



Ministry of Environment and Tourism
Republic of Namibia

Fifth National Report to the Convention on Biological Diversity (2010-2014)

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Acronyms

ABS: Access and Benefit Sharing	NGO: Non-Governmental Organisation
BCC: Benguela Current Commission	NIMPA: Namibian Islands Marine Protected Area
BCLME: Benguela Current Large Marine Ecosystem	NNF: Namibia Nature Foundation
BMCC: Biodiversity Management and Climate Change Project	NPC: National Planning Commission
BOLD: Barcode of Life Data Systems (Project)	NPGRC: National Plants Genetic Resources Centre
CBD: Convention on Biological Diversity	OBIS: Ocean Biogeographic Information System
CBNRM: Community-Based Natural Resource Management	OKACOM: Okavango River Commission
CBO: Community-Based Organisation	ORASECOM: Orange-Senqhu River Commission
CEPA: Communication, Education and Public Awareness	PASS: Strengthening the Capacity of the Protected Area System to Address new Management Challenges (Project)
CITES: Convention on Trade in Endangered Species	PGRFA SAP: Plant and Genetic Resources for Food and Agriculture Strategic Action Plan
DART: Directorate of Agricultural Research and Training	PLCAs: Protected Landscape Conservation Areas
DEA: Department of Environmental Affairs	PoN: Polytechnic of Namibia
DoF: Directorate of Forestry	PSR: Pressure State Response
EBSA: Ecologically or Biologically Significant Area	SADC: Southern African Development Community
EIA: Environmental Impact Assessment	SDAC: Sustainable Development Advisory Council
EIF: Environmental Investment Fund of Namibia	SEA: Strategic Environmental Assessment
EMP: Environmental Management Plan	SEMP: Strategic Environmental Management Plan
GDP: Gross Domestic Product	SPAN: Strengthening the Protected Area Network Project
GEF: Global Environment Facility	TAC: Total Allowable Catch
GIS: Geographic Information Systems	TFCA: Transfrontier Conservation Area
GIZ: Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH	UNAM: University of Namibia
GMOs: Genetically Modified Organisms	UNCCD: United Nations Convention to Combat Desertification
GPTF: Game Products Trust Fund	UNESCO: United Nations Educational, Scientific and Cultural Organisation
GTRC: Gobabeb Training and Research Centre	UNFCCC: United Nations Framework Convention on Climate Change
IBA: Important Bird Area	WTTCC: World Travel and Tourism Council
IBPC: Interim Bioprospecting Committee	WWF: World Wide Fund for Nature
ICZM: Integrated Coastal Zone Management	
IPA: Important Plant Area	
IPTT: Indigenous Plant Task Team	
IRLUP: Integrated Regional Land-Use Plan	
ISOER: Integrated State of the Environment Report	
IUCN: International Union for the Conservation of Nature	
IWRM: Integrated Water Resources Management	
KAZA: Kavango Zambezi (TFCA)	
KBA: Key Biodiversity Area	
KPI: Key Performance Indicator	
MAWF: Ministry of Agriculture, Water and Forestry	
MCA: Millennium Challenge Account	
MDGs: Millennium Development Goals	
MET: Ministry of Environment and Tourism	
MFMR: Ministry of Fisheries and Marine Resources	
MHA: Ministry of Home Affairs and Immigration	
MLR: Ministry of Lands and Resettlement	
MME: Ministry of Mines and Energy	
MoE: Ministry of Education	
MoF: Ministry of Finance	
MPA: Marine Protected Area	
MRLGHRD: Ministry of Regional and Local Government, Housing and Rural Development	
MSBP: Millennium Seed Bank Partnership	
MTI: Ministry of Trade and Industry	
MWT: Ministry of Works and Transport	
MYNSSC: Ministry of Youth, National Service, Sport and Culture	
NACOMA: Namibian Coast Management and Conservation Project	
NACSO: Namibian Association of CBNRM-Support Organisations	
NAFOLA: Sustainable Management of Namibia's Forested Lands	
NAMETT: Namibia's Management Effectiveness Tracking Tool	
NAMPLACE: Namibia Protected Areas Landscape Initiative	
NAP: National Action Programme	
NATMIRC: National Marine Information and Research Center	
NBRI: National Botanical Research Institute	
NBSAP: National Biodiversity Strategy and Action Plan	
NCC-SAP: National Climate Change Strategy and Action Plan	
NCEIS: National Core of Environmental Indicators	
NDP: National Development Plan	
NEEN: Namibian Environmental Education Network	
NERMU: Namib Ecological and Restoration Monitoring Unit	

Executive Summary¹

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. Against this background, the maintenance and enhancement of biodiversity and ecosystem health is of vital importance to Namibia's socio-economic development.

Previous national reports to the Convention on Biological Diversity have highlighted Namibia's approach to addressing poverty reduction, development and conservation goals in an integrated manner. Biodiversity conservation, and particularly its sustainable utilization, is promoted as an engine and enabler for poverty alleviation and economic growth, particularly in Namibia's rural areas. This report continues to focus on this approach with due regard to the guidelines for national reports, which were made available by the CBD Secretariat.

This Executive Summary follows the reporting outline and highlights the key points from each of the reporting sections.

Chapter I provides an update of biodiversity status, trends, threats and implications for human well-being.

Status and Trends in the Conservation of Ecosystems

There was a moderate increase in the area of biomes and vegetation zones under conservation management during the period under review. In 2013, 43.5 per cent of Namibia's landmass was classified as being under conservation management, through (1) Protected areas on state land (2) Communal Conservancies (3) Freehold Conservancies and private game reserves (4) Tourism Concessions and (5) Community Forests.

The protected area network expanded by 28,983km² (or 8.8 per cent) from 2010-2013, with the bulk of this being an increase in the coverage of the acacia savannah and broad-leafed savannah biomes through the expansion of the communal conservancy and community forestry programmes.

There were also a number of other significant developments with regard to the protected area network:

- The **Kavango Zambezi Transfrontier Conservation Area (TFCA)** was formally established in 2011, and with an area of 440,000km², is the world's largest TFCA. It covers the Bwabwata, Mudumu, Mamili, Khaudum and Mangetti National Parks, as well as the Zambezi State Forest and conservancies and community forests around these protected areas, and is shared by Angola, Botswana, Namibia, Zambia and Zimbabwe.
- The **Bwabwata – Okavango** was officially proclaimed as a **Ramsar Wetland Site of International Importance** in 2013. It covers an area of 46,964 hectares and is located in north-eastern Namibia in the Kavango East Region. The site supports one of the highest diversities of species in the Zambezian Flooded Savannas Ecoregion.
- As part of efforts to institute collaborative management of conservation areas, **five Protected Landscape Conservation Areas (PLCAs)** were established. Each PLCA has an existing State Protected Area at its core as well as adjacent communal conservancies, community forests and private reserves / land areas. The PLCAs comprise a total area of 92,392km².
- The **Namib Sand Sea** was inscribed as a **UNESCO World Heritage Site** in June 2013. A National Viability Assessment of Man and Biosphere Reserves in Namibia was also completed in 2014.
- Namibia identified and submitted **four proposals for Ecologically and Biologically Significant Areas (EBSAs)** during the period under review.

Trends in Species Diversity

¹ Relevant maps and graphs are not included in the Executive Summary, and are only found in the relevant chapters.

Wildlife: Namibia completed a Large Carnivore Atlas in 2012 covering six large carnivore species, and compared its results with the previous Large Carnivore Atlas of 2004. Species estimates were higher for all species with lions, leopards, cheetahs and wild dog estimates doubling the previous estimates.

Annual game counts, in which a combination of foot patrols, vehicle-based counts and aerial monitoring are combined, continue to be undertaken at the same time every year. Important wildlife recoveries have been observed in the Zambezi Region, which is Namibia's most biodiversity-rich region, as well as in the sparsely populated, arid and largely pristine Kunene Region in the north-west.

Plants: The National Botanical Research Institute (NBRI) continues to collect and store seed, herbarium specimens and data of threatened, rare, endemic and useful plants. The most recent evaluation of about 1,450 of Namibia's plant species has shown that 40 (2.75 per cent) fall into the threatened categories according to the IUCN system (NBRI 2014), however it is believed that this is an underestimate as not enough is known about all plant populations in the country and most of these evaluations were not based on intensive fieldwork.

Birds: In 2014, Birdlife International estimated that 592 species of bird occur in Namibia. 544 of these species are classified as "least concern", while approximately 5 per cent or 28 of these species are considered globally threatened.

In Namibia, almost all birds are protected under the Nature Conservation Ordinance of 1975. Wetland bird counts are conducted twice per year (once in summer and once in winter) as part of the International Waterbird Census.

Fish / Marine Resources: State of Stocks Reviews were completed in 2011 and 2012 for the shared, commercially utilized, living marine resources in the BCLME Region. The Reviews divided species and or stocks into demersal, small pelagic, crustacean, tuna-like species and others.

Other Taxa: Limited information is available on insects, invertebrates, micro-organisms, arachnids, amphibians and reptiles. There is a need to improve taxonomic research on these groups in Namibia.

The populations of invertebrates and protista; arachnids; insects; reptiles; and amphibians were described for the Namib Sand Sea World Heritage Site.

Threats to Biodiversity

Threats to ecosystems and species and the degree to which these different threats impact upon Namibia's different biomes is assessed in Section 1.3. Each of the threats is addressed in NBSAP2 through dedicated strategic initiatives within the Strategy and Action Plan, as well as key performance indicators and activities (see further in Section 2.2.4).

Implications for Human Well-Being

The adaptive management and sustainable utilization of natural resources, particularly fisheries, wildlife and forest resources, based on scientific and participatory resource monitoring methods, is increasing in Namibia. Overall, this is considered to be leading to an improved state of biodiversity in the country with positive impacts on human well-being, livelihoods and poverty reduction. The CBNRM Programme is particularly demonstrating how the sustainable management of biodiversity can enhance socio-economic development. It is also driving the increased beneficiation and involvement of rural communities in the rapidly growing tourism sector.

The degraded state of Namibia's rangelands is a major concern, as these cover an estimated 71 per cent of the total landmass (Mendelsohn 2006). Soil fertility is also considered to be declining in the crop-growing subsistence agriculture areas of Northern Namibia. Population pressure, poor management practices, increasing climatic variability and the clearance of land are among the drivers of this situation.

Chapter II highlights Namibia's development of a second generation National Biodiversity Strategy and Action Plan (NBSAP). It also covers the mainstreaming of biodiversity, and some key information on Namibia's implementation of the Convention during the period under review.

Development of Second Generation NBSAP

Namibia's first NBSAP1 was implemented during the period 2001-2010 and was internationally recognised as being one of the best first generation NBSAPs. It covered 10 Strategic Themes, which in turn encompassed 55 strategic aims and 242 activity-based targets. Namibia began the process to review NBSAP1 and to develop an updated second generation NBSAP in 2012.

As part of this process, the relevance of the CBD Strategic Plan (2011-2020) and the 20 Aichi Targets to Namibia was also reviewed and considered. The result of this process was that the five strategic goals of the CBD Strategic Plan were considered highly relevant to Namibia, and these provide the overarching framework for NBSAP2. The 20 Aichi Biodiversity Targets were revised into 17 national targets, which are considered to be specific, measurable, attainable, relevant and time-bound to Namibia.

Namibia's NBSAP2 covers the period 2013-2022, and its vision is 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.”***

Mainstreaming of Biodiversity

Namibia's development framework of Vision 2030 and National Development Plans represents its ultimate strategy for poverty reduction. The conservation of biodiversity is prominently featured within this framework, particularly Vision 2030, which has a dedicated Chapter on the Sustainable Utilisation of Natural Resources and Environmental Sustainability.

The integration of biodiversity considerations at all levels of government and society is at the cornerstone of NBSAP2, and is covered under Strategic Goal 1. After participation in the NBSAP 2.0 Project and consulting with the Good Practice Guides Series of the CBD, Namibia identified an approach to achieve its mainstreaming vision for a ***“society in which biodiversity issues and concerns are the responsibility of all citizens and are recognized by all sectors of government, private sector and civil society”***.

The following elements are considered critical to the mainstreaming approach and are given priority in NBSAP2:

- Improved communication, education and public awareness on issues relating to biodiversity
- Valuations of ecosystem services to inform decision making about the values of nature and the integration of biodiversity into national and sectoral policy-making, planning, budgeting and decision-making frameworks
- Development of a wide range of economic incentives to promote biodiversity conservation and sustainable use

Actions taken to implement the Convention since the Fourth National Report

Section 2.3 provides a summary of some of the actions taken and outcomes from Namibia's implementation of the CBD during the period under review. It is broken down according to:

- **Programmes, Projects and Funding:** including programmes and projects funded by relevant ministries as well as bi-lateral and multi-lateral supporting projects.
- **Development of Legislation and Policies:** which highlights the development of seven pieces of legislation and policies to cover threats and opportunities relating to the conservation and use of biodiversity.
- **Establishment of Institutional and Cooperative Mechanisms:** including national level mechanisms such as the NBSAP2 Steering Committee and the Sustainable Development Advisory Council, regional bodies such as the Benguela Current Commission, and local management structures such as the PLCA Collaborative Management Committees.

Chapter III gives an overview of Namibia's progress towards the achievement of the 2020 Aichi Biodiversity Targets and the relevant 2015 Targets of the Millennium Development Goals.

Given that NBSAP2 covers the period 2013-2022, its implementation and national contribution towards achieving the Aichi Targets is only in its early stages. However many of the activities under NBSAP2 are ongoing and a baseline status and a preliminary assessment of progress made towards the 20 Aichi Targets is provided in Table 11.

The report concludes with some lessons learned in the implementation of the CBD in Namibia. Namibia has generally performed well in terms of implementation. It has received international awards for its CBNRM Programme (Markhor Award in 2012) and its management of Marine Resources (Silver Award from the World Future Council in 2012). It has also made significant progress in the development of legislation for sustainable biodiversity management; management of protected areas; conservation of wildlife species; devolution of resource management to the community level; access and benefit sharing; human wildlife conflict; and the promotion of biotrade.

There are a number of challenges remaining, which need to be overcome through effective implementation of NBSAP2. These are listed in section 3.3.

Chapter I: Update on biodiversity status, trends, threats and implications for human well-being

1.1 Importance of Biodiversity for Namibia

Although known as the driest country south of the Sahara, Namibia is blessed with exceptional natural resources and an impressive variety of species and habitats. It is one of the few dryland countries in the world with internationally recognized biodiversity hotspots. The most significant of these is the Tsau //Khaeb (formerly Sperrgebiet), situated in the Succulent Karoo floral kingdom in Southern Namibia. The second hotspot is the rugged Namib Escarpment, which is part of Africa's great western escarpment, and an area of particularly high endemism.

A formal study on the value of biodiversity, although planned, has yet to be conducted. However a variety of studies and reports demonstrate the contribution of biodiversity to social and economic development in Namibia.

Natural resources-based sectors form the backbone of Namibia's economy with mining, fisheries and agriculture alone accounting for around 30 per cent of Gross Domestic Product (GDP) and 85 per cent of exports (MET 2012a). In addition, around 70 per cent of Namibia's population is directly dependent on the natural resource base for income; food; medicinal and health needs; fuel and shelter. This situation demands that biodiversity, and the ecosystem services it provides, are maintained and enhanced as far as possible for sustainable development.

The tourism industry, for which national parks and pristine nature are considered the bedrock, is recognized as the fastest growing sector of the Namibian economy. Travel and tourism was estimated to have accounted for 20.5 per cent of GDP in 2011 (directly and indirectly) (WTTC 2012), and it is a key industry in Namibia linking economic development with poverty alleviation and biodiversity conservation. National parks are promoted as engines of growth in the rural areas by engaging local communities in the management of parks and the sustainable use of natural resources through the granting of tourism and hunting concessions, usually in partnership with private sector investors.

Some sites of national and global significance in Namibia include its:

- Twenty Protected Areas, which cover hugely varied ecosystems and some 17 per cent of the country's land mass including the entire 1500km coastline
- Two Transfrontier Conservation Areas (TFCAs) – Ai-/Ais / Richtersveld TFCA, and the Kavango Zambezi TFCA (the world's largest TFCA)
- Five Ramsar Wetland Sites of International Importance – Etosha Pan, Walvis Bay Lagoon, Sandwich Harbour, Orange River Mouth and Bwabwata-Okavango
- Nineteen Important Bird Areas (IBAs), 12 of which are located in the coastal zone or on offshore islands
- Forty Important Plant Areas (IPAs) spread across the country.

A green economy sectoral study conducted by United Nations Environment Programme (UNEP) in 2012 on "Biotrade: A Catalyst for Transitioning to a Green Economy in Namibia" describes how biotrade currently accounts for around 4.5 per cent of Namibia's GDP. This contribution breaks down as follows: Indigenous Natural Products (0.15 per cent); Wildlife (1.08 per cent); Agriculture: Indigenous Crops and Vegetables (0.97 per cent) and Livestock Breeds (1.62 per cent); Indigenous Fisheries and Marine Resources (0.21 per cent); Timber, Non-Timber Forest Products and Other (0.49 per cent). The same report indicates that the contribution of Biotrade to Namibia's economy could increase by 50 per cent over the next 10 years - to 7 per cent of GDP.

Namibia has been exploring innovative approaches to develop an industry around the sustainable supply and trade of indigenous natural plant products. This approach has brought products from six indigenous plants to the international market, while several other products are also under development. The table below offers some facts and figures on some of Namibia's most important indigenous plant resources:

Devil's Claw (<i>Harpagophytum procumbens</i> and <i>H. zeyheri</i>)					
<ul style="list-style-type: none"> • Regions or Areas: Mainly in communal areas in Kavango East and West, Zambezi, Otjozondjupa and Omaheke. • Commercial and Traditional Uses: Treatment for rheumatism and arthritis. It is exported as dried, unprocessed slices or in processed forms of capsules, tea and powders. • Number of known Farmers selling commercially (2012): 2,291 (1,419 females and 872 males). 					
2010		2011		2012	
Volume (kg)	Value (N\$)	Volume (kg)	Value (N\$)	Volume (kg)	Value (N\$)
296,000	10,360,000	621,935	21,000,000	543,835	25,000,000
Hoodia (<i>Hoodia gordonii</i>)					
<ul style="list-style-type: none"> • Regions or Areas: Southern (Karas and Hardap) and eastern (Zambezi and Kavango East and West). • Commercial and Traditional Uses: Used by Nama people to treat illnesses such as high blood pressure, diabetes, gout, and for suppressing hunger during times of hunting and hardship. This latter property has attracted the attention of international companies interested to develop dietary products. 					
2010		2011		2012	
Volume (kg)	Value (N\$)	Volume (kg)	Value (N\$)	Volume (kg)	Value (N\$)
7,759	179,750	200	Unknown	1,900	Unknown
Kalahari Melon Seed (<i>Citrullus lanatus</i>)					
<ul style="list-style-type: none"> • Regions or Areas: Northern communal regions, Kavango East and West and Zambezi regions. • Commercial and Traditional Uses: Sun screen, skin care products, conditioning hair care products and soaps. • Number of known Farmers selling commercially (2012): 2,291 (1,419 females and 872 males). 					
2010		2011		2012	
Volume (kg)	Value (N\$)	Volume (kg)	Value (N\$)	Volume (kg)	Value (N\$)
Unknown	Unknown	380	40,000	79	7,000
Marula (<i>Sclerocarya birrea</i>)					
<ul style="list-style-type: none"> • Regions or Areas: North Central Regions (Oshana, Oshikoto, Omusati and Ohangwena). • Commercial and Traditional Uses: Food and cosmetic oil. • Number of known Farmers selling commercially (2012): 1,337 females. 					
2010		2011		2012	
Volume (kg)	Value (N\$)	Volume (kg)	Value (N\$)	Volume (kg)	Value (N\$)
7,220	1,330,000	6,080	920,000	6,080	1,003,200
Ximenia (<i>Ximenia americana</i>)					
<ul style="list-style-type: none"> • Regions or Areas: Northern as well as Central regions of Namibia. • Commercial and Traditional Uses: Moisturiser, anti-ageing skin care products, eye-care, anti-acne products, dry, fragile and damaged hair products, soaps and lipsticks and lip balms. • Women used Ximenia oil to soften their skin and condition their hair. Eaten raw, used to make jams, jellies and drinks. • Number of known Farmers selling commercially (2012): 55 females and 2 males. 					
2010		2011		2012	
Volume (kg)	Value (N\$)	Volume (kg)	Value (N\$)	Volume (kg)	Value (N\$)
1,520	117,840	3,150	498,960	3,810	560,561
Commiphora (<i>Commiphora wildii</i>)					
<ul style="list-style-type: none"> • Regions or Areas: Kunene Region (north-west). 					

- **Commercial and Traditional Uses:** The local Ovahimba people use the Commiphora Plant resin as a perfume.
- **Number of known Farmers selling commercially (2012):** 191 females and 196 males.

2010		2011		2012	
Volume (kg)	Value (N\$)	Volume (kg)	Value (N\$)	Volume (kg)	Value (N\$)
3,089	154,400	Unknown	Unknown	1,393	198,490

Table 1: Estimated Export volumes and value (2010-2012) of Devil's Claw, Hoodia, Marula Oil, Ximenia Oil and Commiphora Resin (Source: MCA-Namibia 2012).

Wildlife populations have been particularly well maintained in Namibia due to prudent conservation policies and the country's low human population density. There has been a well-documented recovery in Namibia's wildlife populations since the 1980s, when illegal hunting was at its height and the country suffered an extreme drought. Wildlife resource accounts published in 2009, using data from 2004, estimated that wildlife assets are worth N\$10.5 billion in Namibia. Wildlife numbers were estimated at just over 2 million (Barnes *et al* 2009). The process of updating these wildlife accounts is underway but yet to be completed.

Considerable investment has been made in recent years into improving the management and infrastructure in protected areas so that these can serve as engines for economic growth in rural areas. An estimated N\$186 million was allocated to protected areas management in 2013 compared to N\$109 million in 2010. Revenue from protected areas was also expected to increase from N\$40 million in 2010 to N\$55 million in 2013 (GRN 2013).

Conservation has emerged as an increasingly viable land use in Namibia, particularly since rights to the conditional use of wildlife and forest resources were devolved to local communities through communal conservancies in 1996 and community forests in 2001. It was estimated that community conservation generated over N\$58.3 million for local communities in 2012 and has facilitated the creation of 6,477 jobs and 99 enterprises based on natural resources (NACSO 2013), mainly through trophy hunting, accommodation establishments, and the harvesting and sale of natural resource products and crafts.

1.2 Major Changes in the status and trends of biodiversity in Namibia 2010-2014

Namibia's biodiversity is shaped by its diversity of climate, topography, geology and human influences. As the most arid country south of the Sahara, lack of rainfall and its high level of variability are perhaps the key influences on biodiversity. Namibia is characterized by a steep south-west to north-east rainfall gradient. Annual rainfall can be as low as 10mm in the south-west and west, while it averages around 600mm in the north-eastern areas (Mendelsohn *et al* 2003). A reverse gradient exists in terms of seasonal and daily temperature variations, which are low in the north and north-east and high in the west and south-west. As a result, the greatest overall terrestrial species diversity is found in the more tropical areas of north-eastern Namibia, while areas of high endemism are mainly concentrated in the arid and semi-arid west, central and southern parts of the country.

1.2.1 Trends in the Conservation of Ecosystems

Namibia is classified into 29 vegetation zones and six terrestrial biomes, which include:

- Namib Desert
- Nama Karoo
- Succulent Karoo
- Acacia Savanna
- Broad-leafed Savanna
- Lakes and Salt Pans.

