Ministry of Environment and Tourism
Republic of Namibia

Sixth National Report to the Convention on Biological Diversity (2014-2018)

December 2018

Section I. Information on the targets being pursued at the national level

I. Information on the targets being pursued at the national level

☒ My country has adopted national biodiversity targets or equivalent commitments in line with the Strategic Plan for Biodiversity 2011-2020 and the Aichi Targets

National Target

Target 1: By 2020, at least 75% of surveyed key target groups know the meaning of biodiversity and can identify important reasons for biodiversity conservation

Rationale for the national target

Namibia is characterized by low levels of awareness with regard to environmental protection and biodiverse conservation. Awareness raising is recognized as an important vehicle to achieve a positive change in the behaviour of stakeholders towards biodiversity, based on effectively demonstrating its value and importance to Namibian society. t was therefore considered important for NBSAP 2 to focus on Communication, Education and Public Awareness (CEPA) initiatives as part of mainstreaming biodiversity across government and society.

A CEPA strategy is incorporated within NBSAP2 with the ultimate goal being to "*achieve a positive change in the behaviour of stakeholders towards biodiversity, based on effectively demonstrating its value and importance to Namibian society"*. It was further expected that the CEPA Strategy will offer a more structured and integrated approach to implementation of environment-related awareness raising in Namibia. The CEPA strategy focuses on five key strategic themes, each with corresponding strategic aims:
(i) Awareness
(ii) Education
(iii) Participation and Implementation
(iv) Funding
(v) International Cooperation and Networking

Of key importance is that identified priority target groups and sectors are reached by the strategic stakeholders so that they can implement activities towards the conservation and sustainable utilisation of biodiversity. Priority target groups include technical experts and decision-makers in respective line ministries, regional councils, local authorities and traditional authorities; politicians and high level stakeholders; private sector players; resource managers on-the-ground; and the youth and women's groups. This will require the use of an array of different media and resource material.

The Division of Environmental Information and Natural Resource Economics within the Ministry of Environment and Tourism (MET) is the lead agency to coordinate implementation of the CEPA initiatives within NBSAP2. As Secretariat to the multi-stakeholder Namibia Environmental Education Network (NEEN), it is well positioned to fulfil this function.

Level of application

☒ National/federal

Relevance of the national targets to the Aichi Biodiversity Targets (Links between national targets and Aichi Biodiversity Targets.)

Main related Aichi Biodiversity Targets

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Other relevant information

Namibia developed the NBSAP 2 through a specialised national committee comprised of stakeholders that are directly and/or indirectly implementing biodiversity and natural resources management. The specialised committee convened national workshops throughout the country to ensure contributions from all relevant sectors, including representatives of indigenous peoples and local communities, were captured during the formulation of the 17 national targets.

CEPA initiatives on environmental matters are incorporated within Namibia's fifth National Development Plan and a broader CEPA Strategy was developed by the Ministry of Environment and Tourism.

Relevant websites, web links, and files
http://www.met.gov.na

National Target
Target 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

Rationale for the national target

Biodiversity is considered to underpin human survival and well-being, especially given that around 70% of Namibia's population is dependent on the natural resource base for their livelihood needs in terms of income, food, fuel, medicine and shelter.

Demonstrating the value of biodiversity and the critical ecosystem services it provides was therefore considered an important mainstreaming tool to create awareness and to influence policy makers and planners. NBSAP 2 envisaged a new approach dedicated to the valuation of biodiversity as a whole and its variety of ecosystem services, the results of were to be disseminated and integrated into national, sectoral and local planning frameworks and budgets.

Level of application
☒ National/federal

Relevance of the national targets to the Aichi Biodiversity Targets

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Target 2 was further refined in close consultation with the Environmental Investment Fund of Namibia, the Ministry of Finance and other environmental-related donors. It is also a key driver of Namibia's Biodiversity Resource Mobilization Strategy.

Relevant websites, web links, and files
https://www.eif.org.na/, http://www.met.gov.na, https://resmob.org.

National Target

Target 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

Rationale for the national target

A diverse range of subsidies and incentives are in place in Namibia to address sectoral problems and to promote economic growth and self-sufficiency. An assessment of the impacts of these different subsidies on the conservation and sustainable use of biodiversity was considered a necessary step towards removing or reforming harmful subsidies and for the development and application of positive incentives.

