figure 2 presents the central scenario of estimated real “foreign” biodiversity expenditure in Namibia between 2007/08 and 2020/21 according to the source of funding provided. Total nominal non-GRN biodiversity expenditure is estimated to have increased steadily from N\$213.2m in 2007/08 to N\$264.7m in 2010/11, before peaking at N\$431.8m in 2012/13. This sharp increase was driven by increased funding from the US Government, primarily through the Millennium Challenge Account project, which provided strong support to biodiversity related tourism in parks and conservancies in particular. Following the peak in 2012/13, a decline in non-GRN biodiversity expenditure is expected to N\$262.1m in 2015/16 and towards N\$101.5m in 2020/21. The projected decline in donor funding towards biodiversity is a serious concern, particularly given the challenges faced such as poaching, the continued expansion of the Community Based Natural Resource Management Programme and the infrastructure and maintenance in protected areas.

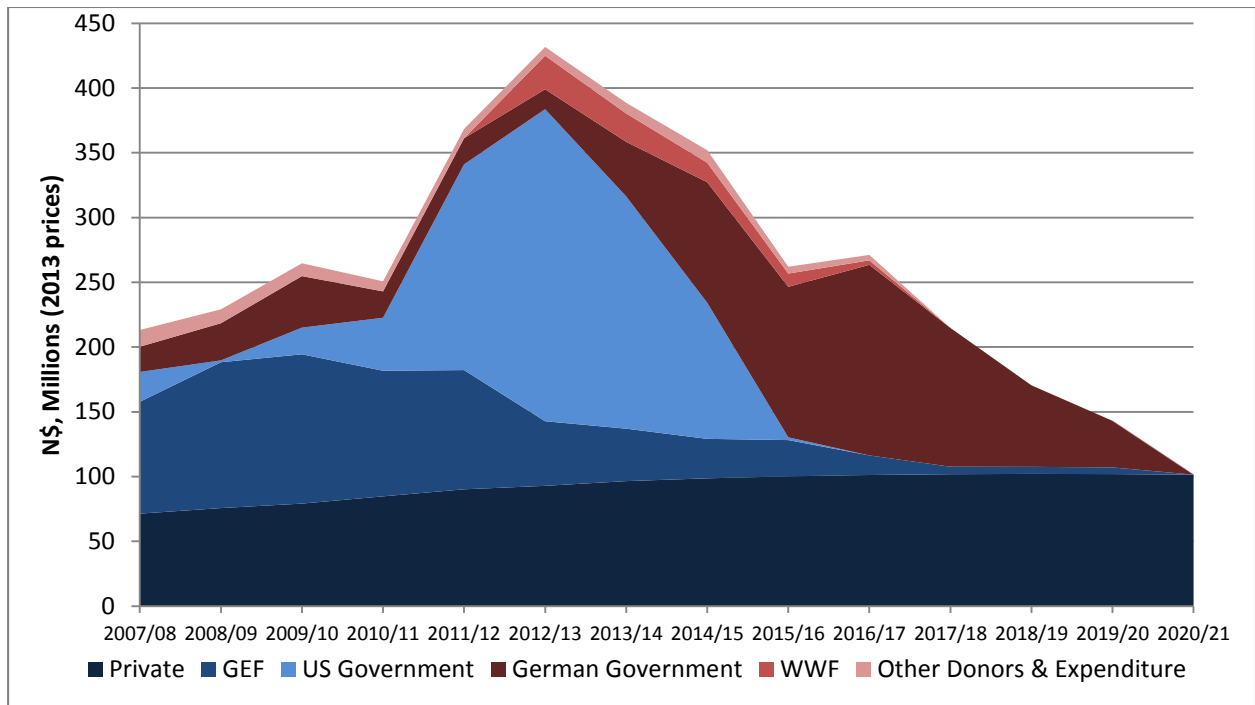


Figure 2: Estimated total real non-GRN biodiversity expenditure, 2007/08 – 2020/21.

2.5 Stakeholders and their capacities

2.5.1 Protagonists supporting positive biodiversity-development links

This is largely covered under section 2.3.1, and 2.4.2 and 2.4.4.

2.5.2 Antagonists undermining desirable biodiversity-development outcomes

There are no specific antagonists undermining desirable biodiversity-development outcomes in Namibia. As was noted in section 2.3.3, sustained economic growth, industrialization, poverty eradication and employment creation are among the critical national priorities. The pathways chosen to achieve these priorities can impact negatively and positively on biodiversity, and from the environmental perspective, it is desirable to minimize the impacts from this development on biodiversity. Large scale mining developments, housing and industrial projects and infrastructure projects are taking place in Namibia and these need to be carefully regulated. In addition the conservation and sustainable utilization of biodiversity will continue to be promoted as a vehicle for poverty eradication.

Limited awareness of the need for biodiversity conservation and broader environmental issues among the general population is also often highlighted as a challenge in Namibia, as is the overall continued perception that environment is a constraint to development. An integrated Communication, Education and Public Awareness Strategy is planned to raise overall importance of the environment and its role in leading Namibia towards a low carbon, resource efficient and climate resilient economy and society, in which communities and ecosystems are thriving.

2.5.3 Effective bridges linking biodiversity and development interests

A large number of institutions and partnerships are important to link biodiversity and development issues, including:

- National steering committees on biodiversity; climate change; and desertification
- Sustainable Development Advisory Council;
- Department of Environmental Affairs – Division of Environmental Information and Natural Resource Economics, which is responsible for natural capital accounting and broader environmental education and awareness raising;
- Department of Environmental Affairs – Division of Environmental Assessments, Waste Management, Pollution Control and Inspections, which is responsible to administer environmental assessments and undertake inspections to ensure compliance with Environmental Management Act;
- Namibian Association of CBNRM Support Organizations;
- Environmental Investment Fund of Namibia

2.5.4 Stakeholder capacities to mainstream biodiversity and development

Visible activity and capacity exist in the biodiversity “bridge” institutions listed in 2.5.3 however continued support in all aspects of individual, institutional and systemic capacity development needs to be leveraged.