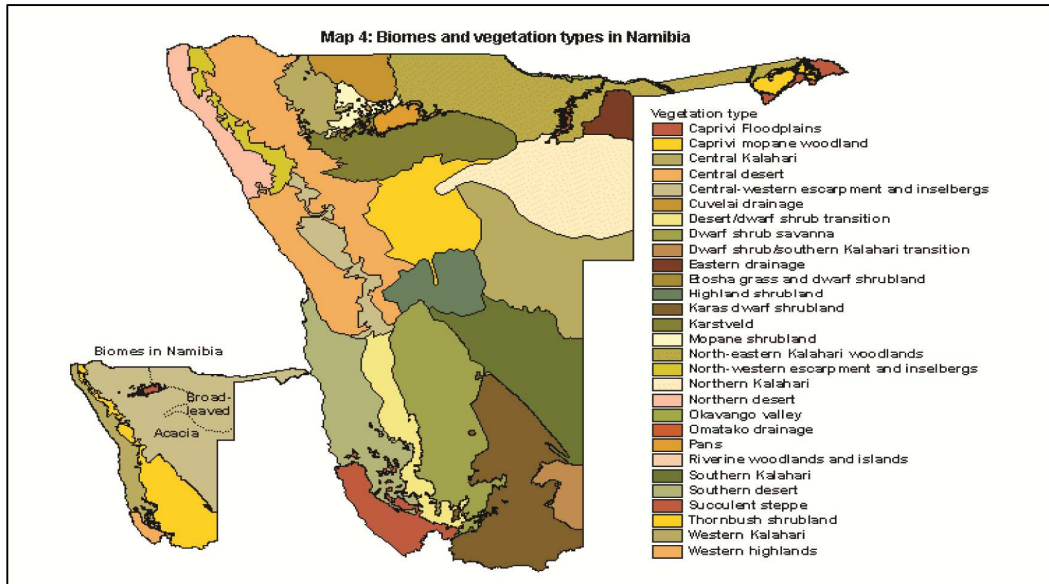


Figure 1: Terrestrial biomes in Namibia.

1.2.1.1 Increase in Ecosystems under Conservation Status

There was a moderate increase in the area of biomes and vegetation zones under conservation management during the period under review. The percentages of the different biomes and vegetation zones under conservation management are depicted in the diagrams below. The protected area network expanded by 28,983km² (or by 8.8 per cent) from 2010-2013, with the bulk of this being an increase in the coverage of the acacia savannah and broad-leafed savannah biomes through the expansion of the communal conservancy and community forestry programmes. Several vegetation classes remain inadequately covered by conservation land uses, as indicated in Figure 3.

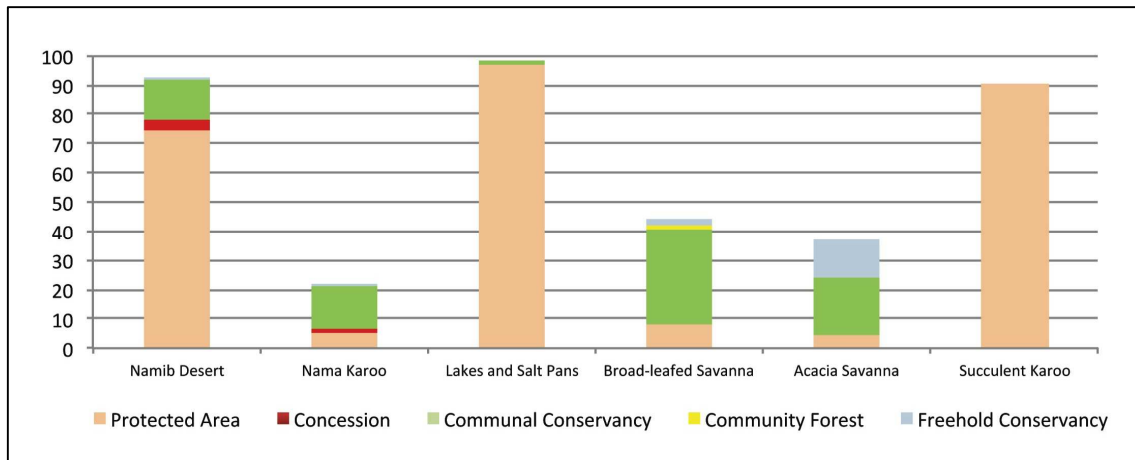


Figure 2: Percentage of the different biomes protected by different types of conservation area (Source: www.nacso.org.na)

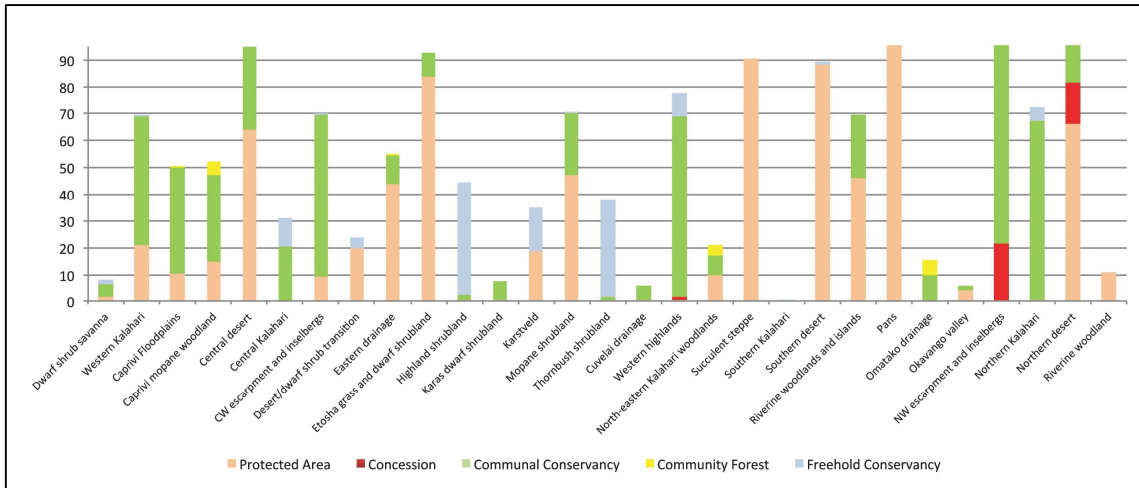


Figure 3: Percentage of the different vegetation classes protected by different types of conservation area (Source: www.nacso.org.na)

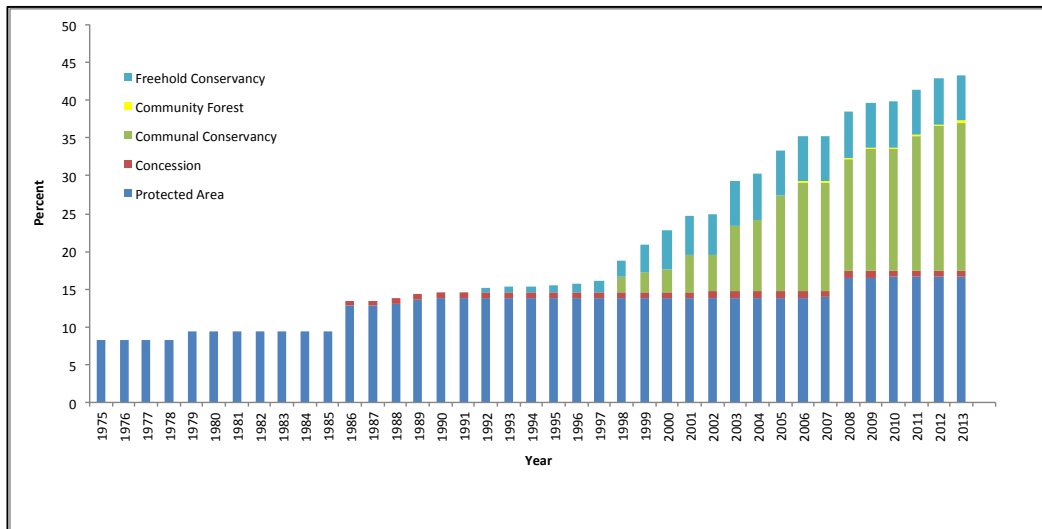


Figure 4: Graph showing the marginal increase in the percentage of territory covered by communal conservancies and community forests since 2010 (Source: www.nacso.org.na).

1.2.1.2 Expansion of the CBNRM Programme

As indicated earlier, the main expansion of areas under conservation management has been achieved through increases in the coverage of the CBNRM Programme.

In 2010, there were 59 communal conservancies registered in Namibia covering almost 133,000km². By 2013, this has increased to 79 communal conservancies covering over 160,000km². The majority of new communal conservancies were registered in the north-western, north-eastern and eastern regions. Communal conservancies now cover the largest share of land under conservation in Namibia (45 per cent compared to 38 per cent for formal state protected areas).

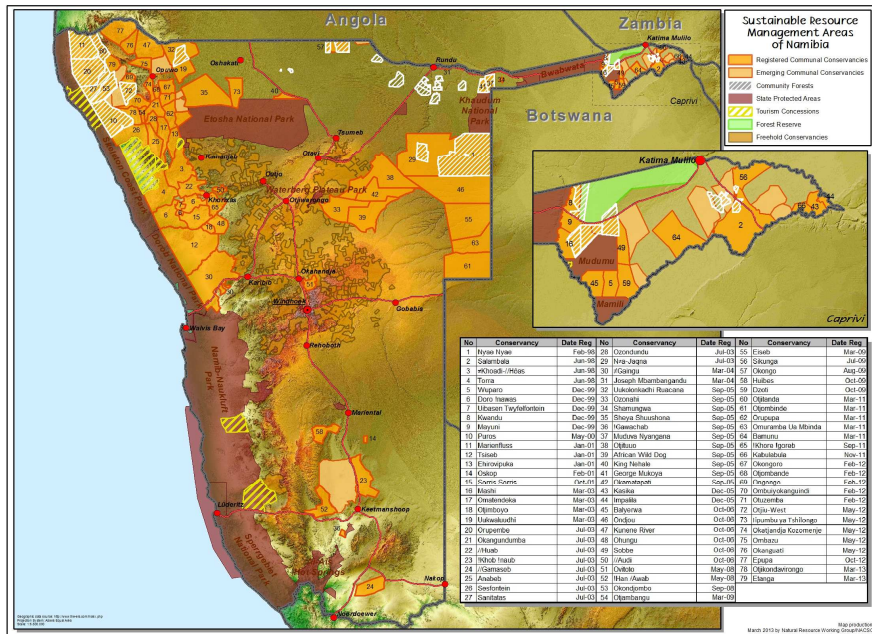


Figure 5: Map showing the breakdown of conservation areas in Namibia, as of March 2013 (Source: www.nacso.org.na).

There was also significant growth in the number and area of community forests during the period under review. The number of community forests increased from 13 to 32 while the area covered by community forests more than doubled to over 3,000km² in 2013 from 1,486km² in 2010.

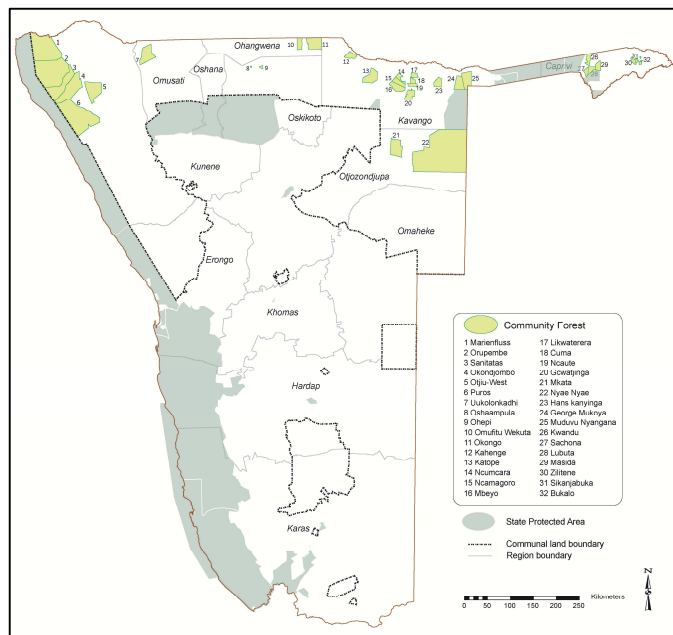


Figure 6: Number and Location of Namibia's Community Forests as of 2013 (Source: www.nacso.org.na).

1.2.1.3 Signature of Kavango Zambezi Transfrontier Conservation Area Treaty

A treaty formally and legally establishing the KAZA TFCA was signed in 2011 by the Presidents of Angola, Botswana, Namibia, Zambia and Zimbabwe. The KAZA TFCA covers an area of 444,000km², including the Bwabwata, Mudumu, Mamilii, Khaudum and Mangetti National Parks, as well as the Zambezi State Forest and conservancies and community forests around these protected areas.

The KAZA TFCA was established for the primary purpose of harmonizing policies, strategies and

practices for managing shared natural resources that straddle the international borders of the five partner States, and for deriving equitable socio-economic benefits through the sustainable use and development of natural and cultural heritage resources.

The organizational and operational arrangements for the development of the KAZA TFCA have been established and include a dedicated KAZA TFCA Secretariat; regional ministerial and technical committees and working groups; and national level steering committees.

1.2.1.4 Proclamation of Bwabwata - Okavango as a Ramsar Site of International Importance

The Bwabwata-Okavango was officially proclaimed as a Ramsar Wetland Site of International Importance in 2013. It covers an area of 46,964 hectares and is located in north-eastern Namibia in the Kavango East Region.

The site consists of the lower Okavango River, part of the Okavango Delta pan-handle and permanently or temporarily flooded marshes and floodplains, including a buffer of riparian forest and open woodland. It supports IUCN Red-Listed species, including the vulnerable African Elephant (*Loxodonta Africana*), Hippopotamus (*Hippopotamus amphibius*), Slaty Egret (*Egretta vinaceigula*), Lion (*Panthera leo*), the endangered Grey Crowned Crane (*Balearica regulorum*) and the critically endangered Eurasian Bittern (*Botaurus stellaris*) and Pel's Fishing Owl (*Scotopelia peli*).

The site supports one of the highest diversities of species in the Zambezi Flooded Savannas Ecoregion. Over 400 species of birds have been recorded at the site, representing the highest number in Namibia. A variety of ecosystem services have been identified for this site, including provisioning, regulating, supporting and cultural values. Current land uses include tourism, crop cultivation and livestock farming. Small-scale farming of millet, sorghum and maize with small numbers of goats and cattle is the dominant agricultural land use. A management plan has been drafted for the site and is in the process of official approval.

Parts of the southern boundary of this site are contiguous with the northern boundary of the adjacent Okavango Delta Ramsar Site in Botswana.

1.2.1.5 Establishment of Protected Landscape Conservation Areas

The NAM-PLACE Project, launched in November 2011, has established five Protected Landscape Conservation Areas (PLCAs) with the aim to ensure that land uses in areas adjacent to existing State Protected Areas are compatible with biodiversity conservation objectives.

Each landscape comprises an existing State Protected Area at its core as well as adjacent communal conservancies and private reserves / land areas. The PLCAs comprise a total area of 92,392km².

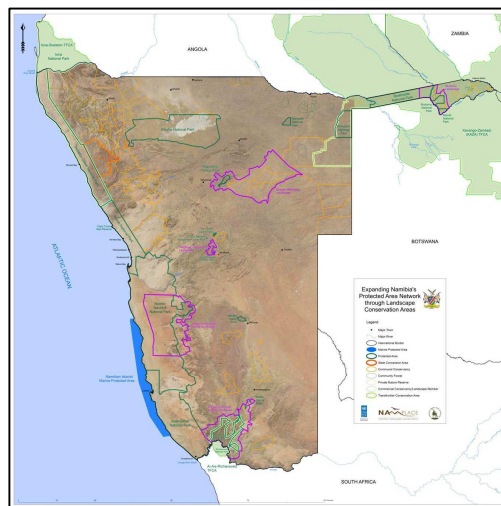


Figure 7: Map showing the five PLCAs (outlined in purple) established through the NAM-PLACE Project since 2011².

² The detailed maps of the 5 PLCAs are included in Appendix IV.

Protected Landscape Conservation Areas	State Protected Area (km ²)	Conservancies / Community Forests (km ²)	Private Land (km ²)	Total Size (km ²)
1. Mudumu	2,335	2,047		4,382
2. Greater Waterberg	469	16,257	2,433	19,159
3. Greater Sossusvlei	49,768		5,730	55,498
4. Greater Fish River Canyon	4,972	132	7,489	12,593
5. Windhoek Green Belt	40		720	760
Total Areas	57,584	18,436	16,372	92,392

Table 2: Namibia's Protected Landscape Conservation Areas by area and land uses (km²).

1.2.1.6 World Heritage Site

The Namib Sand Sea was inscribed as a UNESCO World Heritage Site in June 2013. It covers over 3 million hectares of the Namib-Naukluft Park, and is recognized as a stunning landscape derived from a combination of geological, geomorphic and climatological process in which a unique biota has evolved to take advantage of fog as a moisture source and wind-blown sand and detritus as life support media.

The Namib Sand Sea was deemed to meet each of the four World Heritage Site criteria:

- i. Superlative natural phenomena, outstanding natural beauty and aesthetic importance;
- ii. Outstanding example representing major stages of earth's history, significant ongoing geological processes in the development of land forms and significant geomorphic and physiographic features;
- iii. Outstanding example representing significant ongoing ecological and biological processes in the evolution and development of terrestrial ecosystems and communities of plants and animals; and
- iv. Most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.

The Namibia Nature Foundation also completed a National Viability Assessment of Man and Biosphere Reserves in Namibia in 2014.

1.2.1.7 Identification of Ecologically and Biologically Significant Areas

Namibia has identified and submitted four proposals for Ecologically and Biologically Significant Areas (EBSAs) during the period under review, including:

- Kunene-Tigres
- Namibian Islands
- Namib Flyway
- Benguela Upwelling System³

Kunene-Tigres

The key reasons that the Kunene-Tigres area was submitted for recognition as an EBSA include uniqueness, importance for migratory birds, nursery functions and high habitat & species diversity. It is delineated as a ~4841km² area (103km x 47km) with a northern limit 10km north of Tigres Island, a southern limit 2km south of the Kunene River mouth and an offshore extent of 25 nautical miles. The proposed EBSA is well within the national jurisdictions of the two neighboring countries (Angola and Namibia) with >80 per cent of the proposed area falling within Angolan jurisdiction.

³ The information in this sub-section is sourced directly from MFMR (2013).

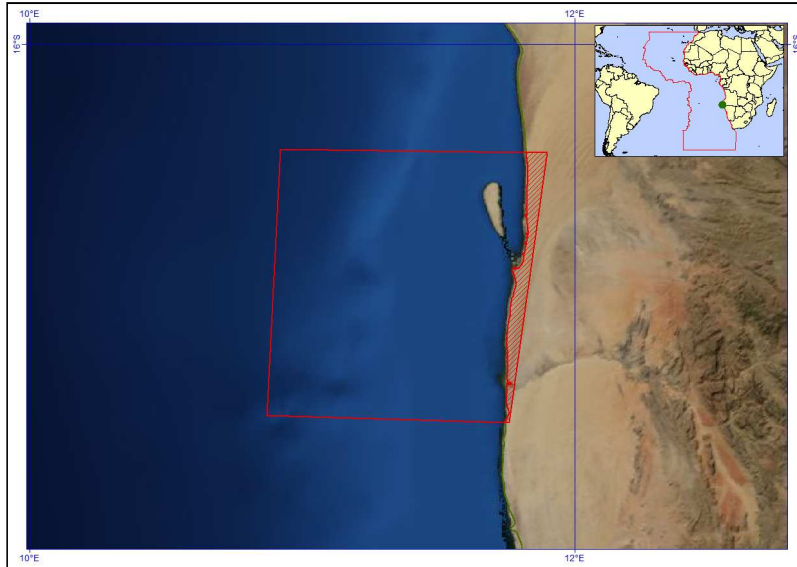


Figure 8: Map of proposed “Kunene-Tigres” EBSA (Source: MFMR 2013).

Namibian Islands

The proposed Namibian Island EBSA comprises four islands located between the latitudes of 24 and 27°S, within the national jurisdiction of Namibia. The four Namibian offshore islands are identified in terms of their significance for life history stages of endangered and vulnerable seabird species. The four proposed islands (Mercury Island, Halifax Island, Ichaboe Island and Possession Island) are seabird-breeding sites within the existing Namibian Islands Marine Protected Area (NIMPA).

Eleven different seabird species breed on the proposed islands, of which nine are endemic to southern Africa. Of these, the African Penguin (*Spheniscus demersus*), Bank Cormorant (*Phalacrocorax neglectus*) and the Cape Cormorant (*P. coronatus*) are listed as endangered, while the Cape Gannet (*Morus capensis*) is listed as vulnerable. The African Penguin and the African Black Oystercatcher (*Haematopus moquini*), a near-threatened shorebird, both breed on all four of the proposed islands, whereas the Cape Gannet, Bank Cormorants and Cape Cormorants (*P. phalacrocorax*) are resident to three of the four proposed islands.

The endangered species of seabirds foraging in the vicinity of the islands are threatened by food shortages; harvesting of fishery resources; anthropogenic and mining disturbances; and environmental variability. The collapse of the sardine resource in the 1960s and anchovy populations in the 1990s, both significant pelagic prey species, threatens the viability of African penguin and Cape Gannet populations.

The coast is vulnerable to marine pollution, especially oil spills, and it is regarded that a minimum oil spill around the breeding sites of the endangered and flightless African Penguin will threaten their populations by almost 80 per cent. Namibia has a National Oil Spill Contingency Plan, and a follow up process to draft the Oil Spill Sensitivity Mapping is currently underway for improved monitoring and prevention.

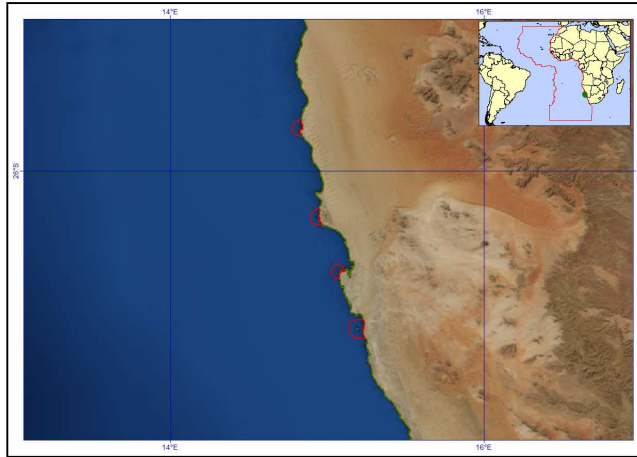


Figure 9: Map of proposed “Namibian Islands” EBSA (Source: MFMR 2013).

Namib Flyway

The Namib Flyway is a highly productive area in the Benguela system that attracts large numbers of sea and shorebirds, marine mammals, marine turtles and other fauna. It contains two marine Ramsar sites, four Important Bird Areas (IBAs) and two proposed offshore IBAs.

The Namib Flyway is situated between Cape Cross and Sandwich Harbour on the inshore area of the terrestrial Dorob National Park and the Namib Naukluft Park, between latitudes 21 and 24 degrees South. The area extends offshore for 50 nautical miles, within the national jurisdiction of Namibia.

The coastline includes mixed rocky and sandy shoreline with Resident, Palearctic, Oceanic and intra-African migrant bird species that also operate in offshore areas. These bird species include seabirds (terns, gulls, cormorants, gannets, shearwaters, albatrosses, petrels, skuas etc.); shorebirds (plovers, sandpipers, turnstones, whimbrels, stints, oystercatchers, curlews, knots, godwits, avocets etc.) and waterbirds (flamingos, ducks, grebes, coots, gallinules, herons etc.). Globally threatened birds supported by this proposed EBSA are Bank Cormorant, Lesser Flamingo (*Phoenicopterus minor*), African Black Oystercatcher and Damara Tern (*Sterna belaenarum*). Cetaceans such as Bottlenose Dolphins (*Tursiops truncatus*), Heaviside’s Dolphins (*Cephalorhynchus heavisidii*) and Southern Right Whales (*Eubalaena australis*) breed in this area. Humpback (*Megaptera novaeangliae*) and Minke (*balaenoptera acutorostrata*) whales are common whereas other species like Fin (*Balaenoptera physalus*) whales and beaked whales are also present together with many other cetacean species. The area is very important as a foraging area for Leatherback Turtles (*Dermochelys coriacea*).

The area is under threat from Walvis Bay harbour expansion, an industrial park and seabed mining proposals. Uncontrolled coastal development and oil exploration are additional threats.