Closely linked to this has been the process of Environmental Fiscal Reform being undertaken in Namibia, part of which is aiming at the introduction of various environmental taxes and levies for environmentally harmful activities and the generation of market-based revenue streams as a source of long-term and sustainable funding for positive environmental investments. This is a key part of the process to develop positive biodiversity incentives.

Level of application
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Target 3 was further refined in close consultation with the Environmental Investment Fund of Namibia, the Ministry of Finance and other environmental related donors

Relevant websites, web links, and files
http://www.met.gov.na, https://resmob.org, https://www.eif.org.na/

National Target
Target 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

Rationale for the national target

Namibia is home to a relatively large number of pristine natural habitats, many of which are home to high levels of species endemism and species richness, as well as being providers of essential ecosystem services. These areas are threatened to differing extents by various economic, demographic and social pressures. For example, land and sea-based mining activities threaten habitats (often in protected areas) in the Namib escarpment and marine ecosystems; forests in the north and north-eastern areas are vulnerable to illegal logging, population pressure and land-use change; and wetlands, including perennial and ephemeral rivers, are vulnerable to the over-abstraction of water for farming as well as pollution.

Preventing the loss of these sensitive habitats requires that the underlying causes are addressed through an integrated approach to development. Emphasis needs to be based on the following tools to prevent the loss of high biodiversity value habitats:

- Integrated Land Use Planning
- Mapping and protection of key biodiversity areas (KBAs)
- The use of EIAs and SEAs to guide development decision-making, as well as the wider enforcement of the Environmental Management Act of 2007
- Integrated mechanisms for natural resource governance at different levels including Integrated Coastal Zone Management (ICZM) as well as Communal Land Boards and expert working groups on biodiversity sensitive areas

Level of application:
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This target was developed in close consultation with the Ministry of Land Reform to address land use planning issues.

Relevant websites, web links, and files
http://www.mlr.gov.na

National Target
Target 5: By 2022, all living marine and aquatic resources are managed sustainably and guided by the ecosystem approach

Rationale for the national target

Namibia's 1500km coastline falls within the Benguela Current System and is under protected area status due to its rich biodiversity. Fishing is an important economic activity and there is increasing exploration and mining activities taking place in the coastal and marine environment. The coast is also a popular tourist destination and home to a number of important and growing urban centers. In this context, the Government has put in place a number of measures to ensure the long-term conservation, management and sustainable use of marine resources and coastal habitats. Nevertheless, fish and aquatic invertebrate stocks as well as aquatic plants are threatened by habitat loss and alteration due to off-shore mining and exploration; land-based pollution; invasive species; and climate change impacts.

Particularly relevant measures promoted through NBSAP 2 are Marine Spatial Planning (MSP), the identification of Ecologically or Biologically Significant Areas (EBSAs); the elimination of destructive fishing practices; the transboundary management of marine resources through the Benguela Current Commission; sustainable fishing measures such as the use of closed seasons and minimum mesh sizes; strict by-catch regulations; and improved capacity to monitor, control and survey these measures. While many of these approaches are well-established in marine ecosystems, the need for them to be extended to inland fisheries was recommended during the national NBSAP1 review workshop in July 2012.

The sustainable development of the aquaculture industry, guided by the Aquaculture Act of 2002, was identified in Vision 2030 as a priority area to enhance food security, generate employment and improve livelihoods in rural areas. The Aquaculture Act contains strong measures to ensure that this industry grows in a responsible manner, which will also be promoted through NBSAP2.

Level of application

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Target 5 was further refined with close consultation with the Ministry of Fisheries and Marine Resources and the Benguela Current Convention. In addition, target 5 has also guided and contributed to the formulation of the current fifth National Development Plan (NDP 5) through the Blue Economy strategy which states that "by 2022, Namibia will have implemented a Blue Economy governance and management system that sustainably maximizes economic benefits from marine resources and ensures equitable marine wealth distribution to all Namibians".

Relevant websites, web links, and files
www.mfmr.gov.na, https://cmr.mandela.ac.za/EBSA-Portal

National Target
Target 6: By 2022, Principles of sound rangeland and sustainable forest management, and good environmental practices in agriculture are applied on at least 50 percent of all relevant areas

Rationale for the national target

Agriculture and forestry are critical sectors for sustainable resource use and poverty reduction in the rural areas. An estimated 71 percent of Namibia's land area is used as rangeland for cattle ranching and small-stock farming, much of which is recognized as heavily degraded. Crop cultivation is vital to subsistence farmers in the northern regions and is being promoted on a commercial scale through the Green Scheme Programme. Forest resources are an asset for communities, mainly in the north and north-eastern regions, and forests are the source of many of Namibia's increasingly important indigenous plant products.