Financial resources are a critical constraint facing all of the above listed institutions. In the area of natural capital accounting, there is a shortage of trained environmental economists and a lack of available data to inform and update accounts such as wildlife on a regular basis. The respective national committees on biodiversity, climate change and desertification could be better integrated for the promotion of synergies and these members would also benefit from targeted capacity programmes given that they are the technical representatives from the relevant institutions on these committees. Inadequate capacities exist to monitor and effectively enforce the provisions of the Environmental Management Act nationwide and there is a need to develop capacity of staff as well as tools, standards and processes to ensure that the environment is protected from negative impacts of development.

In recent years, community conservation has expanded rapidly in Namibia, mainly through communal conservancies and community forests. There are now 82 communal conservancies and 32 community forests in place. On the one hand, increased income is being generated through this programme and capacity strengthening is needed for communities to manage and utilize these resources for the maximum benefit of the community. Additionally, the expansion of the programme places increasing demands on supporting institutions such as NACSO, EIF and the MET to ensure that the programme is sustainable and that these community institutions are adequately supported.

3. Focusing the approach for Mainstreaming – Plans and Targets

A workshop from February 2013 on “Biodiversity Mainstreaming, Dissemination and Communication Strategy” formulated a vision for biodiversity mainstreaming in Namibia to “ensure biodiversity is conserved by all sectors as part of wider efforts to promote sustainable development in Namibia.” The workshop also identified certain priority desired “biodiversity and development” outcomes for the mainstreaming of biodiversity. These included:

- i. Improved understanding of biodiversity among wider population;
- ii. More qualified environmental journalists and reporters to keep the general public informed of biodiversity issues;
- iii. Biodiversity and the concept of ecosystem services is prominent within NDP5 and other national policies;
- iv. Curriculum at school and higher institutions to incorporate issues of biodiversity and its environmental, economic and social value;
- v. Reduced inequality gap due to job creation and diversified income sources for local communities;
- vi. Biodiversity and ecosystem services forms part of national accounting;
- vii. Research and development in the area of biodiversity drives industrial innovation;
- viii. All interventions relating to biodiversity are done on full cost/benefit analysis;
- ix. Trade offs between production and conservation addressed; and
- x. Rehabilitation and conservation of landscapes.

These outcomes remain highly valid in the Namibian context and in some ways have been given increased weight by national and international developments since 2013. These developments include the finalization of NBSAP II, the new government’s commitment to poverty eradication by 2030, the Harambee Prosperity Plan (2016-2020), the adoption of the Sustainable Development Goals and the Paris Agreement on Climate Change.

In line with the Mainstreaming Diagnostic Tool, it is recommended for this exercise to focus on one or two development processes, sectors or issues to focus its mainstreaming efforts. Therefore each of the above outcomes were assessed based on the prioritization criteria suggested in the Mainstreaming Diagnostic Tool as per the table in Annex I, also bearing in mind that some of the outcomes do not have clear next steps in terms of how to realize them and that some of the outcomes could be grouped. This prompted the identification of the following priority actions to be supported through this project:

	Activity and key action steps	By Who	When
1.	Integration of biodiversity issues within NDP5 <ul style="list-style-type: none"> • Prepare briefing paper on integrating biodiversity issues within NDP5 • Participate in NDP5 preparation process and promote integration of biodiversity issues 	Project Team	March 2017
2.	Integrated Communication, Education and Public Awareness	Project Team	March 2017

	Activity and key action steps	By Who	When
	Strategy developed on environmental issues ² <ul style="list-style-type: none"> • Develop terms of reference and commission consultancy for development of CEPA strategy • Supervise consultant and support consultations to develop CEPA strategy 		

² It is envisaged that the CEPA strategy will also cover issues of environmental education and journalism as per outcomes 2 and 4 in the Annex I table.

Annex I: Prioritization of desired mainstreaming outcomes

Mainstreaming Outcome	High profile	Future-relevant	Major development and biodiversity outcomes	Tractable	Urgency	Learning	Total
1. Improved understanding of biodiversity among wider population	5	5	5	3	5	5	28
2. More qualified environmental journalists and reporters to keep the general public informed of biodiversity issues	5	5	3	1	3	4	21
3. Biodiversity and the concept of ecosystem services is prominent within NDP5 and other national policies	5	5	5	5	4	3	27
4. Curriculum at school and higher institutions to incorporate issues of biodiversity and its environmental, economic and social value	3	5	4	2	3	5	22
5. Reduced inequality gap due to job creation and diversified income sources for local communities	5	5	5	4	4	3	26
6. Biodiversity and ecosystem services forms part of national accounting	3	5	4	4	4	5	25
7. Research and development in the area of biodiversity drives industrial innovation ³	5	5	5	5	4	4	28
8. All interventions relating to biodiversity are done on full cost/benefit analysis	3	4	3	4	3	2	19
9. Trade offs between production and conservation addressed	4	4	4	3	3	3	21

³ This is being taken up through the establishment of an ABS and Biotrade Research and Development Center with support from the German Development Bank.

Mainstreaming Outcome	High profile	Future-relevant	Major development and biodiversity outcomes	Tractable	Urgency	Learning	Total
10.Rehabilitation and conservation of landscapes	3	5	4	5	5	4	26

Prioritization Criteria Exercise for mainstreaming initiatives...