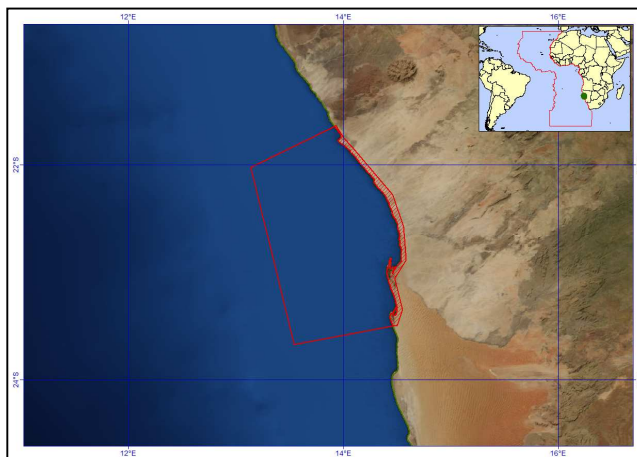


Figure 10: Map of proposed “Namib Flyway” EBSA (Source: MFMR 2013).

Benguela Upwelling System

The Benguela Upwelling System is bounded in the north and south by warm water current systems and characterized by very high primary production (>1000 mg C/m²/day). This high biological productivity supports numerous commercial, artisanal and recreational fisheries. It includes important spawning and nursery areas for fish as well as foraging areas for endangered and threatened bird species. Another key characteristic feature is the diatomaceous mud-belt in the Northern Benguela. This includes regionally unique low oxygen benthic communities that depend on sulphide oxidising bacteria.

The geographical extent of the proposed Benguela Upwelling System EBSA is from Cape Point in the south to the Angola-Namibia border (17°15'S) in the north along the southwestern African coast. At the northern region the offshore limit of the proposed Benguela Upwelling System EBSA extends outside the Exclusive Economic Zones of Namibia and Angola.

The productivity of the environment and the abundant stocks of zooplankton and fish that they support in turn sustain abundant top predator populations including 15 species of seabirds (9 of which are endemic) that breed in the region, several shorebirds species, the Cape Fur Seal (*Arctocephalus pusillus*) and several cetacean species – one of which is endemic to the Benguela Current.

Apart from productivity, the strong prevailing winds in the area also have a cooling effect that provides benign climatic conditions for land breeding marine predators such as seals and seabirds with the system being characterized by numerous large seal and seabird colonies. There are a number of confirmed coastal IBAs in the focus area (excluding Angola), for example Sandwich Harbour, Orange River Mouth, Namibia's offshore islands and Walvis Bay. The area encapsulates important breeding and foraging areas for locally endemic breeding seabird species such as the African Penguin (*Spheniscus demersus*), Cape Gannet (*Morus capensis*), Bank Cormorant (*Phalacrocorax neglectus*), the Cape Cormorant (*P. capensis*), various tern and gull species, as well as important foraging areas for several non-breeding migrants to the area including Black-browed (*Diomedea melanophris*), Atlantic Yellow-nosed (*Thalassarche chlororhynchos*) and Shy Albatrosses (*T. cauta*), and, Cory's Shearwater (*Calonectris diomedea*), Spectacled (*Procellaria conspicillata*) and White-chinned Petrels (*P. aequinoctialis*).

The northern Benguela ecosystem historically supported high pelagic catches. Overfishing and possible changes in the ecosystem have led to a decline in pelagic species leaving the northern Benguela system in a "degraded" state with some evidence of "jellification". This has been reflected in population declines in the breeding populations of several piscivorous predators in the northern Benguela, including the African Penguin (endangered), Cape Gannet (vulnerable) and the Bank Cormorant (endangered).

The southern Benguela ecosystem appears to have been more stable and the fish stocks appear to have benefited from relatively conservative fisheries management strategies implemented over the past several decades. Nevertheless, there have been recent shifts in the geographical distribution of important prey species in the southern Benguela Current Ecosystem, most importantly eastward shifts in the distribution of the sardine (*Sardinops sagax*), anchovy (*Engraulis capensis*) and rock lobster (*Jasus lalandii*) stocks since the 1990s. This has evidently had negative consequences for seabirds on the west coast of South Africa, with general declines in breeding populations of seabirds including African Penguin, Cape Gannet and Bank Cormorant as with the northern Benguela.

Diamond mining proliferates in the areas between 26 and 30°S and further exploratory licenses are being awarded for diamond and other marine mining interests along the entire Namibian coast. Mining licenses and exploratory licenses for industrial minerals, such as phosphates, have also been awarded along the entire Namibian coast and further applications for bulk commodity seabed mining are expected. Namibia has imposed a moratorium on phosphate seabed mining awaiting more thorough research. Petroleum exploration and production is taking place within the Namibian component of this area. The Kudu Gas Field in Namibia is earmarked to be developed within the next two years.

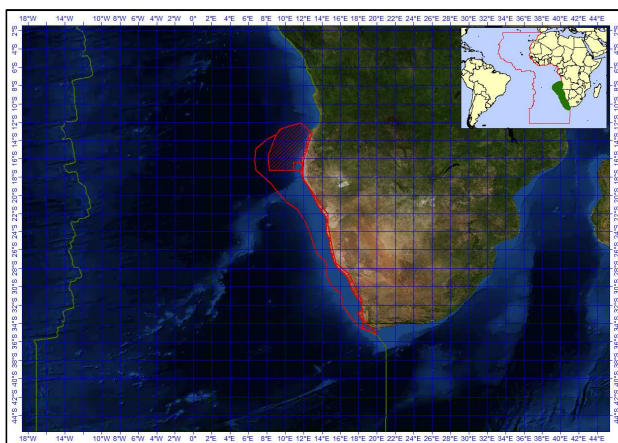


Figure 11: Map of proposed “Benguela Upwelling System” EBSA (Source: MFMR 2013).

1.2.2 Trends in the Conservation of Species

As an arid country, Namibia has a relatively low number of species compared to countries with wetter climates. However it possesses a high level of endemism, with approximately 20 per cent of described species classified as endemic. Endemism is particularly high in plants, invertebrates, reptiles and frogs in Namibia while is relatively low in mammals, birds and fish.

Taxonomic Group	Number of described species in Namibia	Percentage of species endemic to Namibia
Amphibians	50	12
Arachnids	618	11
Birds	592	2
Fish	114	8
Insects	6,421	24
Mammals	229	7
Plants	4,334	14
Reptiles	254	28

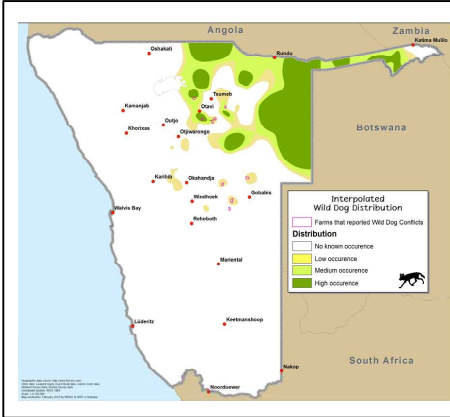
Table 3: Number of described species in Namibia and levels of endemism.

Since the submission of Namibia’s 4th National Report in 2010, the following changes in biodiversity trends and status have been noted:

1.2.2.1 Mammals

Given their value to Namibia in terms of consumptive and non-consumptive uses, mammals, especially wildlife, are perhaps the best researched of Namibia’s taxonomic groups.

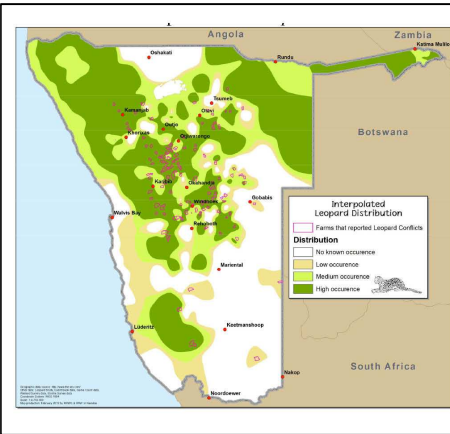
Namibia completed a Large Carnivore Atlas in 2012 covering six large carnivore species, and compared its results with the previous Large Carnivore Atlas of 2004. Species estimates were higher for all species with lions, leopards, cheetahs and wild dog estimates doubling the previous estimates.



Wild Dog *Lycan pictus*

Since the previous large carnivore atlas, the wild dog population was estimated to have increased by over 150%. The entire northeastern portion of Namibia is categorized as high density. It is likely that the wild dog population of northern Botswana acts as a source for Namibia's population.

The total estimate for African wild dog is approximately 4,534 and Namibia specific ly at 200 adult individuals.

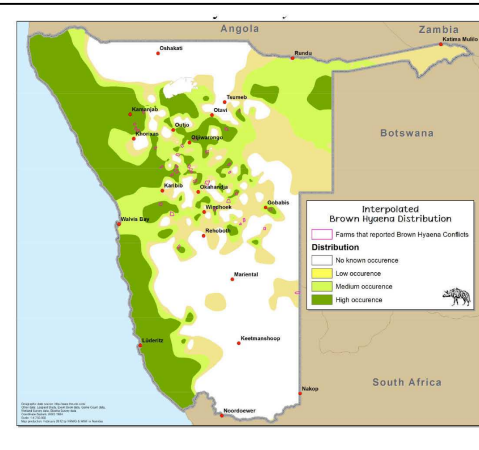


Leopard: *Pantherus pardus*

The leopard is the most widespread large carnivore in Namibia and their population is thought to be increasing in many regions of the country.

The Large Carnivore Atlas suggests that the leopard population has increased by more than 110% since 2004. This analysis is based on estimates derived from both camera-trapping and spoor surveys.

Further, targeted studies should investigate leopard density in the communal lands in the northeast, northwest and commercial farms in the south.



Brown Hyaena: *Hyaena brunnea*

The brown hyaena population remained the most stable of the large carnivores, though the high estimate was a 100% increase on the previous high estimate.

The total estimate for brown hyenas across their range is between 5,000-8,000 including large populations in Botswana, Zimbabwe and South Africa. (2012).

The IUCN Redlist suggests that the brown hyena population of Namibia is between 500-1000 individuals, which is not far from the stated estimate in the Large Carnivore Atlas.

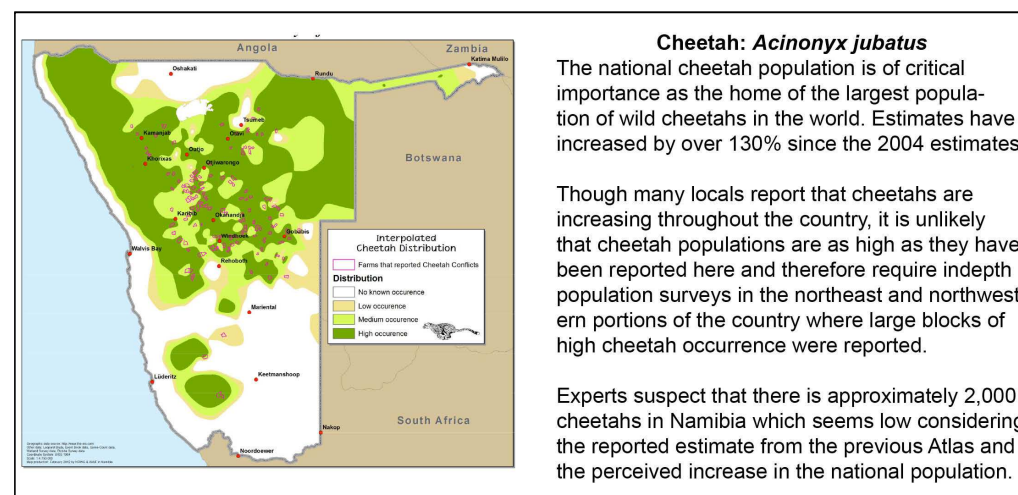
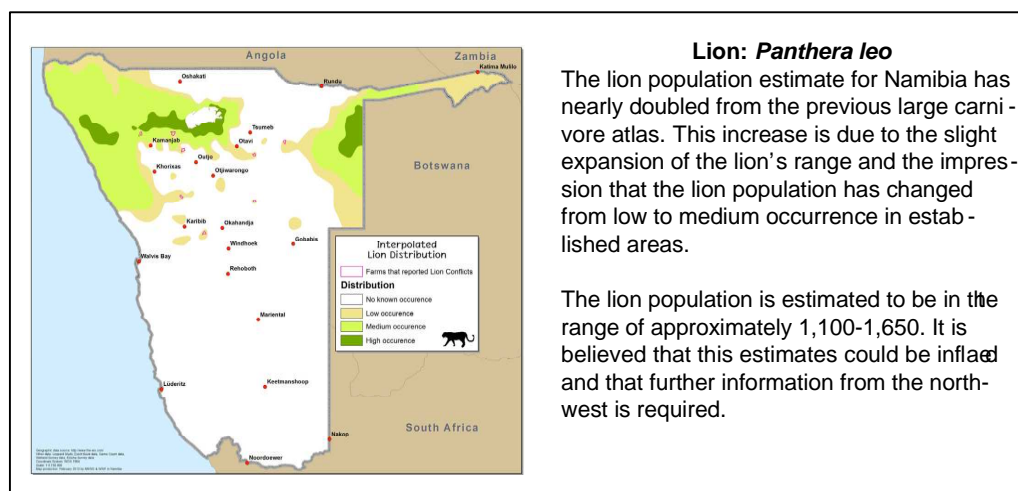
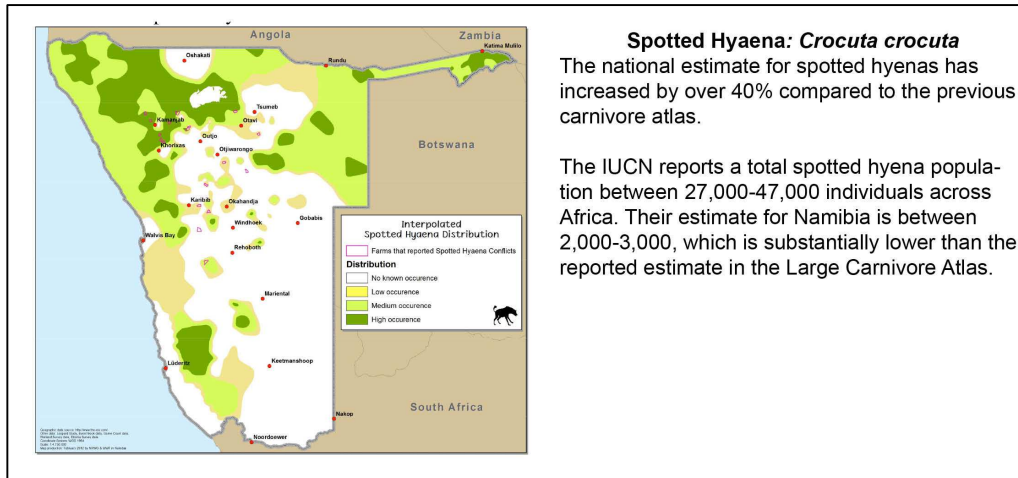


Figure 12: Summarized information from Namibia's Large Carnivore Atlas of 2012.

Annual Game counts, in which a combination of foot patrols, vehicle-based counts and aerial monitoring are combined, continue to be undertaken at the same time every year. These are now undertaken in conservancies in the north-west, north-east, north-central and southern regions, and provide important data for information sharing, planning and management.

Important wildlife recoveries have occurred in the Zambezi Region, which is Namibia's most biodiversity-rich region. The increases are attributed to breeding; reduced levels of poaching; introductions; and immigration from Botswana. The graph below gives an index of sightings during regular fixed-route foot patrols in seven long-established conservancies in Zambezi Region. Wildlife movement in and out of the area, including transboundary movements, is the main explanation for the significant annual fluctuations (NACSO 2013).

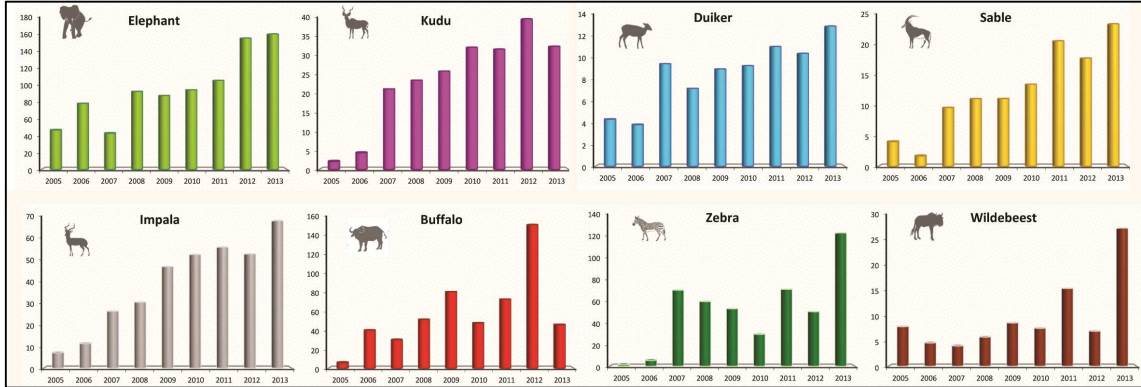


Figure 13: Trends in wildlife sightings (average number of animals per 100km) from the north-eastern game counts (2005-2013) (Source: www.nacso.org.na).

The communal conservancy programme began in the sparsely populated, arid and largely pristine Kunene Region. Illegal hunting and a devastating drought reduced wildlife to very small numbers in the 1980s, however populations have greatly increased since this period. The graph below illustrates the healthy populations of wildlife now recorded in the area. The fluctuations in the graph are explained by movement of game in and out of the survey area and range expansion into inaccessible terrain.

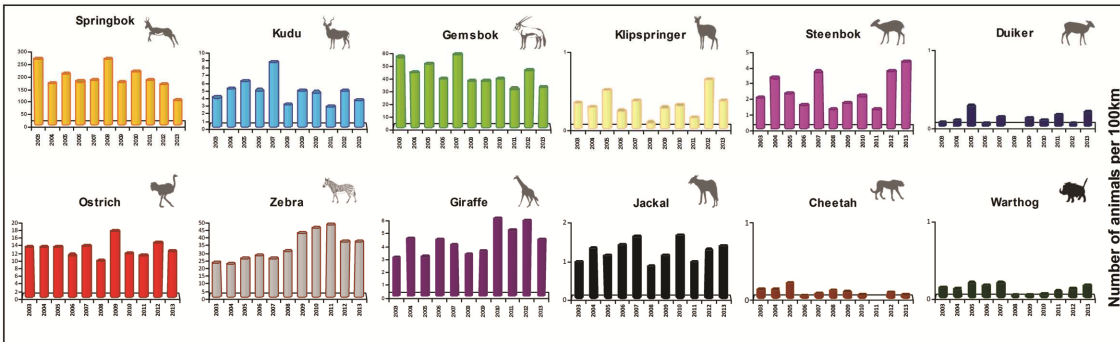
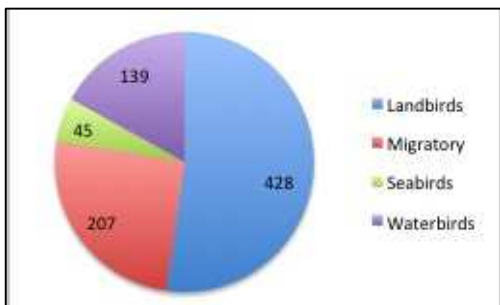


Figure 14: Trends in wildlife sightings (average number of animals per 100km) from the north-western game counts (2005-2013) (Source: www.nacso.org.na).

1.2.2.2 Birds



Birdlife International (2014) estimated that 592 species of bird occur in Namibia. These are broken down in Figure 15.

544 of these species are classified as “least concern”, while approximately 5 per cent or 28 of these species are considered globally threatened. These 28 species, including their global and Namibian status (where known) are listed in Table 4 below.

Figure 15: Breakdown of Bird Species in Namibia (Source: Birdlife International 2014)

Species	Namibian status (where known)	Global status
1. Black-cheeked Lovebird <i>Agapornis nigrigenis</i>		VU
2. Blue Crane <i>Anthropoides paradiseus</i>		VU
3. Grey Crowned-Crane <i>Balearica regulorum</i>		EN
4. Southern Ground-Hornbill <i>Bucorvus leadbeateri</i>		VU
5. Wattled Crane <i>Bugeranus carunculatus</i>		VU
6. Black Harrier <i>Circus maurus</i>		VU
7. Tristan Albatross <i>Diomedea dabbenena</i>	CR	CR
8. Damara Tern <i>Sterna balaenarum</i>	NT	NT
9. Wandering Albatross <i>Diomedea exulans</i>		VU
10. Slaty Egret <i>Egretta vinaceigula</i>		VU
11. White-Backed Vulture <i>Gyps africanus</i>		EN
12. Cape Vulture <i>Gyps coprotheres</i>		VU
13. Cape Gannet <i>Morus capensis</i>	EN	VU
14. Hooded Vulture <i>Necrosyrtes monachus</i>		EN
15. Egyptian Vulture <i>Neophron percnopterus</i>		EN
16. Ludwig's Bustard <i>Neotis ludwigii</i>		EN
17. Cape Cormorant <i>Phalacrocorax capensis</i>	NT	NT
18. Bank Cormorant <i>Phalacrocorax neglectus</i>	EN	EN
19. Martial Eagle <i>Polemaetus bellicosus</i>		VU
20. White-chinned Petrel <i>Procellaria aequinoctilis</i>	VU	VU
21. Spectacled Petrel <i>Procellaria conspicillata</i>	VU	VU
22. Atlantic Petrel <i>Pterodroma incerta</i>		EN
23. Secretary Bird <i>Sagittarius serpentarius</i>		VU
24. African Penguin <i>Spheniscus demersus</i>	EN	EN
25. Atlantic Yellow-nosed Albatross <i>Thalassarche chlororhynchos</i>	EN	EN
26. Grey-headed Albatross <i>Thalassarche chrysostoma</i>		EN
27. Lappet-faced Vulture <i>Torgos tracheliotos</i>		VU
28. White-headed Vulture <i>Trigonoceps occipitalis</i>		VU

Table 4: Globally threatened bird species in Namibia (Source: Birdlife International 2014).

In Namibia, almost all birds are protected under the Nature Conservation Ordinance of 1975. Wetland bird counts are conducted twice per year (once in summer and once in winter) as part of the International Waterbird Census.

An analysis of trends was recently completed, and it appears that resident wetland birds have stable to increasing populations while migratory wetland birds, especially the smaller ones, seem to be decreasing. There is one long-term project monitoring the breeding of Lappet-faced Vultures in the Namib Desert and it appears that the vultures have moved away from areas of high tourism activity.

Another project monitoring the breeding of Damara Tern on the central Namibian coast is showing the sensitivity of this bird to poorly planned coastal developments. Namibia has been taking part in the Southern African Bird Atlas Project (SABAP) since 2012, which looks at all bird species but this project is still too new to make any concrete conclusions.

1.2.2.3 Fish / Marine Resources

As part of a study commissioned by the Benguela Current Commission (BCC), State of Stocks Reviews were completed in 2011 and 2012 for the shared, commercially utilized, living marine resources in the BCLME Region. The Reviews divided species and or stocks into demersal, small pelagic, crustacean, tuna-like species and others, as indicated in Figure 16 below.