Desertification and drought are key drivers of biodiversity loss in Namibia and with climate change set to lead to increased rainfall variability and instances of extreme events, the threat to ecosystems and species diversity is increasing and requires coordinated action. Unsustainable land management practices compound this threat leading to problems such as bush encroachment by invader species; the disappearance of perennial grasses; and the prevalence of bare soils which inhibit nutrient cycling, water infiltration, seedling development and other essential ecological processes.

These practices need to be changed so that land and ecosystems maintain their productivity and integrity and species loss is avoided over the long-term. Identified good management practices compatible with the ecosystem approach such as rotational grazing, conservation agriculture, and community forestry are being promoted, strengthened and expanded under this target. This is also an area of synergy with Namibia's National Climate Change Strategy and Action Plan (NCC-SAP) and the Third National Action Programme (NAP3) to the United Nations Convention to Combat Desertification (UNCCD).

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Relevant websites, web links, and files
www.mawf.gov.na, www.nacso.org.na

National Target
Target 7: By 2022, pollution, including from excess nutrients, has been brought to levels that are not detrimental to biodiversity and ecosystem health and functioning

Rationale for the national target

Although Namibia is not heavily industrialised, pollution was considered extremely relevant to Namibia during the NBSAP1 review workshop in July 2012. Pollution of water, the expanding number of intensive irrigation schemes, and the use and disposal of chemicals were considered as major concerns as well as the rapid and uncontrolled urbanization that is taking place.

The legislative framework and development of standards for the management of waste and for the control of pollution is inadequate in Namibia,. Institutional capacity and cooperation to address this issue is another critical constraint that needs to be addressed, as is the upgrading of infrastructure to store, handle and dispose of waste satisfactorily.

Level of application
☒ National/federal

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Other related Aichi Biodiversity Targets (Please select one or more Aichi Biodiversity Target to which the national target is indirectly related.)

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Initiatives to reduce pollution are incorporated in the Public and Environmental Health Act of 2015 and the National Solid Waste Management Strategy (2018-2028).

Relevant websites, web links, and files
http://www.met.gov.na

National Target
Target 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

Rationale for the national target

A variety of sectors deals with alien invasive species in Namibia, and these different sectors need to be coordinated to tackle this problem, which has been identified as a significant threat to biodiversity. A 2004 report identified and described Namibia's 15 most important invasive alien plant species as well as 11 alien animal species, which have the potential to become extremely invasive in Namibia. These species need to be targeted and managed to minimize their impact on Namibia's biodiversity.

Level of application:
☒ National/federal

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This target was further refined with close cooperation with the Namibia University of Science and Technology (NUST) and the National Botanical Research Institute (NBRI).

Relevant websites, web links, and files
www.nbri.org.na, www.nust.na

National Target
Target 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

Rationale for the national target

Namibia's ecosystems and biodiversity are particularly vulnerable to the impacts of climate change. Climate change has the potential to reverse the country's development goals and is likely to have severe effects on agricultural production, food security, fisheries and tourism. The effects of increased rainfall variability and an increase in the number of extreme events will place further stress on ecosystems, and these effects will also impact on species distribution, composition and migration. Human population pressure will further exacerbate this stress, particularly in peri-urban areas and in northern Namibia.

In line with Namibia's NCC-SAP, the main thrust of this target was to identify the ecosystems most vulnerable to climate change and to identify and implement appropriate measures to make these ecosystems less vulnerable to the impacts of climate change over the short to medium-term. These assessments were also intended to pinpoint adaptation measures based on nature itself, i.e. ecosystem-based adaptation.

Level of application
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This target has also shaped Namibia's Nationally Determined Contribution (2015) and NDP 5, which incorporates a strategic programme for the management of the environment and climate resilience, with the target stating that "by 2022, Namibia will be sustainably managing its environment and be resilient to the impact of climate change".

Relevant websites, web links, and files

www.npc.gov.na, www.met.gov.na

National Target

Target 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

Rationale for the national target

Protected areas are a proven method for safeguarding habitats and species and important ecosystem services. Namibia is home to a diverse range of protected areas including national parks; transfrontier conservation areas; communal conservancies; freehold management units; private game reserves and tourism concessions.

National Parks cover approximately 18 percent of the country's landmass, while the different land uses together bring some 43 percent of Namibia under some form of conservation. Thus, the main focus for Namibia under NBSAP2 is to strengthen and consolidate the management of existing protected areas.

Whilst having large network of terrestrial protection area, the marine protected areas remained few, therefore through the NBSAP 2 a national working group on EBSAs was formed to identified, describe the EBSAs according to the CBD seven (7) criteria and provide recommendation for formal/or legal protection of the EBSAs.

Furthermore, specific emphasis will be placed on improving ecological connectivity; engaging and benefiting local communities; upgrading infrastructure; monitoring and evaluation of management effectiveness; eco-tourism approaches; and building the capacity of protected area staff.

Level of application

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The Ministry of Environment and Tourism has dedicated programmes for protected areas management as well as wildlife management.

Relevant websites, web links, and files
www.met.gov.na, https://cmr.mandela.ac.za/EBSA-Portal

National Target
Target 11: By 2016, threatened and vulnerable species lists are updated and measures implemented by 2019 to improve their conservation status

Rationale for the national target

Threatened and vulnerable plant and animal species are the main focus of this target. Namibia has performed quite well in terms of the in-situ and ex-situ conservation of wildlife and plants. Management and recovery plans have been initiated for a number of species and taxa. Research programmes of the MET's Directorate of Natural Resources Management have driven the in-situ conservation of wildlife while ex-situ conservation of plants has been greatly improved with targeted programmes through the National Plant Genetic Resources Centre (NPGRC).

However, the critical need to strengthen human and infrastructural capacity of institutions such as the NPGRC and the National Museum was identified in NBSAP 2 so that the ecological and management needs and conservation status of threatened and endemic species are better known. Research and knowledge of micro-organisms, many marine organisms and endophytes and extremophytes is also lacking.

The illegal trade of wildlife products and unregulated harvesting of plant and plant products are further major concerns for which improved law enforcement is necessary, particularly in the areas of intelligence, interception and prosecution.

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The Ministry of Environment and Tourism developed species management plans for priority species.

Relevant websites, web links, and files
http://www.met.gov.na, www.nbri.org.na

National Target
Target 12: By 2020, Genetic diversity of cultivated plants and farmed animals is maintained and enhanced

Rationale for the national target
Namibia's plant and animal genetic resources are particularly important for the sustainable development of Namibia's agriculture industry and to improve food security, especially given the predicted impacts of climate change on the agriculture sector. Indigenous breeds of livestock and crops have been replaced to a large extent by exotic breeds and crops which are often poorly adapted to Namibia's harsh farming environment. The Ministry of Agriculture Water and Forestry (MAWF) has sought to address this situation, however this process is at a relatively early stage, especially in terms of livestock breeds. Particular emphasis needs to be placed on characterizing and conserving livestock and crop breeds; breeds inventories and monitoring; and developing and promoting indigenous breeds for adoption by local farmers.

Namibia has developed a legislative framework to promote the safe use of biotechnology and the management of living modified organisms through the Biosafety Act in 2006. The legal and administrative basis to implement this Act has been identified as a challenge as well as human resources and infrastructural capacity, and insufficient awareness of the issue among the wider population. These challenges were targeted directly through the implementation of NBSAP2.

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Relevant websites, web links, and files
http://bch.ncrst.na

National Target
Target 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

Rationale for the national target

Namibia's CBNRM Programme has led to the establishment of 86 communal conservancies on 19.8% of the country's landmass. Communal conservancies are delivering substantial benefits to communities in the form of income generation from tourism and biotrade as well as employment, while also improving wildlife populations across the country. An estimated 23 of these conservancies were financially self-sufficient in 2011 and it was planned to further strengthen conservancies during the lifespan of NBSAP2 to ensure the viability of the Programme over the long term.

Due to Namibia's high level of aridity, wetlands are a critical refuge for biodiversity and provider of essential ecosystem services. Wetland systems in Namibia include marine, estuarine, riverine, lacustrine and palustrine systems. Each of these is affected by a range of stakeholders and require an integrated approach to management. This process is underway in Namibia with the establishment of basin management committees and transboundary river commissions. NBSAP2 will seek to strengthen this more holistic approach to tackle threats such as pollution; alien invasive species; over-abstraction of water and groundwater depletion.