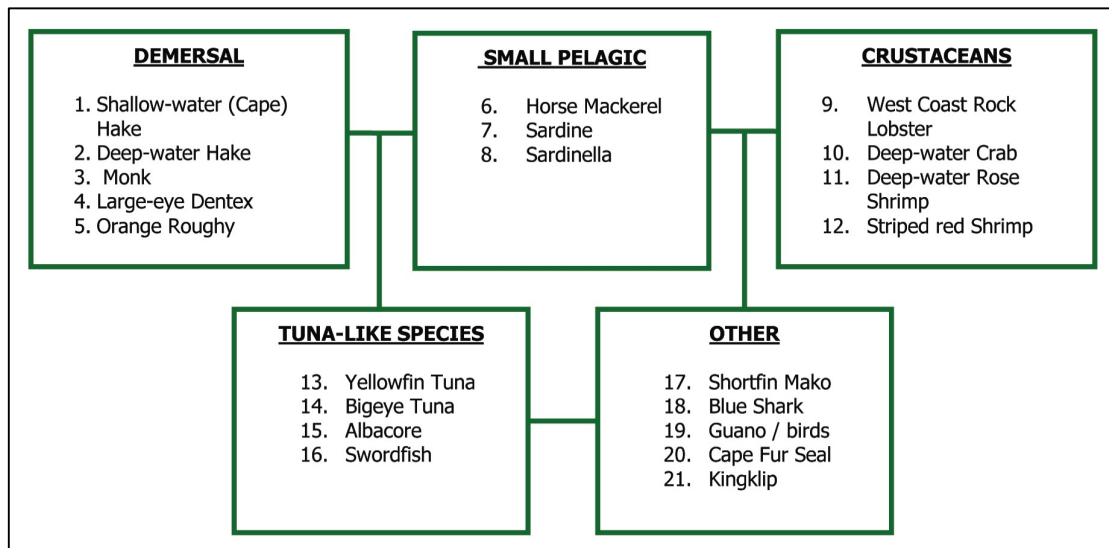


Figure 16: Breakdown of species covered under the State of Stocks Reviews of 2011 and 2012 (Source: www.benguelacc.org).

The reports analyze each of the 19 species (guano and seabirds are dealt with separately) according to:

- Distribution, biology and stock identification
- The Fishery, Historical Catches and Management
- Biomass indices and research
- Stock assessments

For further information, these reports are available from <http://www.benguelacc.org/index.php/en/publications>.

The Ministry of Fisheries and Marine Resources has lead Namibia's participation in the Barcode of Life Data Systems (BOLD) Project (www.boldsystems.org). Under this project, voucher specimens and DNA have been collected from fish, molluscs, crustaceans and others from:

- 25 Orders
- 83 Families
- 107 Genera
- 432 species
- 1797 individuals.

Namibia also contributes to the Ocean Biogeographic Information System, which is a web-based access point to information about the distribution and abundance of living species in the oceans (www.iobis.org).

1.2.2.4 Plants

Out of Namibia's approximately 4,400 plant taxa, about 605 are considered to be endemic. A further 181 taxa or 4 per cent are near endemic. The most recent evaluation of about 1450 of Namibia's plant species has shown that 40 (2.75 per cent) fall into the threatened categories according to the IUCN

system (NBRI 2014), however it is believed that this is an underestimate as not enough is known about all plant populations in the country and most of these evaluations were not based on intensive fieldwork. The fact that 7.7 per cent of the total taxa, or 23.6 per cent (342 species) of taxa evaluated against IUCN categories, are data deficient is indicative of this (NBRI 2014). 52 species are listed as CITES 1 and 2 species.

Species	Area Found	Protection Status
<i>Acacia montis-usti</i>	North-west	F (LC)
<i>Adenia pechuelii</i>	North-west and Central-west	LC
<i>Caesalpinia merxmullerana</i>	South	LC
<i>Caesalpinia pearsonii</i>	West-central	LC
<i>Ceraria longipedunculata</i>	North-west	LC
<i>Commiphora anacardiifolia</i>	North-west	LC
<i>Commiphora cervifolia</i>	South	LC
<i>Commiphora dinteri</i>	North-west and Central-west	LC
<i>Commiphora giessii</i>	North-west	LC
<i>Commiphora krauseliana</i>	North-west	LC
<i>Commiphora saxicola</i>	North-west and Central-west	LC
<i>Commiphora virgata</i>	North-west and Central-west	LC
<i>Commiphora sp. nov.</i>	North-west	
<i>Cyphostemma bainesii</i>	West-central	NC (LC)
<i>Cyphostemma juttae</i>	North-west and Karstveld	NC (LC)
<i>Ectadium latifolium</i>	South-west	
<i>Elephantorrhiza rangei</i>	Nauté Dam	EN
<i>Elephantorrhiza schinziana</i>	Otavi Mountains	LC
<i>Erythrina decora</i>	North-west and Central	F (Rare)
<i>Euclea asperrima</i>	Naukluft area	Rare
<i>Euphorbia damarana</i>	North-west and Central-west	C2, LC
<i>Euphorbia venenata</i>	Central-north	C2, LC
<i>Haematoxylum dinteri</i>	South	LC
<i>Heteromorpha papillosa</i>	Central	LC
<i>Lycium grandicalyx</i>	South	LC
<i>Manuleopsis dinteri</i>	South	LC

<i>Neoluederitzia sericeocarpa</i>	South	CR
<i>Rhus volkii</i>	Naukluft area	NE
<i>Salsola arborea</i>	North-west	DD
<i>Sesamothamnus sp. nov.</i>	North-west	

Table 5: Namibia's endemic trees and shrubs and their conservation status/concerns (Adapted from the Tree Atlas of Namibia 2005) (C2=CITES Appendix 2 species, DD= Data deficient (Red data status), EN= Endangered, F=Protected under Namibian legislation (Forestry Ordinance [U22] No. 37 of 1952 and/or Forest Act No. 72 of 1968) LC=least concern (red data status), NC=Protected according to the Nature Conservation Ordinance 1975, NE= Not Evaluated).

The National Plants Genetic Resources Centre (NPGRC) of the NBRI continues to collect seeds of both wild and cultivated indigenous plants. In 2013, the germplasm collection stood at 3,973, an increase of 10.4 per cent on the previously reported number of accessions.

Crop/species	Number of accession in 2008	Number of accessions in 2013	% increase since 2008
Pearl millet (<i>Pennisetum glaucum</i>)	1441	1460	1.32
Sorghum (<i>Sorghum bicolor</i>)	134	155	15.67
Cowpea (<i>Vigna unguiculata</i>)	58	92	58.62
Bambara Groundnut (<i>Vigna subterranea</i>)	55	56	1.82
Groundnut (<i>Arachis hypogaea</i>)	29	42	44.82
Maize (<i>Zea mays</i>)	11	25	127.27
Pumpkin (<i>Cucurbita</i> spp.)	13	57	338.46
Melon (<i>Citrullus lanatus</i>)	98	111	13.26
Wild species	1761	1975	12.15
TOTAL	3600	3973	10.36

Table 6: Change in number of accessions stored at NPGRC since 2008.

The Millennium Seed Bank Project (2001-2010), a partnership between the NBRI and the Royal Botanical Gardens in the United Kingdom, was extended to cover the period 2011-2015. It is now known as the Millennium Seed Bank Partnership (MSBP). The MSBP complements the work of the NPGRC in the collection and storage of seed, herbarium specimens and data of threatened, rare, endemic and useful indigenous plants. Funds were also received from the Ernest Kleinwort Trust for seed collection of threatened species and re-introduction of the threatened *Gazania thermalis* at a site in Gross Barmen.

Progress made is presented in Table 7 below. Of the approximately 4,000 seed-bearing plant species in Namibia, 923 (23 per cent) have been collected and banked.

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Total seed collections	45	67	14	62	182	207	147	137	133	14	0	61	38
Threatened	0	1	1	0	2	4	1	1	0	5	0	10	12
Endemic or near-endemic	15	51	6	46	151	170	97	115	38	0	0	0	1
Useful	12	9	4	12	19	18	20	12	24	3	0	28	7
Total target spp	27	61	11	58	172	192	118	128	62	8	0	38	20

% of target spp.	60	91	79	94	95	93	80	93	47	57	0	62	53
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Table 7: Target species collected for each category under the MSBP. (Note: some species may fall into more than one category). Species were listed for only one category.

The Gobabeb Training and Research Centre is implementing a project to develop a Strategic Action Plan (SAP) for the conservation of plant genetic resources for food and agriculture (PGRFA). The PGRFA SAP, with implementation beginning in 2014, will provide the foundation for immediate and mid-term investment in the ongoing conservation of PGRFA in Namibia. It will contribute to the identification of PGRFA to be conserved and their relation to food security; understanding the vulnerability of these resources to climate change; recognition of the stakeholders involved, their roles in PGRFA conservation and their capacities; identification of policies, norms, standards, and incentives motivating behavior in relation to PGRFA use and conservation; and a definition of the barriers to effective conservation of PGRFA.

1.2.2.5 Invertebrates / Arachnids / Insects / Reptiles / Amphibians

Limited additional information is available on these taxonomic groups for the period under review, although the populations of invertebrates and protista; arachnids; insects; reptiles; and amphibians were described for the Namib Sand Sea World Heritage Site.

There is a need for improved taxonomic research into these groups in Namibia.

1.3 Main Threats to Biodiversity

The following are listed as the main threats to biodiversity in Namibia's NBSAP2 document:

- **Unsustainable Water Uses:** Mainly through large scale irrigation (particularly in North-Eastern Regions), pollution (in and adjacent to urban areas), damming and over- abstraction of groundwater (mainly on commercial farms).
- **Expansion of urban areas and increasing industrialization:** Leading to increasing demand for resources and services, and increasing types and volumes of waste and pollution.
- **Threats of impacts of Climate Change:** Mainly through increased drought and flood events; shifts in vegetation types and species distribution; and effects on vulnerable ecosystems such as the Benguela Current Large Marine Ecosystem (BCLME).
- **Mining, Prospecting and Extractive Industries:** Expansion of mining and prospecting especially in ecologically sensitive areas (including off-shore) and through habitat loss and destruction; infrastructural development; increased demand for water and electricity; and the long term impacts of contaminated waste.
- **Unsustainable Land Management:** Leading to soil erosion, land degradation, deforestation and bush encroachment.
- **Alien Invasive Species:** Leading to species loss and ecosystem simplification and breakdown.
- **Illegal harvesting and trade of wildlife and forest and plant resources:** Leads to loss of biological diversity and loss of income arising from inequitable benefit-sharing from wildlife, forest and plant resources.
- **Human Wildlife Conflict:** Increases damages to community livelihoods in terms of crop destruction, water point damage and livestock mortalities and even threats to human life.
- **Uncontrolled bush fires:** In 2011, uncontrolled fires destroyed and damaged around 370,000 hectares of vegetation. Bush fires are also a major threat to national parks such as Etosha, Namib Naukluft and those in the north-east.

The degree to which these different threats impact upon Namibia's different biomes is preliminarily assessed in Figure 17 below:

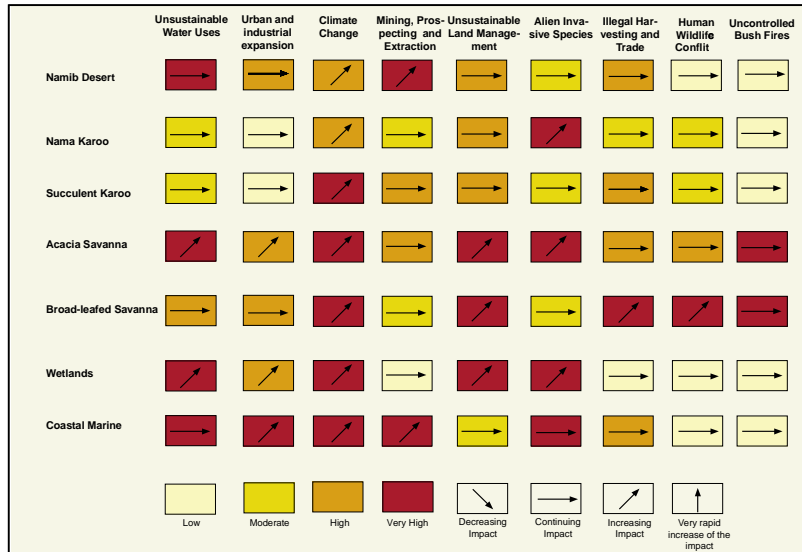


Figure 17: Estimated level of impact of different threats per different biome and trends in their impact.

1.4 Impacts from the changes in biodiversity for ecosystem services and the socio-economic and cultural implications

Biodiversity and ecosystem services are of particular importance to the tourism, agriculture and fisheries sectors, and are generally considered to be in a healthy state in Namibia. This is considered to be having an increasingly positive impact on human well-being, livelihoods and poverty reduction.

The CBNRM Programme is particularly demonstrating how the sustainable management of biodiversity can enhance socio-economic development. It is also driving the increased beneficiation and involvement of rural communities in the rapidly growing tourism sector. In 2012, it was estimated that community conservation:

- Covered over 52 per cent of communal land and around 172,000 residents.
- Generated over N\$58.3 million for local communities.
- Facilitated 6,477 jobs.
- Comprised of 99 enterprises based on natural resources (NACSO 2013).

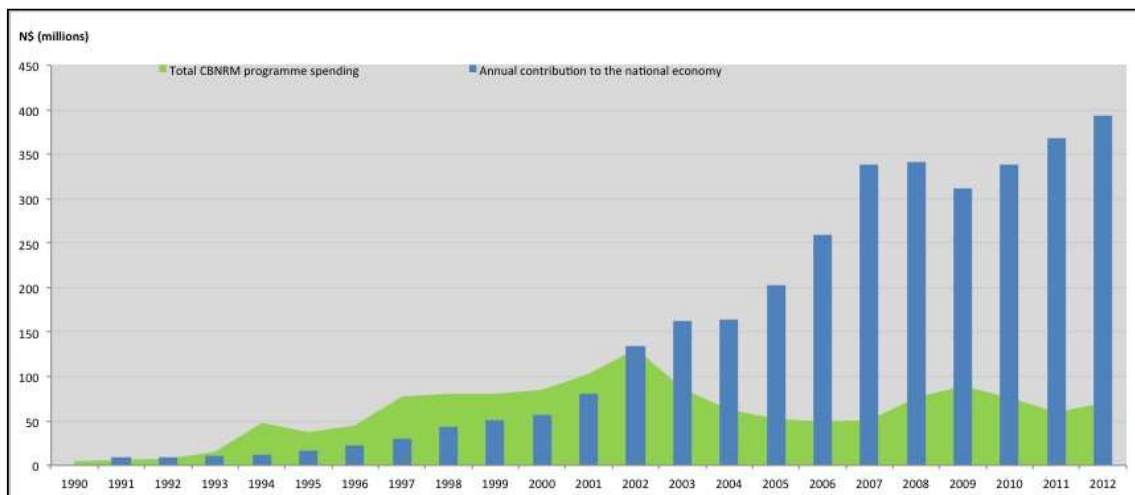


Figure 18: Graph showing the annual contribution of the CBNRM Programme to the national economy versus Programme spending.

The recovery of commercially important fish stocks has been promoted through the Marine Resources Act of 2000. This Act lays the basis for the conservation of the marine ecosystem and the responsible

utilization, conservation, protection and promotion of marine resources on a sustainable basis. Measures introduced include Total Allowable Catches (TACs), minimum allowable mesh sizes and minimum fish sizes to be landed to protect juvenile fish stocks, as well as closed areas and seasons. These measures are backed up by a Monitoring, Control and Surveillance system, which integrates inspections and patrols at sea, on land and from the air.

This has resulted for the most part in increased stock estimates for commercially important species, and in moderately increased TACs for the fishing industry (see Status of Stocks Review (2012) at <http://www.benguelacc.org/index.php/en/publications>).

Agriculture involves the bulk of Namibia's population and landmass. The degraded state of Namibia's rangelands is a major concern, as these cover an estimated 71 per cent of the total landmass (Mendelsohn 2006). The National Rangeland Policy of 2011 recognizes that much of this land is heavily degraded, with livestock carrying capacities having declined to 36 per cent of the values reported for the 1950s, and bush encroachment causing annual economic losses of N\$1.6 billion on both private and communal farmland.

Rangelands are especially prevalent in the Nama Karoo, Acacia Savanna and Broad-leafed Savanna Biomes, and the alien invasive bush species threaten ecosystem-provisioning services – particularly the provision of water.

Soil fertility is also considered to be declining in the crop-growing subsistence agriculture areas of Northern Namibia. Population pressure, poor management practices, increasing climatic variability and the clearance of land are among the drivers of this situation. With approximately 60 per cent of Namibia's population residing in these areas, the long-term impacts on human well-being and livelihoods are likely to be profound.

Chapter II: The National Biodiversity Strategy and Action Plan (NBSAP), its Implementation, and the Mainstreaming of Biodiversity

2.1 Namibia's Biodiversity Targets

Namibia updated its NBSAP during the period 2012-2013. NBSAP2 covers the period 2013-2022, and its vision is 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.”***

As part of the process to develop NBSAP2, the relevance of the CBD Strategic Plan (2011-2020) and the 20 Aichi Targets to Namibia was reviewed and considered. The result of this process was that the five strategic goals of the CBD Strategic Plan were considered highly relevant to Namibia, and these provide the overarching framework for NBSAP2. The 20 Aichi Biodiversity Targets were revised into 17 national targets, which are considered to be specific, measurable, attainable, relevant and time-bound to Namibia.

It is clear from Figure 19, that Strategic Goal A on mainstreaming (targets 1-4); D on benefits (targets 14-16); and E on participatory planning, knowledge management and capacity building were considered most important. Over 50 per cent of Namibia’s 13 regions (prior to the new regional demarcations, which created 14 regions in 2013) considered all of the 20 Aichi Targets as being highly relevant to their region, with the exception of targets 5, 6 and 10⁴. This is explained by the fact that these targets make specific reference to forests, fisheries and marine ecosystems, which do not feature in most of Namibia’s regions.

Aichi Target 4 on sustainable consumption and production was considered to be of relatively low importance for biodiversity conservation in Namibia, and is being addressed through other fora. Aichi Targets 14 and 15 were combined to cover the safeguarding of ecosystems as well as the restoration of degraded ecosystems. Aichi Target 17 was considered an international target only and not relevant to Namibia.

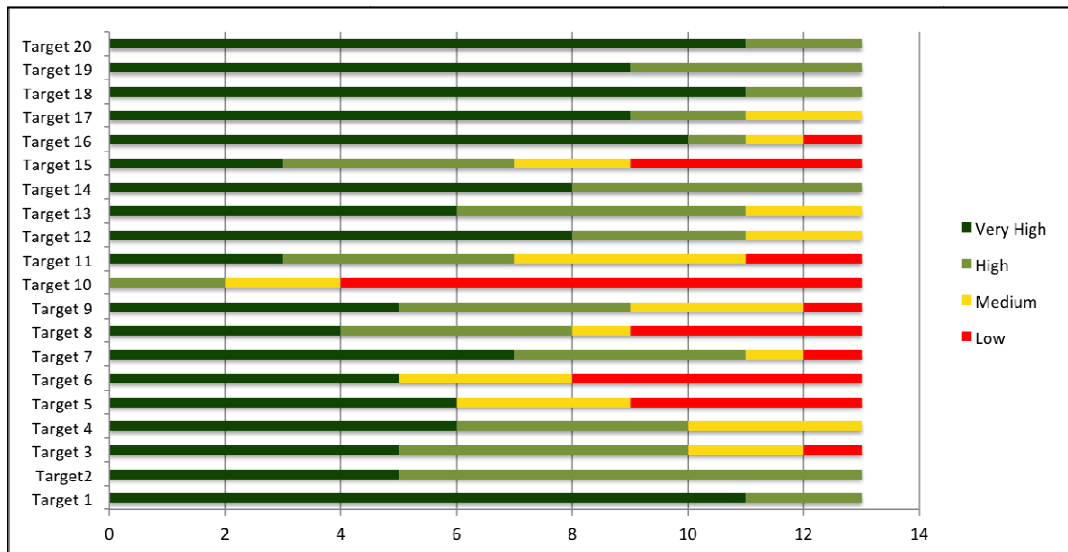


Figure 19: Outcome of prioritization exercises undertaken on the 20 Aichi Targets in each of Namibia’s 13 regions.

⁴ The issue of coral reefs was considered of relatively low importance to Namibia, however climate change is recognized as a key threat to biodiversity needing to be addressed.

Thus NBSAP2 is closely aligned to the CBD Strategic Plan and Aichi Targets (2011-2020), while also targeting Namibia's threats, opportunities and priorities. The Strategic Goals and Targets of NBSAP2 are presented in the table below:

NBSAP2 Goals and Targets	
<i>Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society</i>	
1.	By 2020, at least 75 per cent of surveyed key target groups know the meaning of biodiversity and can identify important reasons for biodiversity conservation
2.	By 2018, biodiversity values and prioritized ecosystem services are quantified, monitored and mainstreamed to support national and sectoral policy-making, planning, budgeting and decision-making frameworks
3.	By 2018, selected incentives for biodiversity conservation and sustainable use are in place and applied, and the most harmful subsidies are identified and their phase out is initiated
<i>Strategic Goal B: Reduce direct pressures on biodiversity and promote the sustainable use of biological resources</i>	
4.	By 2022, the rate of loss and degradation of natural habitats outside protected areas serving as ecological corridors or containing key biodiversity areas or providing important ecosystem services is minimized through integrated land use planning
5.	By 2022, all living marine and aquatic resources are managed sustainably and guided by the ecosystem approach
6.	By 2022, Principles of sound rangeland and sustainable forest management, and good environmental practices in agriculture are applied on at least 50 per cent of all relevant areas
7.	By 2022, pollution, including from excess nutrients, has been brought to levels that are not detrimental to biodiversity and ecosystem health and functioning
8.	By 2015, National review of invasive alien species in Namibia from 2004 is updated (including identification of pathways), and by 2018 priority measures are in place to control and manage their impact
9.	By 2016, ecosystems most vulnerable to climate change and their anthropogenic pressures are identified, and by 2018 appropriate adaptation measures are developed and implemented in priority areas
<i>Strategic Goal C: Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity</i>	
10.	By 2018, existing terrestrial protected areas (national parks) are conserved, effectively and equitably managed, within an ecologically representative and well-connected system, and by 2020 coastal and marine areas, of particular importance to biodiversity and ecosystem services are identified and measures for their protection initiated
11.	By 2016, threatened and vulnerable species lists are updated and measures implemented by 2019 to improve their conservation status
12.	By 2020, Genetic diversity of cultivated plants and farmed animals is maintained and enhanced
<i>Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services</i>	
13.	By 2022, ecosystems that provide essential services and contribute to health, livelihoods and well-being are safeguarded, and restoration programmes have been initiated for degraded ecosystems covering at least 15 per cent of the priority areas
14.	By 2015, national legislation giving effect to the Nagoya Protocol is in force and by 2018 fully operational to ensure that benefits are fair and equitably shared from the conservation and sustainable use of biodiversity
<i>Strategic Goal E: Enhance implementation of NBSAP2 through participatory planning, knowledge management and capacity building</i>	
15.	By 2020, Traditional knowledge and the innovations and practices of indigenous and local communities relevant to the conservation and sustainable use of biodiversity are recognised, respected and promoted
16.	By 2022, knowledge, science base and technologies relating to biodiversity and ecosystem management are improved and made relevant to political decision makers
17.	By 2022, mobilization of financial resources from all sources has been increased compared to the period 2008-2012 to allow for the effective implementation of this strategy and action plan

Table 8: Namibia's biodiversity targets from 2013-2022.

Each of the targets also has one or more key performance indicators through which progress towards achieving the targets will be measured. Strategic initiatives were also formulated to guide actions that will ultimately lead Namibia on a path towards the achievement of its 17 targets. There are 38 such strategic initiatives, each with associated activities identified during the NBSAP2 consultative process. The activities also have designated lead agencies and indicators to allow for improved monitoring.

2.2 Updating of NBSAP

2.2.1 How NBSAP 2 differs from NBSAP 1?

Namibia's first NBSAP1 was implemented during the period 2001-2013 and was internationally recognised as being one of the best first generation NBSAPs. It covered 10 Strategic Themes, which in turn encompassed 55 strategic aims and 242 activity-based targets. The review of NBSAP1 indicated that some 80 per cent of these targets were at least partially achieved. NBSAP2 sets about building on areas that were under-achieved but still considered priorities as well as identifying new priority areas for action.

Although NBSAP1 was well designed and very ambitious in scope, the review indicated that it was overly ambitious. For this reason NBSAP2 is more focused and outcome-oriented with just 17 strategic targets and 38 strategic initiatives. It is also considered that its targets are more specific, measurable, attainable, realistic and time-bound compared to those of NBSAP1.