This target also covers the restoration of degraded lands, which offers linkages with Namibia's contribution to a land degradation neutral world and its NAP3 to the UNCCD. The most serious type of degradation requiring rehabilitation and restoration in Namibia is bush-encroached land. An estimated 26 million hectares of land is bush-encroached and the rehabilitation of this land has considerable economic, social and ecological potential.

Many areas home to rich biodiversity and rare and endemic species, including the Namib escarpment and Tsau //Khaeb (Sperrgebiet) area, are also characterized by the presence of minerals. The negative impacts from exploration and mining activities can be severe on these areas. Landscape alteration; soil and water contamination; and the loss of critical habitats can compromise ecosystems and reduce tourism potential in these areas. A national policy on mining in

protected areas was under development to reduce this threat and to promote the restoration of degraded areas. Some good practice examples of restoration have been undertaken in the Tsau //Khaeb (Sperrgebiet) Park through Namdeb. Standards and guidelines are needed to promote a standardised approach to rehabilitation, while instruments such as biodiversity offsets should also be explored during NBSAP2.

Level of application
☒ National/federal

Relevance of the national targets to the Aichi Biodiversity Targets

Main related Aichi Biodiversity Targets

☐ 1 ☐ 6 ☐ 11 ☐ 16
☐ 2 ☐ 7 ☐ 12 ☐ 17
☐ 3 ☐ 8 ☐ 13 ☐ 18
☐ 4 ☐ 9 ☒ 14 ☐ 19
☐ 5 ☐ 10 ☒ 15 ☐ 20

Other related Aichi Biodiversity Targets

☐ 1 ☐ 6 ☒ 11 ☐ 16
☐ 2 ☒ 7 ☐ 12 ☐ 17
☐ 3 ☐ 8 ☐ 13 ☐ 18
☐ 4 ☐ 9 ☐ 14 ☐ 19
☒ 5 ☐ 10 ☐ 15 ☐ 20

Other relevant information

Namibia developed the NBSAP 2 through a specialised national committee comprised of stakeholders that are directly and/or indirectly implementing biodiversity and natural resources management. The specialised national committee convened national workshops throughout the country to ensure contributions from all relevant sectors, including representatives of indigenous peoples and local communities, were captured during the formulation of the 17 national targets.

Namibia established its LDN targets in 2015 and has also identified restoration targets in its Nationally Determined Contribution.

Relevant websites, web links, and files
www.met.gov.na

National Target
Target 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

Namibia is known to be rich in indigenous plants and other biological resources. The implementation of domestic legislation was identified as a key focus area of NBSAP2, given the potential of ABS to unlock the opportunities from biotrade and bioprospecting for local communities.

The establishment and operationalization of a permanent Competent National Authority on ABS to replace the Interim Bioprospecting Committee was also identified as a key step towards promoting and regulating biotrade and bioprospecting and the negotiation of ABS agreements

Level of application
☒ National/federal

Relevance of the national targets to the Aichi Biodiversity Targets

Main related Aichi Biodiversity Targets

☐ 1	☐ 6	☐ 11	☒ 16
☐ 2	☐ 7	☐ 12	☐ 17
☐ 3	☐ 8	☐ 13	☒ 18
☐ 4	☐ 9	☐ 14	☐ 19
☐ 5	☐ 10	☐ 15	☐ 20

Other related Aichi Biodiversity Targets

☐ 1	☐ 6	☐ 11	☐ 16
☐ 2	☒ 7	☐ 12	☐ 17
☐ 3	☐ 8	☒ 13	☐ 18
☐ 4	☐ 9	☐ 14	☐ 19
☐ 5	☐ 10	☐ 15	☐ 20

Other relevant information
Namibia developed the NBSAP 2 through a specialised national committee comprised of stakeholders that are directly and/or indirectly implementing biodiversity and natural resources management. The specialised national committee convened national workshops throughout the country to ensure contributions from all relevant sectors, including representatives of indigenous peoples and local communities, were captured during the formulation of the 17 national targets.

This target is being addressed through the development of domestic ABS legislation, which was signed into law in 2017.

Relevant websites, web links, and files
www.met.gov.na

National Target
Target 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 recognized, respected and promoted

Rationale for the national target

Traditional Authorities have a key role to play in the management of natural resources in Namibia with the Traditional Authorities Act of 2000 giving them the mandate to ensure that members of their communities use natural resources in a manner that conserves the environment and maintains ecosystems. Traditional knowledge, referring to the knowledge, innovations and practices of indigenous and local communities relating to biodiversity, has also helped to preserve, maintain and increase biodiversity over centuries in Namibia. Traditional knowledge has also played a key role in facilitating the development of new products from biodiversity and has helped scientists to understand biodiversity.

Thus, traditional knowledge of Namibian communities needs to be carefully harnessed and regulated so that these communities benefit to a greater extent from their biodiversity-related expertise. The development of bio-cultural protocols; systems to protect and document traditional practices; the incorporation of traditional resource management approaches into school and tertiary curricula; and the further empowerment of Traditional Authorities over issues of biodiversity were identified as priority activities in the implementation of NBSAP2.

Level of application
☒ National/federal

Relevance of the national targets to the Aichi Biodiversity Targets

Main related Aichi Biodiversity Targets

☐ 1 ☐ 6 ☐ 11 ☐ 16
☐ 2 ☐ 7 ☐ 12 ☒ 17
☐ 3 ☐ 8 ☐ 13 ☐ 18
☐ 4 ☐ 9 ☐ 14 ☐ 19
☐ 5 ☐ 10 ☐ 15 ☐ 20

Other related Aichi Biodiversity Targets

☐ 1 ☐ 6 ☐ 11 ☒ 16
☐ 2 ☐ 7 ☐ 12 ☐ 17
☐ 3 ☐ 8 ☒ 13 ☐ 18
☐ 4 ☐ 9 ☐ 14 ☐ 19
☐ 5 ☐ 10 ☐ 15 ☐ 20

Other relevant information

Namibia developed the NBSAP 2 through a specialised national committee comprised of stakeholders that are directly and/or indirectly implementing biodiversity and natural resources management. The specialised national committee convened national workshops throughout the country to ensure contributions from all relevant sectors, including representatives of indigenous peoples and local communities, were captured during the formulation of the 17 national targets.

Relevant websites, web links, and files

National Target
Target 16: By 2022, knowledge, science base and technologies relating to biodiversity and ecosystem management are improved and made relevant to political decision-makers

Rationale for the national target

Namibia's National Commission on Research, Science and Technology (NCRST) was established in 2012 to coordinate, monitor and supervise research, science and technology and to provide policy guidance to the research, science and technology innovation systems in Namibia. The NCRST was also tasked to facilitate the establishment of the National Research, Science and Technology Fund.

The NCRST is represented on the NBSAP2 Steering Committee and, research, as a critical tool for the management of biodiversity, is promoted through the NCRST, in the following areas:

- Monitoring of natural resources, including marine, forest and wildlife resources (with the full involvement of communities) to guide sustainable utilisation;
- Taxonomy to improve knowledge of unknown or little known species (including those which may be of commercial use) such as microbial organisms, extremophytes, endophytes and marine organisms;
- Product testing and quality assurance and standards development;

- Innovation and the development of new biodiversity-based products;
- Development of new adaptive approaches to fisheries and land management.

Research and science relating to biodiversity is also undertaken and supported through the Ministry of Environment and Tourism, Environmental Investment Fund, Gobabeb Research and Training Center and the Namibian Chamber of Environment.

Modalities to communicate relevant research findings to policy-makers, through a science policy interface mechanism, are being explored in the NBSAP2.

Level of application
☒ National/federal

Relevance of the national targets to the Aichi Biodiversity Targets

Main related Aichi Biodiversity Targets

☐ 1 ☐ 6 ☐ 11 ☐ 16
☐ 2 ☐ 7 ☐ 12 ☐ 17
☐ 3 ☐ 8 ☐ 13 ☐ 18
☐ 4 ☐ 9 ☐ 14 ☒ 19
☐ 5 ☐ 10 ☐ 15 ☐ 20

Other related Aichi Biodiversity Targets

☐ 1 ☐ 6 ☐ 11 ☐ 16
☐ 2 ☐ 7 ☒ 12 ☐ 17
☐ 3 ☐ 8 ☒ 13 ☐ 18
☐ 4 ☐ 9 ☒ 14 ☐ 19
☐ 5 ☐ 10 ☒ 15 ☐ 20

Other relevant information

Namibia developed the NBSAP 2 through a specialised national committee comprised of stakeholders that are directly and/or indirectly implementing biodiversity and natural resources management. The specialised national committee convened national workshops throughout the country to ensure contributions from all relevant sectors, including representatives of indigenous peoples and local communities, were captured during the formulation of the 17 national targets.