The coordination framework for the implementation and monitoring and evaluation of NBSAP1, while initially strong and effective, fell away after the end of the donor-funded National Biodiversity Programme in 2005. For this reason, a new NBSAP2 Steering Committee was established to coordinate its implementation, including the aspects of monitoring and evaluation. The newly established and permanent Division of Multilateral Environmental Agreements, within the DEA, serves as Secretariat to this Committee.

The review process further revealed that awareness levels of NBSAP1 were low, including among key implementing partners; regional and local stakeholders; and the general public. Communication, Education and Public Awareness (CEPA) activities were not well coordinated, which was an impediment to effective implementation. For this reason, a dedicated CEPA strategy has been included within NBSAP2.

Significant shortfalls in capacity, technology and infrastructure hindered implementation of NBSAP1 in a number of areas including biosystematics, biotechnology and environmental monitoring. These shortfalls have not been adequately addressed and are prioritized in NBSAP2. The coordination and management of cross-cutting areas such as wetlands, mountain ecosystems and biosystematics also remains a particular challenge that is targeted through NBSAP2.

2.2.2 How the actions in NBSAP2 will contribute to the achievement of Namibia's Targets?

The actions identified and incorporated in NBSAP2 resulted directly from the NBSAP2 consultative process, which involved inputs from over 400 stakeholders including various Government ministries; local and regional government authorities; the scientific community; non-governmental organisations (NGOs) and Community-Based Organisations (CBOs); indigenous and local communities; donor agencies; and the private sector. Thus the actions listed in NBSAP2 are considered to be inclusive of all sectors and comprehensive for the achievement of the respective targets.

2.2.3 Contribution of NBSAP2 to the achievement of the Strategic Plan for Biodiversity

Based on the results of the outcomes of the national and regional prioritization exercises undertaken as part of the consultative process, NBSAP2 is closely aligned with the Strategic Plan for Biodiversity and the Aichi Targets (2011-2020). This means that Namibia's contribution to the achievement of the Strategic Plan for Biodiversity will be relatively easy to measure.

2.2.4 Addressing Threats to Biodiversity

Nine leading threats to biodiversity were identified in NBSAP2 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.

Threat	Main Relevant Strategic Initiatives	Relevant KPI(s)
1. Unsustainable Water Uses including through large scale agriculture, pollution, damming and over-abstraction	<p>2.3.1: Strengthen sound agricultural and rangeland management practices which minimize the negative impacts of agricultural / livestock production on biodiversity and ecosystem functioning</p> <p>2.4.1: Monitor and manage levels of pollution through a range of effective measures</p> <p>4.1.2: Foster the implementation of integrated water management plans, including restoration and protection of critical wetlands systems, and taking into account transboundary issues</p>	<ul style="list-style-type: none"> ▪ Environmental Impact Assessments and Environmental Management Plans for large scale agricultural developments ▪ Trends in water quality in aquatic systems (dams, rivers and Ramsar Sites) ▪ Implementation of Integrated Water Resources Management Plan ▪ Enforcement of agreements reached under the different transboundary water commissions
2. Expansion of urban areas and increasing industrialization	<p>1.3.1: Analyze existing and identify potential incentives to encourage biodiversity conservation and sustainable use and discourage activities that impact negatively on biodiversity</p> <p>1.3.2: Introduce environmental taxes and levies and market-based instruments as part of an Environmental Fiscal Reform Framework</p>	<ul style="list-style-type: none"> ▪ List of assessed subsidies and measurement of magnitude of negative impact on biodiversity ▪ List of analysed incentives and measurement of their potential positive impact on biodiversity ▪ Environmental fiscal policy framework
3. Threats and Impacts of Climate Change	<p>2.6.1: Undertake vulnerability assessment and develop relevant adaptation measures to enhance climate change resilience of priority ecosystems</p>	<ul style="list-style-type: none"> ▪ Report on the vulnerability of Namibian ecosystems to climate change and associated anthropogenic pressures ▪ Evaluation of implementation of appropriate measures
4. Mining and prospecting	<p>2.1.1: Strengthen the application of decision support tools for environmental management and protection through improved land and resource use decisions and land use planning</p> <p>2.1.2: Strengthen institutional capacity at all levels to promote informed and integrated decision-making, harmonised policy frameworks and coordinated action on issues relating to land use planning</p>	<ul style="list-style-type: none"> ▪ Participatory Integrated Regional Land Use Plans with SEA approved by Cabinet for all Regions ▪ Delineation of ecological corridors ▪ Criteria for key biodiversity areas

Threat	Main Relevant Strategic Initiatives	Relevant KPI(s)
5. Unsustainable land management practices	<p>2.3.1: Strengthen sound agricultural and rangeland management practices which minimize the negative impacts of agricultural / livestock production on biodiversity and ecosystem functioning</p> <p>2.3.3: Increase community support to enhance livelihood options through biodiversity-based enterprises</p> <p>4.1.3: Undertake the rehabilitation and restoration of land degraded through unsustainable land management practices and establish biodiversity offsets</p>	<ul style="list-style-type: none"> ▪ Status of agriculture and rangeland report ▪ Environmental Impact Assessments and Environmental Management Plans for large scale agricultural developments ▪ Changes in vegetative / land use cover ▪ Area of degraded ecosystems and identified priority areas for action ▪ Number of rehabilitation and restoration programmes and area covered
6. Uncontrolled bush fires	2.3.2: Implement sustainable forest management practices in existing and new community forests to enhance conservation and sustainable use of biodiversity	<ul style="list-style-type: none"> ▪ Implemented Management Plans for Community Forests ▪ Changes in vegetative / land use cover
7. Alien Invasive Species	2.5.1: Develop mechanisms and measures to prevent the establishment and introduction of alien invasive species and to control or eradicate existing alien invasive species	<ul style="list-style-type: none"> ▪ Updated National Review ▪ Management Plans implemented to control most threatening alien invasive species
8. Illegal harvesting and trade of wildlife and forest and plant resources	<p>3.2.1: Enhance the management of threatened and vulnerable species, and improve their conservation status</p> <p>3.2.2: Strengthen the framework for law enforcement and implementation with regard to the illegal trade in fauna and flora and derived products</p> <p>4.1.1: Consolidate and further strengthen the implementation of the CBNRM Policy and Programmes</p> <p>4.2.1: Finalize and implement the processes of acceding to the Nagoya Protocol as well as the Access to Genetic Resources and Associated Traditional Knowledge Bill</p> <p>4.2.2: Facilitate bioprospecting and biotrade activities in accordance with legislation</p>	<ul style="list-style-type: none"> ▪ Number of Species Management Plans under implementation ▪ Conservation status of threatened and vulnerable species ▪ Area under sustainable CBNRM and benefits to involved communities ▪ Accession to the Nagoya Protocol ▪ Gazetting of ABS national legislation and regulation ▪ Institutional arrangements in place including the Competent National Authority and National Focal Point (Genetic Resources and Traditional Knowledge Unit within MET), and national bioprospecting account within EIF ▪ Number of ABS agreements
9. Human Wildlife Conflict	<p>3.1.3: Consolidate integrated park management to enable it to generate economic benefits, tackle human wildlife conflicts and contribute to biodiversity protection integrated into the wider landscape</p> <p>4.1.1: Consolidate and further strengthen the implementation of the CBNRM Policy and Programmes</p>	<ul style="list-style-type: none"> ▪ Approved management plans for all national parks ▪ Management Effectiveness of Namibia's terrestrial protected areas (national parks) ▪ Area under sustainable CBNRM and benefits to involved communities

Table 9: Tackling the main threats to biodiversity through NBSAP2.

2.2.5 Mainstreaming Biodiversity Considerations through NBSAP2

The integration of biodiversity considerations at all levels of government and society is a cornerstone of NBSAP2, and is covered under Strategic Goal 1 of NBSAP2. After participation in the NBSAP 2.0 Project and consulting with the Good Practice Guides Series of the CBD, Namibia identified an approach to achieve its mainstreaming vision for a ***“society in which biodiversity issues and concerns are the responsibility of all citizens and are recognized by all sectors of government, private sector and civil society”***.

The mainstreaming approach emphasizes:

- Making and communicating the business case for biodiversity with focus on poverty alleviation, with the aim to improve understanding among decision and policy makers and the private sector of the linkages between biodiversity, poverty and economic development.
- Integrating biodiversity considerations into national, regional, local and sectoral policies, plans, strategies and budgets.

In order to effectively mainstream biodiversity across government and society and to address the underlying causes of biodiversity loss, the following elements are considered critical and given priority in NBSAP2:

- Improved communication, education and public awareness on issues relating to biodiversity.
- Valuations of ecosystem services to inform decision making about the values of nature and the integration of biodiversity into national and sectoral policy-making, planning, budgeting and decision-making frameworks.
- Development of a wide range of economic incentives to promote biodiversity conservation and sustainable use.

2.3 Actions taken to implement the Convention since the Fourth National Report

2.3.1 Programmes, Projects and Funding

A wide variety of projects and programmes have been implemented during the period under review. These include programmes and projects funded by relevant ministries as well as bi-lateral and multi-lateral supporting projects.

2.3.1.1 National Government Programmes

The natural resources-related ministries – Ministry of Environment and Tourism; Ministry of Agriculture, Water and Forestry (MAWF); and the Ministry of Fisheries and Marine Resources (MFMR) - are the key ministries responsible for the conservation and sustainable use of biodiversity. The Ministry of Mines and Energy (MME) and Ministry of Lands and Resettlement (MLR) also undertake programmes, which aim to have a positive effect on biodiversity. The National Museum, under the Ministry of Youth, National Service, Sport and Culture, takes responsibility for the collection, curation research of specimens and dissemination of information relevant to the national heritage of Namibia.

The main relevant programmes run by the MET under the period of review included:

- Wildlife and Protected Area Management
- Protection and Management of Key Species and Natural Resources
- Community-Based Natural Resource Management
- Regulation of Environmental Protection and Sustainable Resource Management

The resources allocated to these programmes over the period 2010-2013 are indicated in Figure 20 below:

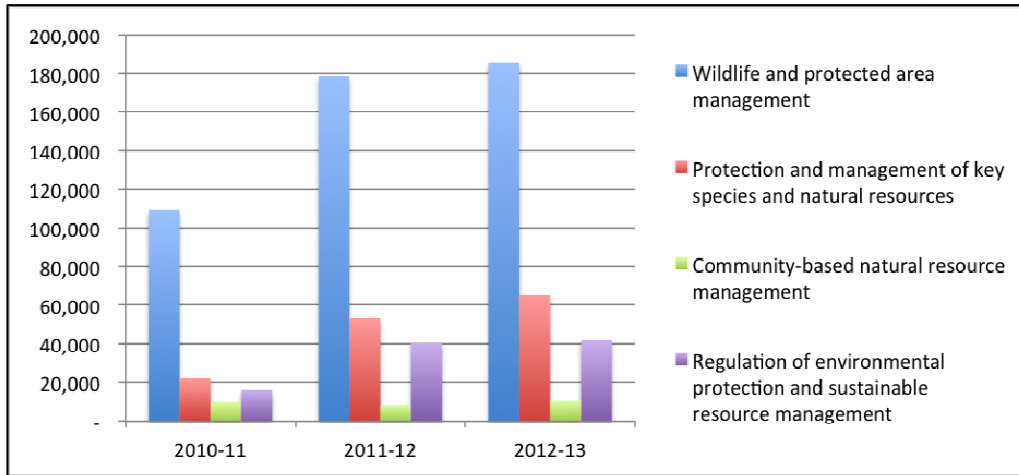


Figure 20: Resources allocated in N\$ (000s) from 2010-2013 to MET's biodiversity-related programmes (Source: GRN 2013).

The main relevant programmes run by the MFMR under the period of review included:

- Survey and Stock Assessment
- Promotion of Marine and Inland Aquaculture Areas
- Marine and Inland Monitoring Control and Surveillance

The resources allocated to these programmes over the period 2010-2013 are indicated in Figure 21 below:

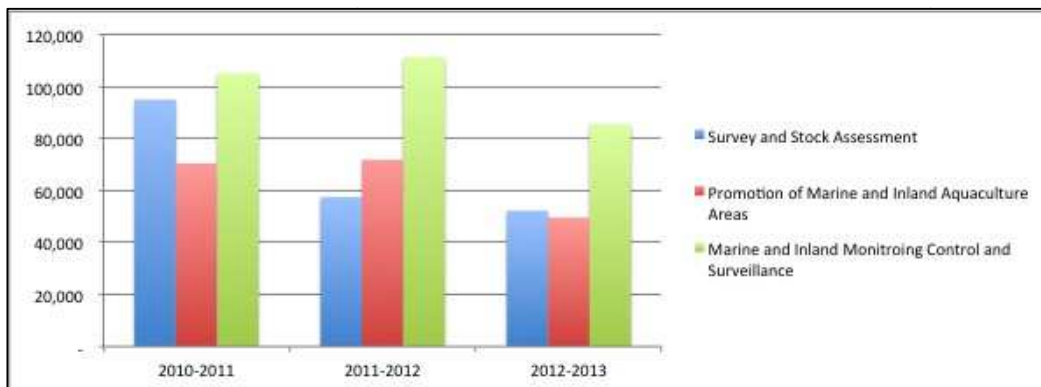


Figure 21: Resources allocated in N\$ (000s) from 2010-2013 to MFMR's biodiversity-related programmes (Source: GRN 2013).

The main relevant programmes run by the MAWF under the period of review included:

- Crop production and horticultural development
- Livestock production, improvement and animal health control
- Integrated water resources management
- Management, development and utilization of forest resources

The resources allocated to these programmes over the period 2010-2013 are indicated in Figure 22 below:

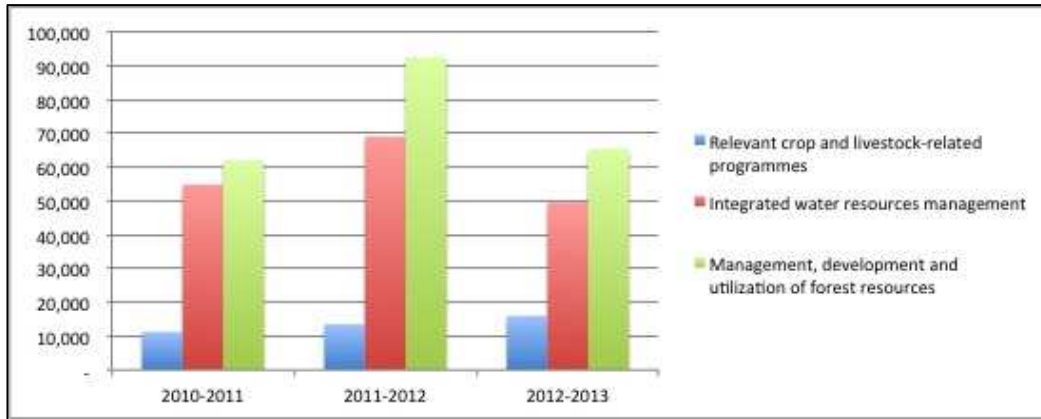


Figure 22: Resources allocated in N\$ (000s) from 2010-2013 to MAWF's biodiversity-related programmes (crop and livestock production measures were filtered according to those relevant to biodiversity) (Source: GRN 2013).

The MME runs a programme of environmental protection, which involves various environmental monitoring initiatives, with particular focus on abandoned mines. It has allocated an annual average of N\$12.2 million to this programme for the period 2010-2013. The MLR operates a programme of land usage, which involves the production of Integrated Regional Land Use Plans (IRLUPs) as well as initiatives to improve security of tenure in communal areas. An annual average of N\$29.2 million was allocated to this programme from 2010-2013.

Two dedicated funding institutions, mandated under Acts of Parliament, have also supported biodiversity conservation during the period under review.

The Game Products Trust Fund (GPTF), established under the Game Products Trust Fund Act of 1997, serves to:

- Make grants to emerging conservancies and wildlife councils for the purposes of implementing and maintaining projects and programmes regarding wildlife conservation and management and rural development;
- Allocate funds to conservancies, wildlife councils and protected areas, and to approved persons, organizations and institutions regarding wildlife conservation and management and rural development;
- Support measures aimed at improving the relationship between people and wildlife; and
- Support improvements in the monitoring, management, protection, sustainable use and development of wildlife resources in rural areas.

It allocated an annual average of N\$8 million to these activities during the period 2010-2013. The main sources of income for the GPTF are derived from entrance fees to national parks, ivory sales, live export head levies, hunting concessions, live game auctions, and the trophy hunting of problem animals.

The Environmental Investment Fund (EIF), established under the Environmental Investment Fund Act of 2001, has been operational since 2011. Annual budgetary allocations for the EIF averaged N\$18 million during the period under review. The EIF has benefitted over 10,000 people with grants financing alone, through projects that address food security and livelihood improvements, green technology and waste management and education and training in relevant academic areas of interest. The EIF is also spearheading the process of Environmental Fiscal Reform in Namibia.

2.3.1.2 Donor-Supported Projects

A wide variety of multi-lateral and bi-lateral projects have also supported the national government in a number of biodiversity-relevant areas during the period under review.

Multilateral Projects

Strengthening the Protected Area Network (SPAN) Project

Period of Operation: 2006-2012

Funds: US\$8.2 million from the GEF

Project Objective: Increased management effectiveness of the national PA network for biodiversity conservation

Benguela Current Large Marine Ecosystem Strategic Action Programme (BCLME SAP)

Period of Operation: 2009-2013

Funds: US\$5 million through the GEF

Project Objective: To support the implementation of the Benguela Current Commission's (BCCs) Strategic Action Programme (SAP) for the development and adoption of an effective transboundary Large Marine Ecosystem management structure primarily addressing fish stocks and fisheries rejuvenation and sustainability, supported and made operational by functioning and sustainable transboundary and national level institutions, and guided by a series of lessons and best practices.

Country Pilot Partnership Programme for Integrated Sustainable Land Management

Period of Operation: 2007-2012

Funds: US\$10 million

Programme Objective: Combat land degradation using integrated, cross-sectoral approaches, which enable Namibia to reach its Millennium Development Goal Seven (environmental sustainability) and to assure the integrity of dry-land ecosystems and ecosystem services.

Third National Communication and First Biennial Update Report to the UNFCCC (2012-2015)

Period of Operation: 2012-2015

Funds: US\$832,000 from the GEF

Project Objective: To enhance Namibia's capacity to better deal with climate change risks and create opportunities at individual, institutional and systemic levels.

Namibia Coast Conservation and Management (NACOMA) Project Phase II (2013-2015) (GEF)

Period of Operation: 2013-2015

Funds: US\$1.925 million from GEF

Project Objective: Strengthen conservation, sustainable use and mainstreaming of biodiversity in coastal and marine ecosystems in Namibia.

Strengthening the Capacity of the Protected Area System to Address New Management Challenges (PASS Namibia)

Period of Operation: 2014-2019

Funds: US\$4 million from the GEF

Project Objective: Strengthen the Protected Area system of Namibia and ensure sustainable finance through improving current systems for revenue generation; introduction of innovative revenue generation mechanisms; and cost effective enforcement through application of the Enforcement Economics Model

Sustainable Management of Namibia's Forested Lands (NAFOLA) Project

Period of Operation: 2014-2019

Funds: US\$4.93 million from the GEF

Project Objective: To maintain current dry forests and the ecosystem goods and services they provide, in over 500,000 ha of forested lands, through wide-scale adoption of sustainable land and forest management and other improved technologies.

Bi-Lateral Projects

KAZA Project

Period of Operation: 2008-

Funds: A suite of international donors is supporting the development of the KAZA TFCA is being supported.

Project Objective: To sustainably manage the Kavango Zambezi ecosystem, its heritage and cultural resources based on best conservation and tourism models for the socio-economic wellbeing of the communities and other stakeholders

Agriculture and Tourism Projects of the Millennium Challenge Account - Namibia

Period of Operation: 2009-2014

Funds: US\$63 million to the promotion of eco-tourism in communal conservancies and the development of Etosha National Park, and US\$7.4 million in the indigenous natural plants sector
Overall Programme Objective: To alleviate rural poverty through transformational and accelerated economic growth.

Southern Africa Regional Environment Programme

Period of Operation: 2010-2015

Funds: from USAID: US\$ 30 million (including Namibia, Angola and Botswana)

Programme Objective: Promote a transboundary approach to resource management and climate resilience to preserve the Okavango basin and provide sustainable and equitable development opportunities for its inhabitants

Namibia National Parks Programme Phase II and Phase III

Period of Operation: 2010-2013 and 2014-2017

Funds: €7.4 million from the German Federal Ministry for Economic Cooperation and Development

Project Objective: Enhance park management and infrastructure development in Namibia's North-Eastern Parks in the KAZA TFCA and the Tsau //Khaeb (Sperrgebiet) National Park.

Biodiversity Management and Climate Change Project

Period of Operation: 2013-2016

Funds: US\$7 million from the German Federal Ministry for Economic Cooperation and Development.

Project Objective: Coherent implementation of biodiversity and climate-related policies, strategies and practices through the MET, in close cooperation with other ministries and non-governmental actors.

Conservation and Sustainable Use of the Benguela Current Large Marine Ecosystem

Period of Operation: 2014-2019

Funds: €7.5 million from the German Federal Ministry for Environment, Nature Conservation and Nuclear Safety

Programme Objective: To increase the capacities of the Benguela Current Commission and its member states for enhanced sustainable management of the BCLME's marine biodiversity and natural resources, making use of EBSAs and Marine Spatial Planning tools.

Integrated National Park Management Programme

Period of Operation: 2014-

Funds: €12 million from the German Federal Ministry for Economic Cooperation and Development

Programme Objective: Support MET in the planning, development and management of an integrated coastal park from the Orange River to the Kunene River

NBSAP2 Resource Mobilisation Project

Period of Operation: 2013-2017

Funds: €2.5 million from the German Federal Ministry for Environment, Nature Conservation and Nuclear Safety

Project Objective: To improve resource mobilization for biodiversity conservation sustainably on the basis of an economic valuation of ecosystem services and their mainstreaming into national governance processes.

2.3.2 Development of Legislation and Policies

Substantial progress was made during the period under review in the development of legislation and policies to cover threats and opportunities relating to the conservation and use of biodiversity. This sub-section describes this progress in brief.

2.3.2.1 Draft Access and Benefit Sharing Bill

Namibia played a lead role, as spokesperson for Africa, in negotiations relating to the Nagoya Protocol on ABS, and Cabinet approved Namibia's accession to the Nagoya Protocol in November 2013.

After the agreement of the Nagoya Protocol, Namibia initiated the process to develop a Bill on Access to Genetic Resources and Associated Traditional Knowledge in 2011. The regional and national consultative process was incorporated approximately 170 participants representing government

agencies, indigenous and local community members, traditional authorities, conservancies and the youth from the different regions of Namibia. It was also used as an opportunity to raise awareness of ABS and the wider relevance of multilateral environmental agreements at the local level.

The revised draft bill was finalized in 2012 and has the following stated objectives:

- To regulate access to genetic resources and associated traditional knowledge based upon prior informed consent;
- To protect local communities' rights over and traditional knowledge in respect thereof;
- To promote a fair and equitable mechanism for benefit sharing;
- To establish the necessary administrative structures and processes to implement and enforce such principles.

The ABS Bill is to be tabled during the 9th session of the current Namibian Parliament, which runs from February-March 2014. Draft regulations for the bill were also finalized in 2013.

2.3.2.2 National Policy on Protected Areas, Neighbours and Resident Community

The National Policy on Protected Areas, Neighbours and Resident Community was approved in 2013. The aim of the policy is to improve conservation of Namibia's protected areas; to provide greater social equity in the distribution of benefits from protected areas; and to stimulate local and regional economies.

This is to be achieved by creating business opportunities linked to protected areas through working closely with neighbours, community residents in the parks and other relevant stakeholders. It gives particular attention to promoting the socio-economic development of these communities and their involvement in the planning and development of protected areas. The Policy is also the first legislative framework in the country to recognize the formation and promotion of Landscape Conservation Areas.

2.3.2.3 National Coastal Policy

A National Policy on Coastal Management was launched in March 2013. The overall objective of the National Coastal Management Policy is to provide a framework to strengthen governance of Namibia's coastal areas to realize long-term national goals defined in Vision 2030 and the more specific targets of NDPs, namely sustainable economic growth, employment creation, and reduced inequalities in income.