Relevant websites, web links, and files
www.ncrst.na, www.met.gov.na, www.eif.org.na, www.gobabebtrc.org, www.n-c-e.org

National Target
Target 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

Rationale for the national target

Namibia is committed through NBSAP2 to implementing decision XI/5 of UNCBD COP11 in Hyderabad, India which called on governments to implement the following measures among others:

- Identify and seek funding support from diverse sources including regional and international donor agencies, foundations and, as appropriate, through private- sector involvement;

- Establish strategic partnerships with other Parties and other Governments and with various organizations, regional bodies or centres of excellence with a view to pooling resources and/or widening opportunities and possibilities for mobilizing resources from various sources;
- Identify and maximize opportunities for technical cooperation with regional and international organizations, institutions and development assistance agencies;
- Ensure efficient use of available resources and adopt cost-effective approaches to capacity-building.

Level of application
☒ National/federal

Relevance of the national targets to the Aichi Biodiversity Targets

Main related Aichi Biodiversity Targets

☐ 1	☐ 6	☐ 11	☐ 16
☐ 2	☐ 7	☐ 12	☐ 17
☐ 3	☐ 8	☐ 13	☐ 18
☐ 4	☐ 9	☐ 14	☐ 19
☐ 5	☐ 10	☐ 15	☒ 20

Other related Aichi Biodiversity Targets

☐ 1	☐ 6	☐ 11	☐ 16
☒ 2	☐ 7	☐ 12	☐ 17
☒ 3	☐ 8	☐ 13	☐ 18
☒ 4	☐ 9	☐ 14	☐ 19
☐ 5	☐ 10	☐ 15	☐ 20

Other relevant information

Namibia developed the NBSAP 2 through a specialised national committee comprised of stakeholders that are directly and/or indirectly implementing biodiversity and natural resources management. The specialised national committee convened national workshops throughout the country to ensure the contribution from all relevant sectors, including representatives of indigenous peoples and local communities, were captured during the formulation of the 17 national targets.

This target is driving the development of the Biodiversity Resource Mobilization Strategy.

Relevant websites, web links, and files
https://www.eif.org.na/, http://www.met.gov.na, https://resmob.org.

Section II. Implementation measures taken, assessment of their effectiveness, associated obstacles and scientific and technical needs to achieve national targets

Implementation measures taken, assessment of their effectiveness, associated obstacles and scientific and technical needs to achieve national targets

Describe a measure taken to contribute to the implementation of your country's national biodiversity strategy and action plan

Awareness Raising Initiatives

During the period under review, the Ministry finalized the Environmental Education Policy for Sustainable Development as well as the Communication, Education and Public Awareness Strategy on environmental issues. Both the Policy and CEPA Strategy outline interventions to stimulate and engage people to conserve biodiversity and to sustainably use natural resources.

Youth and Environment Summits have been held annually since 2013. The main goals of these Summits are to expose Grade 11 and 12 learners to scientific processes, fieldwork and current leading topics in environmental science, to inspire pupils to explore future endeavors in scientific research and career opportunities in the environmental field as well as to promote critical thinking, scientific inquiry and observation skills. Each year, approximately 30 learners are intensively trained on research themes of international salience.

Global environmental days on wildlife, forestry (arbor day), biodiversity, desertification and environment are commemorated annually and target youth and particularly school children.

The National Youth Coalition on Climate Change is active and is a member of the National Climate Change Committee. Representatives of the Coalition are often supported to participate in international conferences such as those linked to the United Nations Framework Convention on Climate Change.

The Biosafety Clearing House (BCH) Mechanism was operationalized. It is the main tool being used by the Biosafety Council to communicate all information relating to Namibia's decisions regarding GMOs and LMOs. It contains GMO-related information including existing legislation; proposed regulations on GMO use as food or for feed and processing; environmental release and contained use; as well as information required by parties for the advanced informed agreement procedure for Namibia.