It specifically seeks to:

- Provide a foundation for improving quality of life of coastal communities, while maintaining the biological diversity and productivity of our country's coastal ecosystems;
- Provide and guide management actions toward addressing coastal resource use and allocation and promote a balance between development and conservation of coastal and marine environment;
- Provide a framework for the institutionalization and implementation of an integrated approach to coastal management in Namibia;
- Facilitate the application and implementation of the principles contained herein, which were developed through wide consultation of all stakeholders and informed by specialist studies, existing laws and policies and best practice in coastal governance globally.

2.3.2.4 National Climate Change Policy, Strategy and Action Plan

A National Climate Change Policy was finalized in 2011, which provides a policy framework for the official engagement of government agencies, civil society and the private sector to collaborate on matters relating to climate change mitigation and adaptation. A Strategy and Action Plan was drafted and finalized in 2014 to guide implementation of the Policy.

2.3.2.5 National Rangeland Policy

This Policy, titled "Restoring Rangelands", seeks to enable rangeland managers to manage their rangelands in such a way so that productivity and biodiversity are restored and maintained. It was finalized in 2012 and has a dedicated task team in place to promote its implementation.

An estimated 71 per cent of Namibia's land area is used as rangeland for cattle ranching and small-stock (Mendelsohn 2006), much of which is recognized as being heavily degraded in the National

Rangeland Policy. Rangelands span almost all biomes and their wise management is essential to safeguard biodiversity.

2.3.2.6 National CBNRM Policy

An integrated natural resources working group was formed in 2010 to analyze the environment-related policy framework and to develop a National Policy on CBNRM for a more integrated approach to CBNRM in Namibia. The policy was launched in 2013 and aims to:

- a) To reconcile rural development with biodiversity conservation;
- b) To empower rural populations to be actively engaged in and benefit from the management of natural resources;
- c) Increase the yields of benefits from communal conservancies and community forests and woodlands through research, adaptive management and application of sound technology;
- d) Create conditions for the investment in conservation related businesses as an incentive to protect the environment and manage its biodiversity;
- e) To strengthen community institutions and structures and thereby enable them to collectively engage in environmental and natural resource monitoring and in mitigation and adaptation to climate change.

2.3.2.7 Draft National Policy on Mining in Protected Areas

This policy aims to contribute to sustainable development by guiding prospecting and mining in protected areas. The policy was initially drafted in 1999 and has been reworked since 2007/08 to account for increasingly important developments such as communal conservancies, tourism concessions, marine protected areas and the ongoing exploration and mining activities in Namibia.

The three objectives of the policy are to:

- i. Ensure that prospecting and mining activities do not cause any negative impacts to the character, ecology and tourism potential of protected areas;
- ii. Identify areas in protected areas that should not be affected by prospecting or mining activities, due to high conservation, aesthetic and tourism values;
- iii. Provide clarity on the different exploration and mining tenements that may be granted in protected areas.

A national conference was held to discuss the draft policy in late 2011, in which valuable recommendations were given, particularly on the following aspects:

- The characteristics of areas to be excluded from prospecting and mining;
- Procedures in relation to different exploration and mining tenements;
- Change of ownership and/or change of company name;
- Renewals;
- Restoration, overburden and closure; and
- Financial implications for mining in protected areas.

The draft of the Policy has been revised accordingly but is yet to be finalized.

2.3.3 Establishment of Institutional and Cooperative Mechanisms

2.3.3.1 NBSAP2 Committee

A National NBSAP2 Steering Committee was established and convened for the first time in May 2012. The Committee oversaw the review process for NBSAP1 and process of elaboration of NBSAP2. The MET serves as Chairperson and Secretariat of the Committee. The Committee was originally established to oversee the formulation of NBSAP2 but its mandate has since been extended so that it also coordinates the implementation of NBSAP2, including its monitoring and evaluation.

Government Ministries

- Ministry of Environment and Tourism (Chair)
- Ministry of Agriculture, Water and Forestry
- Ministry of Education
- Ministry of Finance
- Ministry of Fisheries and Marine Resources
- Ministry of Foreign Affairs

- Ministry of Mines and Energy
- Ministry of Regional and Local Government, Housing and Rural Development
- Ministry of Youth, National Service, Sport and Culture
- National Planning Commission

Academic Community

- Polytechnic of Namibia
- University of Namibia

Indigenous and Local Communities

- Chief of the Aodaman Traditional Authority

Non-Governmental Organizations

- Desert Research Foundation of Namibia

Private Sector

- Chamber of Mines

Donor Agencies

- United Nations Development Programme (UNDP)
- Gesellschaft für Internationale Zusammenarbeit (GIZ)

Table 10: Membership Structure of the NBSAP Steering Committee.

2.3.3.2 Sustainable Development Advisory Council

In line with Article 6 of the Environmental Management Act, the Sustainable Development Advisory Council was established in 2013. The Council is a cross-sectoral body involving four governmental and four non-governmental representatives. Its main functions are to promote co-operation and co-ordination on environmental issues relating to sustainable development, and to advise the Minister of Environment and Tourism on environmental matters, with particular focus on legislation, policy and compliance measures.

2.3.3.3 Benguela Current Commission

The Benguela Current Convention was signed by Namibia, Angola and South Africa in March 2013. The Parliament of Namibia ratified the Convention in July 2013. The Convention is a formal environmental treaty that seeks to introduce an ecosystem approach to the management of the BCLME. It specifically promotes a “coordinated regional approach to the long-term conservation, protection, rehabilitation, enhancement and sustainable use of the BCLME, to provide economic, environmental and social benefits.”

The Convention also formally establishes the Benguela Current Commission (BCC) as a permanent inter-governmental organization, which strives to ensure that industrial development progresses in an environmentally responsible manner and promotes a cooperative approach to minimize pollution, harmonize maritime policies, laws and regulation and the monitoring and management of fisheries stocks.

All national level positions in the BCC were defined and filled by November 2012. The Secretariat of the BCC relocated from Windhoek to Swakopmund in November 2013.

2.3.3.4 NAM-PLACE – Collaborative Management Committees

The NAM-PLACE is leading the establishment of collaborative management approaches towards conservation areas. Adaptive Collaborative Management Committees have been set up for its five PLCAs, each of which have constitutions and corresponding management plans.

2.3.4 Some Tangible Outcomes from Namibia’s Implementation of the CBD

2.3.4.1 Improved Management of Protected Areas

An estimated 16.7 per cent of Namibia is covered by State Protected Areas, which is almost equal to Aichi Target 11 of 17 per cent. During the period under review, Namibia has focused on improving the management of its protected areas. A framework and guidelines for the development of park management plans was finalized and approved by the MET in 2011. Management plans, aligned to

the new management plan guidelines, were developed for the /Ai-/Ais Hot Springs Game Park, Sperrgebiet National Park, Skeleton Coast Park, Namib Naukluft Park, Bwabwata, Mudumu and Mamili Parks, Waterberg Plateau Park and Mangetti National Park.

Assessments of the management effectiveness of protected areas were undertaken in 2004, 2009 and 2011. The assessments show significant improvement in the management of all protected areas. The scores for each protected area are shown below (0-100 scale) and are based on the analysis of a set of criteria determined using questionnaires including the drafting of regular work plans; research; resource management; staff training; education and awareness programmes; traditional authority involvement; economic benefits to communities; monitoring and evaluation; condition assessment; and law enforcement.

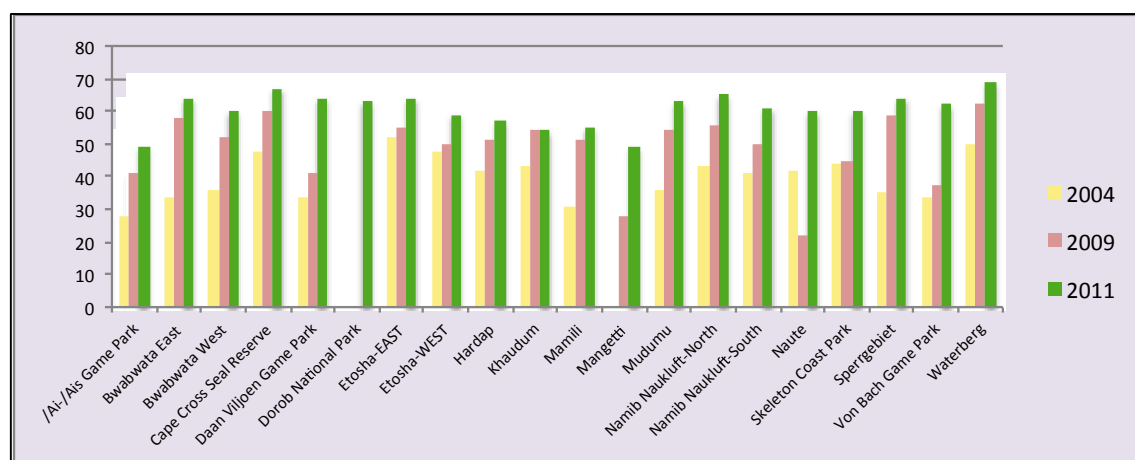


Figure 23: Results of the assessments of the management effectiveness of Namibia's protected areas, undertaken in 2004, 2009 and 2011.

A tool has also been developed through the NACOMA Project to assess the management effectiveness of Namibia's MPA. It has been in use for 2 years. In 2009 the MPA received an "intermediate" rating of 90. This progressed to 94.5 in 2011 and 103.5 in 2013, both of which are classed as "good" management ratings.

2.3.4.2 CBNRM Programme

As reported in section 1.2.1.2, Namibia's CBNRM Programme continues to grow rapidly. NACSO (2013) states that 35 Conservancies had achieved financial self-sufficiency by 2012, covering their running costs from their own income. 34 of these Conservancies subsequently distributed benefits to their members. However, there are still needs in many Conservancies and Community Forests in building management capacities, providing governance support (particularly in those Conservancies that have only been recently established), ensuring that knowledge is maintained when there are committee changes, and developing systems to strengthen benefit distribution and accountability with regard to the use of funds.

2.3.4.3 Sustainable Utilization of Biodiversity

The sustainable utilization of living natural resources is anchored in Article 95 (L) of the Constitution. Namibia has employed a rigorous scientific approach to monitoring stocks as a basis for conservative quota and permit allocations, particularly with regard to the utilization of wildlife and fisheries and marine resources. Its utilization and trade of endangered and rare species has further been in line with the provisions of CITES.

Wildlife, including consumptive and non-consumptive uses, has emerged as an important contributor to the economy, and accounted for an estimated N\$ 700 million (or 2.1 per cent of Gross National Product) in 2004 (Barnes et al 2009). Hunting tourism accounted for 19 per cent of this, and is a particularly important industry in its own right, both for private farms and communal conservancies. Of the 57 conservancies for which there is at least one year's worth of data on financial benefits, 33 derived all or almost all of their total benefits from hunting (Naidoo et al In Press). These benefits allow many conservancies to cover their operating costs, and the benefits accrue quickly without the need for large-scale investment.

Namibia is concerned with increasing anti-trophy hunting pressure from international animal-rights groups, and a general trend away from trophy hunting in neighbouring countries (trophy hunting banned in Kenya since 2003, moratorium placed on trophy hunting in Zambia in 2013, and temporary ban on wildlife hunting in Botswana in 2014). In Namibia's experience, sustainable utilization of wildlife, including through trophy hunting, is the key to successful conservation and benefit-sharing from biodiversity.

If trophy hunting was to be eliminated in Namibia, there could be a massive reversal in conservation gains in terms of both wildlife populations and land uses (return to mainly livestock only farming systems). Additionally, funding for biodiversity conservation through mechanisms such as the GPTF would be reduced and livelihoods would also be negatively affected. For example, a simulation study of a trophy hunting ban recently estimated that there would be a reduction in the number of financially profitable conservancies from 77 per cent (30 of 39) under the status quo, to 18 per cent (7 of 39) when conservancy income from hunting is eliminated. This reduction in profitability occurs in all geographic regions of the country and is presented in Figure 24 below.

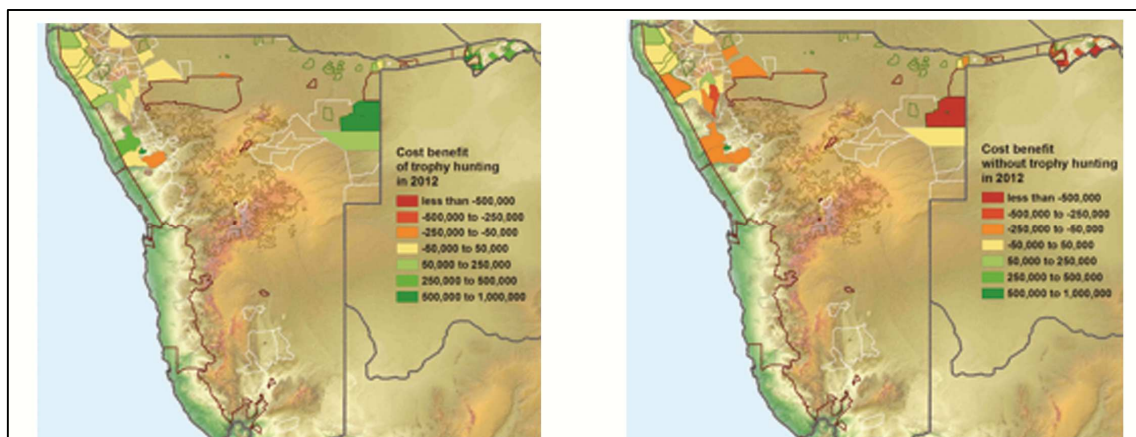


Figure 24: Profitability of communal conservancies under (l) status quo; and (r) simulated hunting ban.

2.3.4.4 Biodiversity Monitoring

The process to develop a set of core national environmental indicators (NCEIS), and an Integrated State of the Environment Report for Namibia's protected area network and coastal and marine ecosystems commenced in 2012. The process is making use of the Pressure-State-Response (PSR) Framework, and has drafted recommended a NCEIS according to the 16 thematic areas identified in the structure in Figure 25 below:

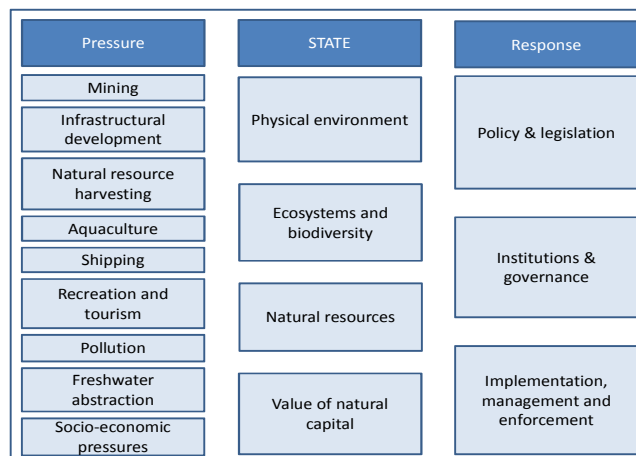


Figure 25: Thematic structuring of indicators for the Marine and Coastal Ecosystems and Protected Areas of Namibia.

A State of the Marine Environment Report for the BCLME was also commissioned by the BCC in early

2014. This Report will incorporate an economic evaluation of the BCLME coastal and marine environment.

Namibia also has an oceanographic monitoring program under which regular oceanographic monitoring surveys to collect data on temperature, salinity, oxygen, nutrients, phytoplankton and zooplankton are conducted. Monitoring lines are at latitudes 20°S, 23°S, 25°S, 26°S and 27°S.

Commercial fish species are monitored on an annual basis using hydro-acoustics and swept area surveys. By-catch species are also recorded during these surveys. Annual surveys are conducted for hake (January/February), horse mackerel (February), sardine (October) and monkfish (November).

MFMR has initiated an intertidal biodiversity monitoring programme. Annual trips are planned from Swakopmund to the Kunene River to assess the biodiversity of the rocky shores. The first survey was conducted at the end of January 2014.

2.3.4.5 Integrating Biodiversity into Development Planning

A Landscape Level Assessment of Biodiversity Vulnerability and Landuse in the Central Namib area was completed in 2012. The Central Namib Area forms part of the Namib Escarpment biodiversity hotspot and is also at the center of Namibia’s mining industry. The assessment directly targeted implementation of the Strategic Environmental Management Plan, which was developed for the sustainable development of Namibia’s Uranium industry.

It made use of fine level data (30 metre resolution) from the University of Hamburg, and combined data on six components to identify biodiversity hotspots and areas of vulnerability so that management of these areas can be improved and integrated into future development. The six components include:

- i. Biophysical data on climate, water catchments, geology, soils and topography.
- ii. Biodiversity data on indicators such as vegetation, lichen fields, species endemism, nesting sites and conservation status.
- iii. Current land use and degradation data looking at mining operations, infrastructure and off-road degradation.
- iv. Climate Change data looking at changing water availability patterns and how this will affect species distribution.
- v. Economic data looking at the values of different land uses such as communal conservancies, protected areas and urban areas.
- vi. Development scenarios: looking at the four different development scenarios outlined in the uranium SEA.

It is envisaged to scale up this initiative to the national level to facilitate sound decision-making processes for land use and development.

2.3.4.6 Human Wildlife Conflict Mitigation

Implementation of the Human Wildlife Conflict Policy of 2009 continued during the period under review, focusing on two main strategies. The first is prevention – practical steps for keeping wildlife away from crops and livestock. The second is the Human Wildlife Self Reliance Scheme, which involves payments to those who have suffered losses.

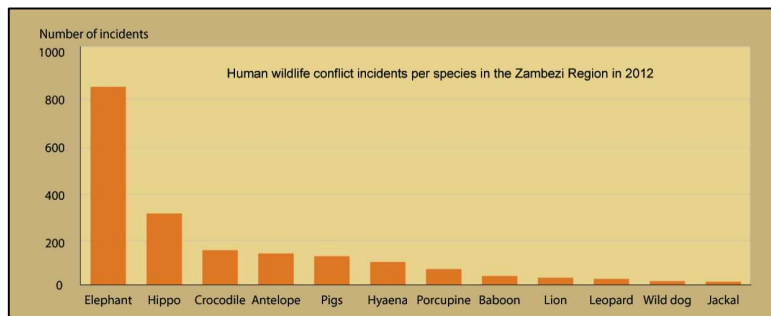


Figure 26: Human Wildlife Conflict incidents reported in Namibia’s most biodiversity rich Zambezi Region (Source: NACSO 2013).

Among the foremost preventative measures being promoted are land use planning and zoning at

communal conservancy level. Other activities being supported include chilli bombs to deter elephants from crop areas; crocodile fences; predator secure enclosures to protect livestock; and physical barriers to protect water infrastructure from elephants.

The national implementation of the Human Wildlife Self Reliance Scheme has commenced with annual payments to each communal conservancy in Namibia for the purposes of human wildlife conflict management and compensation. Funding for the Scheme comes from the GPTF of the Ministry of Environment and Tourism.

2.4 Mainstreaming of Biodiversity into relevant sectoral and cross-sectoral strategies, plans and programmes

Namibia's development framework of Vision 2030 and National Development Plans represents its ultimate strategy for poverty reduction. The conservation of biodiversity is prominently featured within this framework, particularly Vision 2030, which has a dedicated Chapter on the Sustainable Utilisation of Natural Resources and Environmental Sustainability.

A focused 4th National Development Plan (NDP4) is under implementation from 2012-2017. NDP4 has three main objectives:

- High and sustained economic growth;
- Employment creation; and
- Increased income equality.

NDP4 further focuses on the following sectors for economic growth: agriculture, tourism, manufacturing and logistics. Biodiversity management has an important contribution to make towards these objectives and most of the economic priority areas.

Biodiversity, through the nature-based tourism sector is already an important provider of employment, while the potential for it to contribute further to employment creation and reduced income inequality through biodiversity-based enterprises is still largely untapped.

Strategic initiatives in NDP4 to promote conservation agriculture and implement a debushing programme are good examples of national commitment to sustainable agriculture and the restoration of degraded lands, while the maintenance and development of national parks and increased investment in communal areas are outlined as key strategies under the tourism development sector.

Value addition, improved market access, the establishment of testing centres and beneficiation for local people are considered cornerstones to increase the contribution of manufacturing to the economy. Each of these areas is highly relevant also for the development of biotrade in Namibia.

2.5 Implementation of NBSAP2 in Namibia

Given that NBSAP2 covers the period 2013-2022, its implementation is only in its early stages. However many of the activities under NBSAP2 are ongoing and this aspect is covered in more detail in Section 3.1.

Chapter III: Progress towards the 2020 Aichi Biodiversity Targets and contributions to the relevant 2015 Targets of the Millennium Development Goals.

3.1 Progress made towards the implementation of the Strategic Plan for Biodiversity 2011-2020 and Aichi Biodiversity Targets

A preliminary analysis of Namibia's progress towards each of the 2020 targets of the Strategic Plan for Biodiversity 2011-2020 is provided in Table 11 below:

Global Target	National Target	Baseline Status 2013	National Indicators	Rough Progress towards Aichi Target (%)
<i>Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society</i>				
Target 1 - By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.	1.1 By 2020, at least 75 per cent of surveyed key target groups know the meaning of biodiversity and can identify important reasons for biodiversity conservation	<ul style="list-style-type: none"> • No Biodiversity Barometer Tool survey undertaken in Namibia • Awareness raised through Biodiversity Action Days and Coastal Biodiversity Week but limited knowledge of impact 	<ul style="list-style-type: none"> ▪ Results of surveys for pre-defined target groups using the Biodiversity Barometer Tool 	10%
Target 2 - By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.	1.2 By 2018, biodiversity values and prioritized ecosystem services are quantified, monitored and mainstreamed to support national and sectoral policy-making, planning, budgeting and decision-making frameworks	<ul style="list-style-type: none"> • Draft SEA regulations mainstreaming ecosystem services • Biodiversity partially mainstreamed into NDP 4 (as key driver of the tourism industry and through protected area management) • Biodiversity not 	<ul style="list-style-type: none"> ▪ SEA regulations gazetted ▪ Integration of biodiversity issues within NDP5 ▪ Integration of biodiversity into sectoral, regional and local plans and respective budgetary allocations 	20%

		adequately reflected in other sectoral, regional and local plans		
Target 3 - By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions.	1.3 By 2018, selected incentives for biodiversity conservation and sustainable use are in place and applied, and the most harmful subsidies are identified and their phase out is initiated	<ul style="list-style-type: none"> No adequate knowledge of positive or negative incentives for biodiversity Environmental Fiscal Reform process underway through the EIF 	<ul style="list-style-type: none"> List of assessed subsidies and measurement of magnitude of negative impact on biodiversity List of analysed incentives and measurement of their potential positive impact on biodiversity Environmental fiscal policy framework 	10%
Target 4 - By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.	None	<ul style="list-style-type: none"> Strict permit and quota systems in place to regulate the use of fish and wildlife resources 95 companies subscribe to the International Council of Mining and Metals and 30 companies members of the Global Compact Network Namibia 		15%
Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use				
Target 5 - By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.	2.1 By 2022, the rate of loss and degradation of natural habitats outside protected areas serving as ecological corridors or containing key biodiversity areas or providing important ecosystem services is minimized through integrated land use planning	<ul style="list-style-type: none"> IRLUPs with SEA complete for 2 regions: Hardap and Karas Regions (MLR targeting two regions per year) Landscape Level Assessment of key biodiversity vulnerability completed for Erongo Region Five PLCAs established 	<ul style="list-style-type: none"> Participatory Integrated Regional Land Use Plans with SEA approved by Cabinet for all Regions Delineation of ecological corridors Criteria for key biodiversity areas 	20%
Target 6 - By 2020 all fish and invertebrate stocks and aquatic plants are managed and	2.2 By 2022, all living marine and aquatic resources are managed sustainably and	<ul style="list-style-type: none"> Status of stocks report produced in 2011 and 2012 	<ul style="list-style-type: none"> Stocks of commercial fisheries resources at sustainable levels as 	50%

harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.	guided by the ecosystem approach	<ul style="list-style-type: none"> • Marine Spatial Planning to be undertaken through the Conservation and Sustainable Use of the BCLME Project (see section 2.3.1.1) • Four EBSA submissions made 	<p>proven by scientific data</p> <ul style="list-style-type: none"> ▪ Marine Spatial Planning for the greater Benguela Current Large Marine Ecosystem ▪ Ecologically and Biodiversity Significant Areas identified as well as protection measures ▪ Effective Monitoring, Control and Surveillance System in place for inland aquatic resources ▪ Income generated from aquaculture and mariculture industries 	
Target 7 - By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.	2.3 By 2022, Principles of sound rangeland and sustainable forest management, and good environmental practices in agriculture are applied on at least 50 per cent of all relevant areas	<ul style="list-style-type: none"> • 32 registered community forests • Rangeland Policy under implementation • EIAs carried out on Green Scheme Projects • NAP3 to the UNCCD under formulation and expected to be finalized in 2014 	<ul style="list-style-type: none"> ▪ Status of agriculture and rangeland report ▪ Implemented Management Plans for Community Forests ▪ Environmental Impact Assessments and Environmental Management Plans for large scale agricultural developments ▪ Changes in vegetative / land use cover 	20%
Target 8 - By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.	2.4 By 2022, pollution, including from excess nutrients, has been brought to levels that are not detrimental to biodiversity and ecosystem health and functioning	<ul style="list-style-type: none"> • Draft Waste Management and Pollution Control Bill under revision • Environmental Inspections Sub-Division established within MET • Oil Spill Emergency Plan and Coastal Sensitivity Mapping completed 	<ul style="list-style-type: none"> ▪ Compliance with Environmental Management Plans (mining companies) ▪ Trends in water quality in aquatic ecosystems (dams, rivers and Ramsar Sites) ▪ Presence / absence of key indicator species ▪ Pollution standards in place, respected and enforced 	10%
Target 9 - By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated,	2.5 By 2015, National review of invasive alien species in Namibia from 2004 is updated (including identification of	<ul style="list-style-type: none"> • National Review of 2004 • No management plans in place for invasive 	<ul style="list-style-type: none"> ▪ Updated National Review ▪ Management Plans implemented to control most 	15%

and measures are in place to manage pathways to prevent their introduction and establishment.	pathways), and by 2018 priority measures are in place to control and manage their impact	species	threatening alien invasive species	
Target 10 - By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.	2.6 By 2016, ecosystems most vulnerable to climate change and their anthropogenic pressures are identified, and by 2018 appropriate adaptation measures are developed and implemented in priority areas	<ul style="list-style-type: none"> National Vulnerability Assessment of Agriculture completed in 2008 Vulnerability Assessment of Namibia's Protected Area Network of 2010 Fognet Project (Gobabeb) monitoring trends in fog in the coastal zone (fog an important life-giving source of moisture for the species of the Namib Desert biome) 	<ul style="list-style-type: none"> Report on the vulnerability of Namibian ecosystems to climate change and associated anthropogenic pressures Evaluation of implementation of appropriate measures 	15%
Strategic Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity				
Target 11 - By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.	3.1 By 2018, existing terrestrial protected areas (national parks) are conserved, effectively and equitably managed, within an ecologically representative and well-connected system, and by 2020 coastal and marine areas, of particular importance to biodiversity and ecosystem services are identified and measures for their protection initiated	<ul style="list-style-type: none"> Management Effectiveness reports completed in 2004, 2009 and 2011 5 connectivity corridors through the NAM-PLACE PLCAs Estimated N\$58 million generated by PAs in 2013 	<ul style="list-style-type: none"> Approved management plans for all national parks Management Effectiveness of Namibia's terrestrial protected areas (national parks) Sustainable Financing Plans for Protected Area System Number of protected areas with connectivity corridors and managed buffer zones <ul style="list-style-type: none"> Trends in revenue and employment generated through the protected area network 	50%
Target 12 - By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.	3.2 By 2016, threatened and vulnerable species lists are updated and measures implemented by 2019 to improve their conservation status	<ul style="list-style-type: none"> Key wildlife and plant species being managed according to management plans 	<ul style="list-style-type: none"> Number of Species Management Plans under implementation Conservation status of threatened and vulnerable species 	20%

<p>Target 13 - By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.</p>	<p>3.3 By 2020, Genetic diversity of cultivated plants and farmed animals is maintained and enhanced</p>	<ul style="list-style-type: none"> • Farm Animal Genetic Resources Programme of MAWF and FAO • 3,973 Germplasm accessions • Project to develop a Strategic Action Plan (SAP) for the conservation of plant genetic resources for food and agriculture (PGRFA) (see 1.2.2.4) 	<ul style="list-style-type: none"> ▪ Strategy to develop and promote indigenous livestock breeds and crop varieties for adoption by local farmers ▪ Operational institutional framework in place to implement and enforce Biosafety Act of 2006 	<p>10%</p>
<p>Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services</p>				
<p>Target 14 - By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.</p>	<p>4.1 By 2022, ecosystems that provide essential services and contribute to health, livelihoods and well-being are safeguarded, and restoration programmes have been initiated for degraded ecosystems covering at least 15 per cent of the priority areas</p>	<ul style="list-style-type: none"> • 43.5 per cent of Namibia under conservation management • IWRM plan of 2010 • Estimated 30 million hectares of rangeland degraded by bush encroachment 	<ul style="list-style-type: none"> ▪ Area under sustainable CBNRM and benefits to involved communities ▪ Enforcement of agreements reached under the different transboundary water commissions ▪ Implementation of Integrated Water Resources Management Plan ▪ Area of degraded ecosystems and identified priority areas for action ▪ Number of rehabilitation and restoration programmes and area covered 	<p>15%</p>
<p>Target 15 - By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.</p>		<ul style="list-style-type: none"> • As above (Target 14 and 15 combined) 	<ul style="list-style-type: none"> ▪ None 	<p>10%</p>
<p>Target 16 - By 2015, the Nagoya Protocol on</p>	<p>4.2 By 2015, national legislation giving</p>	<ul style="list-style-type: none"> • Namibia's accession to 	<ul style="list-style-type: none"> ▪ Accession to the Nagoya 	<p>40%</p>

<p>Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation.</p>	<p>effect to the Nagoya Protocol is in force and by 2018 fully operational to ensure that benefits are fair and equitably shared from the conservation and sustainable use of biodiversity</p>	<p>the Nagoya Protocol approved by Cabinet in November 2013</p> <ul style="list-style-type: none"> • ABS bill to be tabled in Parliament by March 2014 • Draft Regulations for the ABS bill • Three ABS agreements relating to <i>Hoodia</i>, <i>Marula</i> and <i>Commiphora</i> Resin 	<p>Protocol</p> <ul style="list-style-type: none"> ▪ Gazetting of ABS national legislation and regulation ▪ Institutional arrangements in place including the Competent National Authority and National Focal Point (Genetic Resources and Traditional Knowledge Unit within MET), and national bioprospecting account within EIF ▪ Number of ABS agreements 	
Strategic Goal E: Enhance implementation through participatory planning, knowledge management and capacity-building				
<p>Target 17 - By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.</p>		<ul style="list-style-type: none"> • NBSAP2 updated and under implementation through a participatory approach 	<ul style="list-style-type: none"> ▪ None 	90%
<p>Target 18 - By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.</p>	<p>5.1 By 2020, Traditional knowledge and the innovations and practices of indigenous and local communities relevant to the conservation and sustainable use of biodiversity are recognised, respected and promoted</p>	<ul style="list-style-type: none"> • Traditional Authority represented on NBSAP2 Committee and participates in international CBD fora • Traditional Authorities sensitized on CBD issues through the ABS bill consultative process • Limited and scattered documentation of traditional knowledge relating to natural resources 	<ul style="list-style-type: none"> ▪ Biocultural protocols and practices of local communities documented according to mutually agreed terms ▪ System(s) in place to protect and document traditional knowledge as a basis for research and development of commercial biodiversity products 	10%
<p>Target 19 - By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.</p>	<p>5.2 By 2022, knowledge, science base and technologies relating to biodiversity and ecosystem management are improved and made relevant to political decision makers</p>	<ul style="list-style-type: none"> • Biotechnology laboratory established • Number of biodiversity research papers and partnerships not known • No formal science policy 	<ul style="list-style-type: none"> ▪ Trends in the number of research papers published on biodiversity from PoN, UNAM and other academic research institutions ▪ Trends in the number of 	10%

		interface to communicate research findings to policy makers	research projects on biodiversity undertaken by state research institutions (Gobabeb TRC, Etosha Ecological Institute, NBRI, NATMIRC, DART, DoF) <ul style="list-style-type: none"> ▪ Investment and partnerships in biodiversity-related research, technologies and infrastructure ▪ Policy briefs from research findings relating to biodiversity 	
Target 20 - By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.	5.3 By 2022, mobilization of financial resources from all sources has been increased compared to the period 2008-2012 to allow for the effective implementation of this strategy and action plan.	<ul style="list-style-type: none"> • Dedicated NBSAP2 Resource mobilization project commenced in 2014 • Study commissioned in 2013 to establish baseline biodiversity expenditure and resources needed for full implementation of NBSAP2 • Preliminary analysis of domestic budget shows increased trends towards biodiversity conservation 	<ul style="list-style-type: none"> ▪ Volume of Domestic Funding per annum ▪ Increase in the number of sources (including private sector) ▪ Volume of Official Development Assistance (multi-lateral and bi-lateral) 	25%

Table 11: Namibia's progress towards achieving the Aichi Targets.

3.2 Contribution of actions to implement the Convention towards the achievement of the Millennium Development Goals in Namibia

Namibia continues to make good progress with regard to the achievement of its Millennium Development Goals, particularly goal seven on Environmental Sustainability. Out of 8 targets under this goal, Namibia has already achieved three targets; is on track to achieve two targets; and is not on track to achieve three targets. These are the main areas of the MDGs of relevance to Namibia's implementation of the CBD.

GOALS AND INDICATORS	1990/1993 BASELINE	CURRENT STATUS (2013)	2015 TARGET	TARGET / GOAL ACHIEVABLE?
7. ENSURE ENVIRONMENTAL SUSTAINABILITY				
Protected areas	14%	16.7%	20%	On track
Communal conservancies	0%	19.4%	15%	Achieved
Freehold land conservancies	5%	6%	10%	Not on target
Community forestry (ha)	0%	4%	5%	On track
PERCENT HOUSEHOLDS WITH ACCESS TO SAFE DRINKING WATER				
Urban	99%	99%	100%	Achieved
Rural	78%	90%	87%	Achieved
PERCENT HOUSEHOLDS WITH ACCESS TO BASIC SANITATION				
Urban	59%	57%	98%	Not on target
Rural	14%	17%	65%	Not on target

Table 12: Overview of Namibia's progress towards MDG 7 on Environmental Sustainability (Source: NPC 2013).

3.3 Lessons learned in the implementation of the Convention in Namibia

Namibia has generally performed well in its implementation of the CBD. It has received international awards for its CBNRM Programme (Markhor Award in 2012) and its management of marine resources (Silver Award from the World Future Council in 2012). It has also made significant progress in the development of legislation for sustainable biodiversity management; management of protected areas; conservation of wildlife species; devolution of resource management to the community level ; access and benefit sharing; human wildlife conflict; and the promotion of biotrade.

There are a number of challenges remaining, which need to be overcome through effective implementation of NBSAP2. These include the following as per thematic area:

Management of Protected Areas

- Finalization of the Protected Areas and Wildlife Management Bill;
- Under-representation of certain biomes and vegetation types in the protected area network;
- Law enforcement capacity and strengthening Namibia's preparedness for poaching and illegal hunting;
- Strengthening the management of TFCAs;
- Improving capacity to manage parks according to effective park management plans;
- Continuous opening up of tourism product development opportunities with particular focus on maximizing community benefits.

CBNRM

- Provision of adequate support services to the rapidly expanding programme in a diverse range of areas such as financial and administrative management; contract negotiations; enterprise development; resource monitoring; and conflict resolution;
- Coordination of the different agencies responsible for the devolved management of natural resources, e.g. conservancies (wildlife), community forests (forest resources and grasses) and water point associations and basin management committees (water);

- Diversification of income sources for communities and increased private sector investment in communal areas;
- Human wildlife conflict;
- Prudent management of resources and sustainability and fostering a business-oriented approach to the management of conservancies and community forests.

Forest Management

- Law enforcement and illegal logging;
- Progress of de-bushing delayed because of administrative issues and limited capacity on the ground to implement;
- Forecasting of fires and limited resources to effectively cover all fire hotspot areas;
- Limited capacities of community forest management committees.

Wetlands

- Wetlands Policy lacking;
- Ramsar sites not managed according to management plans but fall within protected areas
- Ecosystem services are not monitored at the Ramsar sites;
- Limited research conducted into the impacts of damming on ephemeral rivers;
- Governance of water basins through Basin Management Committees and Transboundary River Commissions.

Biosystematics

- Fragmentation of biosystematic services among different institutions and lack of coordination;
- Lack of Infrastructure and modern equipment for storage and collection;
- Shortage of qualified staff and need for training for specialists and technicians;
- Development of information technology systems and databases for the management of biosystematic data;
- Inaccessibility of biosystematics-related library services and literature resources;
- Lack of focus on microbial biodiversity.

Biotechnology

- Shortage of data to guide experts in risk assessment and risk management;
- Delays in approving regulations to accompany the Biosafety Act of 2006;
- Collaboration between ministries to strengthen implementation of the Cartagena Protocol on Biosafety;
- Lack of awareness raising (funding constraints) on biosafety and limited flow of information between ministries. There is a low level of awareness of legislation relating to biosafety and biotechnology;
- Retention of trained staff;
- Shortage of capacity in the areas of biotechnology training and research and the need for biosafety training at institutions of high education.

Traditional Knowledge and Natural Resources Management

- Relatively few initiatives to maintain, protect, document and promote traditional knowledge as it relates to natural resource management;
- Capacity of Traditional Authorities to promote the sustainable management of biodiversity.

Alien invasive species

- Lack of experts;
- Inadequate research and inadequate understanding of the issue among the general public owing to a general lack of available information;
- No dedicated policy or programme in place to control alien invasive species.

Mountain ecosystems

- No coordination or structures in place to deal with this issue.

Pollution and waste management

- Inadequate legal framework for the management of pollution and waste.

Sustainable Agriculture

- Degradation of rangelands;
- Reduced productivity of cropland in the Northern Communal Areas;
- Excessive water use.

Environmental monitoring

- Monitoring is mainly done sectorally and there is a lack of a centralized platform from where environment-related information can be accessed;
- Communication of environmental information to policy makers;
- Human resource capacity.

Marine / Coastal Biodiversity

- Limited capacity and initiatives to control and promotion of marine bioprospecting;
- Strengthening capacity for Integrated Coastal Zone Management;
- Difficult and expensive to monitor the environment thoroughly;
- Increasing pressures from industry, mining, exploration and extraction;
- Limited knowledge of climate change impacts – sea surface temperature, sea level rise and disruption of currents, upwelling and fog belt.

Communication, Education and Awareness Raising

- Wide number of actors involved in issues relating to environmental education (coordination);
- Lack of mainstreaming of environmental education within the curriculum;
- Limited awareness of policies and legislation among the general public;
- Limited sharing of information between ministries and other stakeholders;
- Lack of financial support for students to pursue postgraduate study in environmental fields;
- Insufficient environmental awareness programmes for industrial and other companies.

Appendix I: Information concerning the reporting Party and preparation of the fifth national report

This report was compiled through the Department of Environmental Affairs, Ministry of Environment and Tourism. The chief authors were Ndpanda Kanime, Bryn Canniffe, Jonas Nghishidi and Emily Mutota, under the supervision of Teofilus Nghitila – national focal point to the Convention on Biological Diversity.

It was prepared in accordance with Article 26 of the Convention and decision X/10 of the Conference of the Parties. The structure of the report is based on the *Guidelines for the Fifth National Report* and the *Resource Manual for the Fifth National Report*, as published by the Convention.

Relevant data was collected from a wide variety of sources including from respective ministries, NGOs, donor-funded projects, tertiary institutions, individuals and private institutions. Information and views collected in the NBSAP2 elaboration process were also utilized. The Ministry of Environment and Tourism thanks all stakeholders for their contributions to this report.

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Appendix II: References and Further Sources of Information

1. Anchor Environmental Consultants (2013): Development of Core National Environmental Indicators and State of Natural Capital Report for Namibia's Protected Area Network, Coastal and Marine Ecosystems: Interim Report.
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Internet Resources

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- Benguela Current Commission: www.benguelacc.org
- Convention on Biological Diversity (UNCBD): www.cbd.int
- Desert Research Foundation of Namibia (DRFN): www.drfn.org.na
- Global Environment Facility (GEF): www.gefonline.org
- Global Initiative for Western Central and Southern Africa: www.giwacaf.org
- Integrated Rural Development and Nature Conservation (IRDNC) : www.irdnc.org.na
- Millennium Challenge Account Indigenous Natural Product (MCA-INP): www.mcanamibia.org
- Namibia Nature Foundation: www.nnf.org
- Namibia's Biosystematics Website: www.biodiversity.org.na
- Namibian Association of CBNRM Support Organisations: www.nacso.org.na
- Namibian Botanical Research Institute (NBRI): www.nbri.org.na
- Namibian Coast Conservation and Management Project: www.nacoma.org.na
- Namibian Ministry of Agriculture, Water and Forestry: www.mawf.gov.na
- Namibian Ministry of Environment and Tourism: www.met.gov.na
- Namibian Ministry of Finance: www.mof.gov.na
- Namibian Ministry of Fisheries and Marine Resources: www.mfmr.gov.na
- Namibian Ministry of Mines and Energy: www.mme.gov.na
- National Planning Commission: www.npc.gov.na
- Ocean Biogeographic Information System: www.iobis.org
- Okavango River Basin Water Commission (OKACOM): www.okacom.org
- University of Namibia (UNAM): www.unam.na

Appendix III: National implementation of the thematic programmes of work and plans under the Convention on Biological Diversity or decisions of the Conference of the Parties related to cross-cutting issues.

Thematic Programmes of Work and Cross-Cutting Themes	Relevant COP Decisions Suggested Activities / Objectives / Elements	National Progress and Outcomes	Future Priorities
Agriculture Biodiversity	Decision III/11 <ul style="list-style-type: none"> • Assessment of agricultural biodiversity • Adaptive Management practices • Capacity building • Mainstreaming 	<p>NPGRC collects the seeds of both wild and cultivated indigenous plants. In 2013, the germplasm collection stood at 3,973. A seed laboratory and processing plant is in place at Omahenene Research Station, while a tissue culture laboratory was constructed at Mannheim research Station. A MAWF biotechnology laboratory became operational in 2010.</p> <p>The MAWF has drafted two Bills on Seed and Seed Varieties as well as Plant Breeders' and Farmers' Rights. These Bills are aimed at not only increasing agricultural biodiversity but also at encouraging farmers to conserve their agricultural biodiversity.</p> <p>Adaptive management practices to minimize the impact from agriculture on the environment include community-based livestock management approaches; conservation agriculture; and organic agriculture</p>	<ul style="list-style-type: none"> • Strengthening of ex-situ and in-situ conservation capacity • Promotion of genetic diversity in indigenous agricultural crops • Promotion of conservation and awareness of importance of agricultural genetic diversity
Marine and Coastal Biodiversity	Decision VI/5 <ul style="list-style-type: none"> • Integrated Marine and Coastal Management • Marine and Coastal Living Resources • Marine and Coastal Protected Areas • Mariculture • Alien Invasive Species 	<p>National policy on coastal management launched in 2013, which promotes integrated coastal zone management (ICZM). Formulation of a dedicated ICZM bill began in 2014.</p> <p>An ecosystem approach to fisheries management is being pursued by MFMR and BCC. The Benguela Current Convention was signed in March 2013 and ratified by Namibia in July 2013. Status of stock reviews were produced in 2011 and 2012.</p> <p>A SEA was completed in 2012 for the Namibian coastal area and SEAs are also underway for Namibia's main coastal towns.</p>	<ul style="list-style-type: none"> • Enactment of ICZM bill and enhancement of coastal governance • Strengthening of Ecosystem Approach to Fisheries Management • Intensified surveillance on movements of species and aquatic disease surveillance • MPA / EBSA expansion: offshore and transboundary

Thematic Programmes of Work and Cross-Cutting Themes	Relevant COP Decisions Suggested Activities / Objectives / Elements	National Progress and Outcomes	Future Priorities
		A five year Operational Management Plan for Namibia's Islands' Marine Protected Area (NIMPA) has been drafted. Management effectiveness of the NIMPA is also regularly measured. Four EBSA proposals were submitted to the CBD.	MPAs in critical areas • Deep sea biology must be addressed because of increased offshore exploration and mining
Biodiversity of Inland Waters	Decision VII/4 • Conservation, sustainable use and benefit sharing • Institutional and Socio-Economic Enabling Environment • Knowledge, Assessment and Monitoring	The conservation and sustainable use of inland water biodiversity is being best addressed in Namibia through transboundary initiatives and the integrated water resources management approach. OKACOM and ORASECOM are now receiving considerable support and are implementing a coherent approach to managing the Okavango and Orange rivers based on equitable allocation, sustainable utilization, sound environmental management and sharing of benefits. Basin management committees are now in place for three river basins. A new Ramsar Site was proclaimed in 2013 (see section 1.2.1.4)	• Strengthening governance mechanisms, particularly basin management committees and transboundary river commissions • Improved monitoring of wetlands
Forest Biodiversity	Decision VI/22 • Conservation, sustainable use and benefit sharing • Institutional and Socio-Economic Enabling Environment • Knowledge, Assessment and Monitoring	Namibia's community forest programme is promoting the conservation and sustainable use of forest resources, and aims to maximize benefits for communities. Communities are involved in compiling forest inventories as a basis for the sustainable harvesting and use of forest and rangeland products. The forest management plan for community forests is also drafted together with members of the communities. The management indicates on the quantity of resources to be harvested and how these resources are to be sustainably used. 32 community forests were registered by 2013.	• Development of integrated management plans for Community Forests • Enhancement of benefits from community forest programme • Finalization and implementation of the Forest and Veldt Fire Policy • Development of improved community monitoring and patrolling approaches • Design and implementation of a CEPA programme for Namibians on the sustainable management of natural resources
Biodiversity of Dry-Land and Sub-Humid Lands	Decision V/23 • Assessments of biodiversity status and	Namibia's NAP3 to the UNCCD is under formulation and is expected to be finalized in 2014. This will place a strong emphasis on the monitoring and assessment of ecosystem health and will	• Finalization and implementation of NAP3 to the UNCCD with particular focus on monitoring

Thematic Programmes of Work and Cross-Cutting Themes	Relevant COP Decisions Suggested Activities / Objectives / Elements	National Progress and Outcomes	Future Priorities
	trends <ul style="list-style-type: none"> • Targeted Actions for responsible resource management and sustainable livelihoods 	also promote sustainable land management practices in the agriculture and forestry sectors.	land degradation and improving livelihoods and the health of ecosystems
Island Biodiversity	Decision VIII/1 <ul style="list-style-type: none"> • Protect the components of biodiversity • Promote sustainable use • Address threats to biodiversity • Maintain goods and services from biodiversity to support human well-being • Protect traditional knowledge and practices • Ensure the fair and equitable sharing of benefits arising out of the use of genetic resources • Ensure provision of adequate resources 	The main Namibian offshore islands are uninhabited and located in the central region of the BCLME within the intensive Lüderitz upwelling cell. Four Namibian offshore islands were included in an EBSA proposal for their significance in the life history stages of endangered and vulnerable seabird species (see section 1.2.1.7). A buffer area of 5km around each island is used to delineate the ecological and biological significance of the proposed islands and adjacent marine environment.	<ul style="list-style-type: none"> • Improved management of existing MPA and proposed EBSA
Mountain Biodiversity	Decision VII/27 <ul style="list-style-type: none"> • Targeted and Supporting Actions for conservation, sustainable use and benefit sharing • Means of implementation for conservation, sustainable use and benefit sharing 	Many mountain ecosystems in Namibia are home to high species richness and a high number of endemic and endangered species. Much of the Namib Escarpment, and mountain ranges such as the Brandberg, are now under conservation management through conservancies. There is however no formal structure dealing with mountain biodiversity in Namibia.	<ul style="list-style-type: none"> • Establishment of an effective coordination mechanism as appropriate to further explore this area

Thematic Programmes of Work and Cross-Cutting Themes	Relevant COP Decisions Suggested Activities / Objectives / Elements	National Progress and Outcomes	Future Priorities
Biodiversity for Development	<ul style="list-style-type: none"> • Integration of biodiversity into sectoral policies or cross sectoral strategies • Linkages between CBD and poverty alleviation 	<p>Biodiversity is well integrated into Namibia's national development framework of Vision 2030 and NDP4 (see section 2.4).</p> <p>The importance of biodiversity for poverty alleviation through biotrade, national parks, wildlife (trophy hunting, concessions and tourism), as well as the sectors of fisheries and agriculture is documented throughout this document (see sections 1.1, 1.4 and 2.3.4 in particular).</p>	<ul style="list-style-type: none"> ▪ Gazetting of SEA regulations ▪ Integration of biodiversity issues within NDP5 ▪ Integration of biodiversity into sectoral, regional and local plans and respective budgetary allocations
Climate Change and Biodiversity	<ul style="list-style-type: none"> • Synergistic activities 	<p>Biodiversity is prominently referenced in Namibia's Climate Change Policy of 2011 and the Climate Change Strategy and Action Plan of 2014.</p> <p>A number of studies have been conducted as to how Namibia and its biodiversity are likely to be affected by climate change, including a 2010 Vulnerability and Adaptation Assessment on Namibia's Protected Areas and Biodiversity (in terms of species distribution, composition and migration). Endemic species, such as those found in the Namib escarpment and Succulent Karoo Biome are particularly vulnerable.</p> <p>Climate change adaptation is directly targeted under Targets 4, 6, 9 and 12 of Namibia's NBSAP2.</p>	<ul style="list-style-type: none"> ▪ Report on the vulnerability of Namibian ecosystems to climate change and associated anthropogenic pressures ▪ Evaluation and implementation of appropriate adaptation measures
Invasive Alien Species		<p>Namibia's most threatening alien invasive plant and animal species were identified in 2004, however there is a lack of coordinated progress in terms of countering these threats. Adequate legislation and management plans are not in place for alien invasive species, and the need for improved capacity and awareness-raising has been identified.</p> <p>Target 8 of NBSAP2 states that: <i>"By 2015, National review of invasive alien species in Namibia from 2004 is updated (including identification of pathways), and by 2018 priority measures are in</i></p>	<ul style="list-style-type: none"> ▪ Updated National Review ▪ Management Plans implemented to control most threatening alien invasive species ▪ Awareness-raising and capacity building on alien invasive species

Thematic Programmes of Work and Cross-Cutting Themes	Relevant COP Decisions Suggested Activities / Objectives / Elements	National Progress and Outcomes	Future Priorities
		<i>place to control and manage their impact”</i>	
Global Taxonomy Initiative	Decisions IX/22, VIII/3, VII/9, VI/8 and V/9 <ul style="list-style-type: none"> • Assess taxonomic needs and capacities • Build and maintain the necessary human resources, systems and infrastructure • Facilitate an improved and effective infrastructure/system for access to taxonomic information • Generate information needed for decision-making in conservation and sustainable use of biological diversity and its components 	<p>Namibia’s biosystematics needs were identified in a 2003 report, however there has been little coordinated action to address these needs.</p> <p>Taxonomic information was computerized and made available to the public through the website http://www.biodiversity.org.na, however this is no longer updated.</p> <p>Infrastructure, financial and human resources remain great impediments in this area for Namibia.</p>	<ul style="list-style-type: none"> • Improved coordination • Training of specialists, technicians and students to increase capacity in biosystematics and biotechnology • Improved infrastructure and equipment for collections • Development of improved information technology systems and databases for the management of biosystematic data.
Global Plant Conservation Strategy (2011-2020)	Decision X/17 <ul style="list-style-type: none"> • Plant diversity is well understood, documented and recognized • Plant diversity is urgently and effectively conserved • Plant diversity is used in a sustainable and equitable manner • Education and awareness about plant diversity is promoted • Capacities and public 	<p>The NPGRC and MSBP contribute towards the Global Strategy for Plant Conservation, albeit at a slower rate than intended. Of the approximately 4,000 seed-bearing plant species in Namibia, 923 (23%) were collected and banked by 2013 (see section 1.2.2.4).</p> <p>The sustainable utilization of indigenous natural plants is promoted through the Indigenous Plant Taskforce Team (IPTT), and this area is highlighted in section 1.1.</p> <p>Capacity, infrastructure and resource constraints are noted in this area in Namibia.</p>	<ul style="list-style-type: none"> • Addressing the needs of endemic and threatened species • Development and implementation of management and recovery plans for priority taxa • Capacity development

Thematic Programmes of Work and Cross-Cutting Themes	Relevant COP Decisions Suggested Activities / Objectives / Elements	National Progress and Outcomes	Future Priorities
	engagement necessary to implement the Strategy have been developed		
Biodiversity and Tourism		<p>Tourists are mainly attracted to Namibia by its pristine open spaces, remarkable diversity of landscapes and its great wildlife viewing opportunities. It was estimated that N\$58 million was collected from park entrance fees in 2013. Namibia has made great strides to ensure that its fast-growing tourism sector remains high quality and low impact.</p> <p>Biodiversity is reflected in Namibia's Tourism Growth Strategy of 2012. Forty-five tourism establishments have been accredited through the Eco awards Namibia programme, which awards marks of distinction based on performance in terms of community relations, conservation ethics, waste management, water conservation, and use of renewable energy.</p> <p>Namibia has successfully established itself as a leading adventure and eco-tourism destination. It hosted the Adventure Travel World Summit in 2013.</p> <p>Tourism satellite accounts and exit surveys are undertaken annually to find out about why visitors come to Namibia, where they come from, their activities and places visited, length of stay, the likelihood of repeat visits, and primary motivations for visitors to travel.</p>	<ul style="list-style-type: none"> • Capitalizing on eco- and cultural tourism opportunities and making tourism more resilient to climate change • Improved community beneficiation from tourism through employment, concessions, enterprise opportunities, and skills development • Increased domestic tourism • Best practice environmental management in protected areas • Expansion of the Eco awards Namibia programme
Communication, Education and Public Awareness	<p>Decision VI/19</p> <ul style="list-style-type: none"> • Towards a global CEPA network • Exchange of knowledge and expertise • Capacity-building for CEPA 	<ul style="list-style-type: none"> • CEPA Strategy developed for NBSAP2 • Biodiversity Action Day commemorated annually since 2010 • Coastal Biodiversity Week also an annual event • Namibia Environmental Education Network established, decentralized and linked to other international networks • Production of a number of biodiversity-related films including on the Namib Desert, Namibia's Wetlands and the Dorob National Park. 	<ul style="list-style-type: none"> • Increased network of environmental education centres in Namibia • Increasing community awareness of biodiversity management • Improved targeting of decision makers with environmental

Thematic Programmes of Work and Cross-Cutting Themes	Relevant COP Decisions Suggested Activities / Objectives / Elements	National Progress and Outcomes	Future Priorities
		<ul style="list-style-type: none"> Capacity building workshops for journalists and other media practitioners on the CEPA strategy as well as the CBD and integrated implementation of the Rio Conventions 	<p>awareness information</p> <ul style="list-style-type: none"> Improved targeting of out-of-school and unemployed youth
Economics, Trade and Incentive Measures	<p>Decision IX/6</p> <ul style="list-style-type: none"> Assessment of values of biodiversity and ecosystem services for public awareness campaigns and policy action; Methods to promote biodiversity information in consumer decisions Promotion of biodiversity-based products produced in sustainable manner Studies on approaches to develop markets and payment schemes for ecosystem services Analysis of the effects of different incentive measures and the impact on biodiversity 	<ul style="list-style-type: none"> Updated wildlife and forest resource accounts under development Annual production and contribution of Indigenous Natural Plants sector measured Contribution of CBNRM programme to income generation, employment creation and biodiversity conservation measured annually Economic Analysis completed in 2012 for sustainable engagement into the Game Meat Export Value Chain Organic certification developed; Forestry Stewardship Council certification for Charcoal; Team Namibia; Eco awards Namibia Programme Rapid Trade and Environment Assessments conducted on trade in red meat; biochar; eco-tourism; and green labeling Economic Analysis of the Game Meat Value Chain completed in 2012 Incentive measures study and analysis planned under target 3 of NBSAP2 	<ul style="list-style-type: none"> Values of biodiversity and ecosystem services are incorporated into national accounts and mainstreamed into major development strategies and activities of the most relevant line ministries, parastatals and private companies
Impact Assessment	<ul style="list-style-type: none"> Procedures for EIAs of relevant projects Arrangements to ensure environmental consequences of programmes and policies are taken into account; Promote reciprocity, 	<p>Regulations for Environmental Management Act of 2007 were gazetted in 2012 providing the legal framework for EIAs, of which approximately 200 are now processed per year.</p> <p>SEAs were carried out for identified policies, plans and programmes including Namibia's NDP4, Uranium mining, biofuels, coastal development and for tourism development in each of Namibia's five PLCAs.</p>	<ul style="list-style-type: none"> Monitoring and enforcement of compliance to the Environmental Management Act Gazetting of SEA regulations

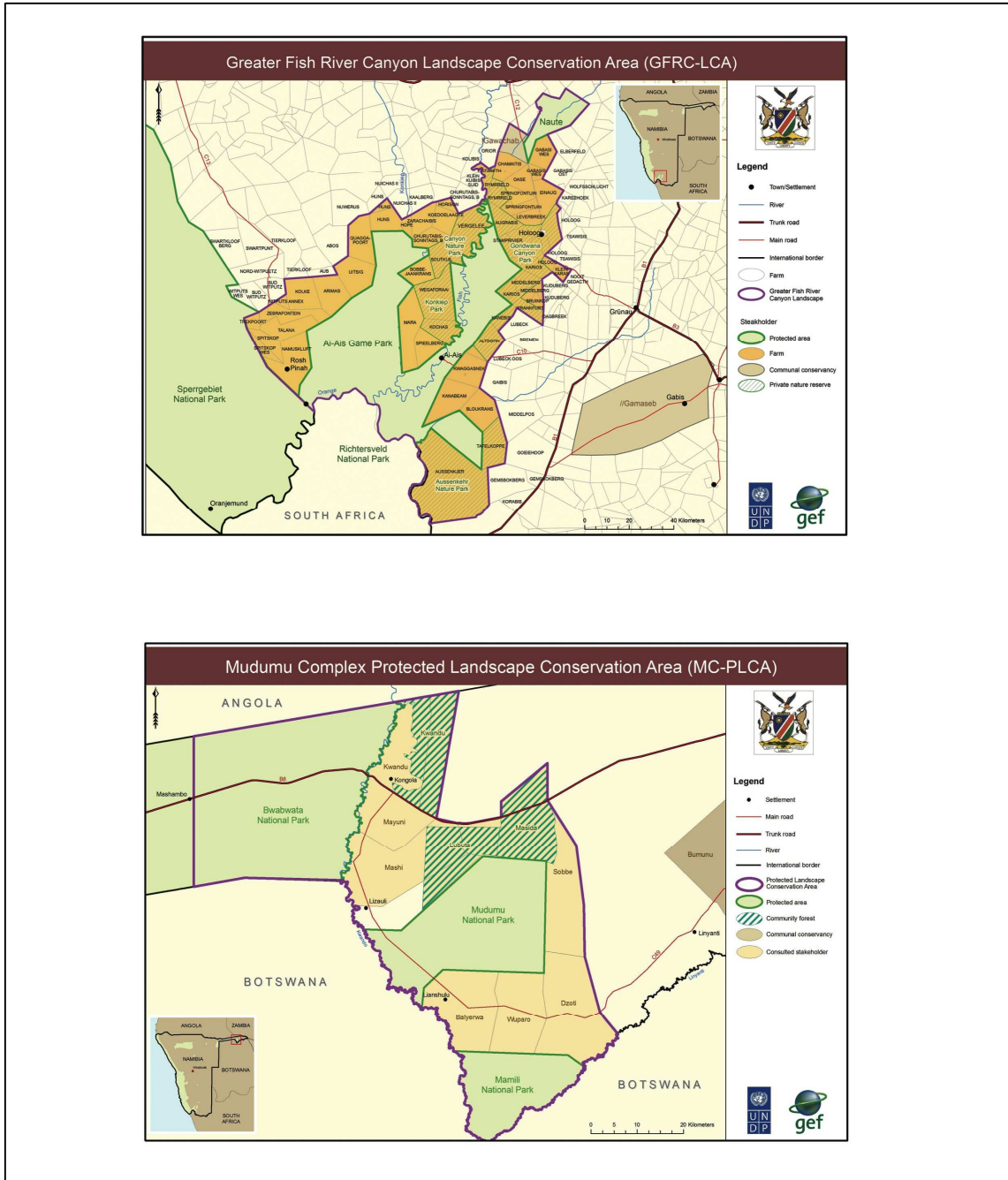
Thematic Programmes of Work and Cross-Cutting Themes	Relevant COP Decisions Suggested Activities / Objectives / Elements	National Progress and Outcomes	Future Priorities
	<p>notification, exchange of information and consultation to minimize danger and damage to other states transboundary issues</p> <ul style="list-style-type: none"> National arrangements for emergency responses to activities or events impacting on biodiversity 	<p>An Oil Spill Emergency Plan is in place and sensitivity mapping to accidental oil pollution is underway. Namibia is actively participating in the Global Initiative for Western, Central and Southern Africa in this regard.</p> <p>A moratorium was placed on the issuing of environmental clearance certificates for phosphate mining in marine areas in 2013, because of inadequate knowledge of its environmental impacts. An assessment study is currently underway to guide the future development of this industry.</p>	
Ecosystem Approach	<ul style="list-style-type: none"> Relationships and processes within ecosystem Enhance benefit sharing Use adaptive management practices Decentralize management actions to the lowest scale Ensure inter-sectoral cooperation 	<p>The ecosystem approach has been well mainstreamed into Namibia's development process. Adaptive management of natural resources (particularly fisheries, wildlife and forest resources), based on innovative and participatory resource monitoring methods, is embraced.</p> <p>The management of natural resources, particularly forests, rangelands, wildlife and water, is increasingly being devolved to the community level.</p> <p>Benefit-sharing from the CBNRM Programme is documented in sections 1.1, 1.4 and 2.3.4.3.</p>	<ul style="list-style-type: none"> Completion of State of the Marine Environment Report, and Integrated State of the Environment Report for coast and nationally Utilization of these reports to guide decision making Enhancement of community capacity for adaptive management and resource monitoring Improving inter-sectoral cooperation at the national and local levels
Biodiversity and Gender	Decision X/19 Mainstream gender within NBSAPs and CBD programmes of work	The increased capacity of rural communities to govern themselves and take control of their resources is a major success of community conservation. Disaggregated gender data is now collected through the CBNRM Programme, and shows that women made up 30 per cent of conservancy management committee members in 2012 (NACSO 2013). Women are also predominantly involved in the management of indigenous plants such as Marula and Commiphora.	<ul style="list-style-type: none"> Increased involvement of women in CBNRM governance Increased beneficiation for women from natural resources management

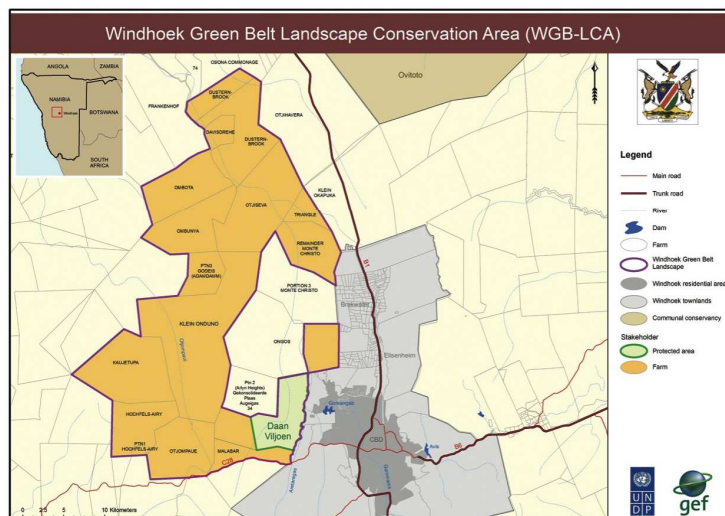
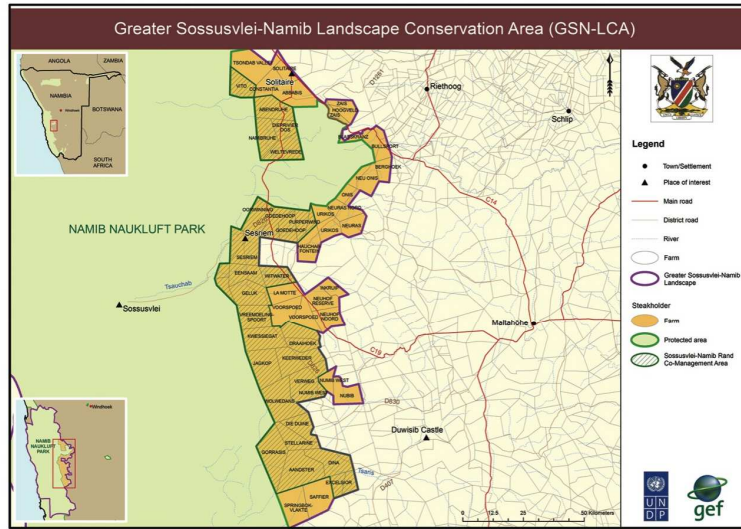
Thematic Programmes of Work and Cross-Cutting Themes	Relevant COP Decisions Suggested Activities / Objectives / Elements	National Progress and Outcomes	Future Priorities
		A national conference on “The Role of Women in Natural Resource Management” was held in 2010, and A Gender Day was convened during Namibia’s hosting of COP11 to the UNCCD in 2013. The empowerment of women is directly promoted in the Namib Declaration, which emerged from the COP11, and will form the basis of Namibia’s NAP3 to the UNCCD.	
Traditional Knowledge, Innovations and Practices		Access to traditional knowledge continues to be regulated through the IBPC, which was established in 2007. Traditional Authorities are represented on the NBSAP2 committee, and have been closely involved in international negotiations on Article 8j. Traditional Authorities were also widely sensitized on CBD issues during the regional ABS bill consultative process.	<ul style="list-style-type: none"> • Development of system to maintain, protect, document and promote traditional knowledge as it relates to natural resources
Identification, Monitoring, Indicators and Assessments (Sustainable Utilization of Biodiversity)	Identification and monitoring of indicators of biodiversity	<p>In section 2.3.4.4, the process to establish a national core set of environmental indicators for the coastal area is described, as is the State of the Marine Environment Report commissioned through the BCC.</p> <p>A wide variety of activities are undertaken to monitor biodiversity in Namibia, including:</p> <ul style="list-style-type: none"> • Annual game counts (see section 1.2.2.1): the directorate of natural resource management and directorate of regional services and parks management carry out the annual game counts for wildlife in the protected areas in Namibia. The counting is done to know the number of certain species Namibia has and to monitor and assess the growth of wildlife. • Forestry Inventories: A National Forest Inventory in Namibia is carried out through the Directorate of Forestry. The main objective of the inventory is to assess the quantity of forest resources Namibia has in its community forests and conservancies. Since the communities are given power to manage the forest resources, it also helps the Directorate to monitor the utilization of resources by the communities. • Bird populations at Wetland Sites; blue cranes are also monitored and counted in Namibia. For monitoring purposes, birds are 	<ul style="list-style-type: none"> • Completion of State of the Marine Environment Report, and Integrated State of the Environment Report for coast and nationally • Utilization of these reports to guide decision making • Enhancement of community capacity for adaptive management and resource monitoring

Thematic Programmes of Work and Cross-Cutting Themes	Relevant COP Decisions Suggested Activities / Objectives / Elements	National Progress and Outcomes	Future Priorities
		<p>ringed to give a good indication of their movements.</p> <ul style="list-style-type: none"> • Status of Stocks Review for fisheries and marine resources (1.2.2.3) • Plant seed and germplasm collections and monitoring of species status 	
Protected Areas	<ul style="list-style-type: none"> • Direct actions for planning, selecting, establishing, strengthening, and managing, protected area systems and sites • Governance, Participation, Equity and Benefit Sharing • Enabling activities including policy, institutions, finance, technology, capacity and awareness • Standards, assessment, and monitoring 	<p>The National Policy on Protected Areas, Neighbours and Resident Community was approved in 2013, while the Mining in Protected Areas Policy is also under development (see section 2.3.2)</p> <p>The entire coastal zone is now under national park protection status. Collaborative management practices have been initiated as part of methods to improve connectivity between different conservation management approaches, particularly in the PLCAs.</p> <p>Management effectiveness assessments have been introduced and are showing positive trends (see section 2.3.4.1). Infrastructural investment is increasing into protected areas and sustainable financing mechanisms are being developed (see figure 20).</p> <p>A wide variety of trainings were provided to parks staff including on financial management, first aid, off-road driving, weapons handling, HIV/AIDS and GIS.</p>	<ul style="list-style-type: none"> • Law enforcement capacity and strengthening Namibia's preparedness for poaching and illegal hunting • Strengthening the management of Transfrontier Conservation Areas • Improving capacity to manage parks according to effective park management plans • Continuous opening up of tourism product development opportunities with particular focus on maximizing community benefits
Technology, Transfer and Cooperation	<ul style="list-style-type: none"> • Technology Assessments • Information Systems • Creating enabling environments • Capacity Building and Enhancement 	<p>A Technology Needs Assessment in the area of biodiversity is prioritized under Target 19 of Namibia's NBSAP2.</p> <p>Capacity building and enhancement is prominently addressed in most bi-lateral and multi-lateral support projects in a wide variety of areas.</p>	<ul style="list-style-type: none"> • Technology Needs Assessment and improved information systems for biodiversity management
Access and Benefit Sharing		<p>Access and benefit sharing bill has been drafted and is submitted to the Cabinet Committee on Legislation, and it may be one of the Bills discussed during the 9th session of the National Assembly in 2014.</p>	<ul style="list-style-type: none"> • Accession to the Nagoya Protocol • Enactment of the ABS bill • Establishment of Competent

Thematic Programmes of Work and Cross-Cutting Themes	Relevant COP Decisions Suggested Activities / Objectives / Elements	National Progress and Outcomes	Future Priorities
		<p>During 2011, consultative workshops were held in all 13 regions of Namibia, to raise awareness on Access and Benefit sharing as well as to gain input from relevant stakeholders to strengthen and further develop the ABS bill to encapsulate the key principles as introduced in the Nagoya Protocol, such as access based on prior informed consent, and benefit sharing based on mutually agreed terms, and technology transfer.</p> <p>Meanwhile the Interim Bioprospecting Committee (IBPC) continues to serve as the body that regulates all bioprospecting activities in Namibia. The IBPC played an important role in the negotiations of Namibia's first ABS-agreement, which was signed in April 2010 for commiphora resin, and it remains the current regime for regulating ABS in Namibia while the Bill is being finalized.</p> <p>The Cabinet of the Republic of Namibia has approved that Namibia accede to the Nagoya protocol on Access and Benefit sharing, and the line Ministry is now currently seeking approval from the National Assembly in terms of article 63 (2) (e) of the Namibian Constitution.</p>	<p>National Authority on ABS and traditional knowledge</p> <ul style="list-style-type: none"> • Increased community beneficiation through the sustainable management of natural resources

Appendix IV: Maps of Protected Landscape Conservation Areas





Appendix V: Reporting Party Information

Contracting Party	REPUBLIC OF NAMIBIA
NATIONAL FOCAL POINT	
Full name of the institution	DEPARTMENT OF ENVIRONMENTAL AFFAIRS
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Signature of officer responsible for submitting national report	 <hr style="width: 100px; margin-left: auto; margin-right: 0;"/> Teofilus Nghitila
Date of Submission	March 31, 2014