Namibia, through a partnership between the Sustainable Development Advisory Council and the Environmental Investment Fund, has also hosted two editions of the Sustainable Development Awards to reward outstanding efforts in the area of biodiversity conservation amongst others.

The Ministry of Environment and Tourism continues to run environmental education centers at Etosha, Waterberg and Ontanda which offer practical education programmes for learners at heavily subsidized rates. These serve as catalysts for countrywide environmental and biodiversity awareness and there are also more than 40 Environmental Clubs in the country.

A first environmental awareness survey has been developed and will be undertaken in 2019.

For the implementation measure, please indicate to which national or Aichi Biodiversity Target(s) it contributes

Target 1
"By 2020, at least 75% of surveyed key target groups know the meaning of biodiversity and can identify important reasons for biodiversity conservation"

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes:

☐ Measure taken has been effective
☒ Measure taken has been partially effective
☐ Measure taken has been ineffective

☐ Unknown

Please explain the selection and where possible indicate the tools or methodology used for the assessment of effectiveness above

The NBSAP 2 steering committee members submit quarterly implementation reports to the NBSAP2 Secretariat, which reviews these reports. The committee also recently convened a meeting to review the 17 targets and the Aichi Biodiversity Target Poster. Each lead institution that implements a specific target provides updates on major progress made on that particular target and assessments were then carried out based on this information.

The development of the CEPA strategy and successful commemoration of International Biodiversity Day are considered significant strides towards achieving target 1.

Relevant websites, web links and files
www.met.gov.na, www.gobabebtrc.org, www.sdacnamibia.org

Other relevant information
None

Relevant websites, web links and files
As above

Obstacles and scientific and technical needs related to the measure taken: Please describe what obstacles have been encountered and any scientific and technical needs for addressing these, including technical and scientific cooperation, capacity development activities or the need for guidance materials.

Under target 1, Namibia targeted to conduct a national survey (such as Biodiversity Barometer) of targeted stakeholders to assess levels of understanding of biodiversity before 2019. This has not been undertaken due to the lack of financial means and scientific and technical expertise. However a concept and draft survey were developed in 2018 and it is planned to carry out the survey in 2019. Namibia would benefit from the experiences of other countries that have undertaken such a survey.

Relevant websites, web links and files
None.

Implementation measures taken, assessment of their effectiveness, associated obstacles and scientific and technical needs to achieve national targets

Describe a measure taken to contribute to the implementation of your country's national biodiversity strategy and action plan

Demonstrating the Economics of Ecosystems and Biodiversity
As part of the NBSAP2, the Namibian Government implemented the Resource Mobilisation for the Biodiversity Strategy of Namibia Project in partnership with the GIZ. The overarching project goal was to improve Namibia's capacity to mobilise financial, human, technical and knowledge-based resources for biodiversity conservation, specifically to support the implementation of the objectives outlined in the NBSAP 2.

Namibia undertook a national study on The Economics of Ecosystems and Biodiversity (TEEB), which was based on an Ecosystem Inventory of Namibia scoping study. The TEEB study delineated ecosystem services and their value across Namibia to inform potential financial mechanisms through which critical investments can be made. Key highlights of the study to improve biodiversity finance were drawn from the three priority and focus sectors:

1. Protected Areas – Namibia's fees to enter National Parks are the lowest compared to others in the SADC region. There is significant potential to increase the park entry fees so that they are re-invested in parks maintenance and upgrading.
2. Community Conservancies – Payment for ecosystem services in communal conservancies is a feasible option to incentivize conservation. This can also be financed by a tourist levy on international flights.
3. Wildlife use on private farms – On freehold land, wildlife friendly rangeland management should be incentivized though the introduction of eco-labels.

The biodiversity expenditure review report was completed. These studies estimated that the benefits provided by nature exceed N$13 billion ($1 billion USD) in value per year to Namibia. It was estimated that Namibia spends only slightly more than N$1 billion per year on biodiversity. To fully achieve the national biodiversity targets, it was concluded that Namibia needs to double its investment in biodiversity.

A study on re-costing the NBSAP 2 was also completed. The abovementioned study revealed that there was a short fall N$2.6 billion to implement the first half of the strategic action plan of 2013 to 2017 and N$4.8 billion is needed to complete the final 5 years of the strategy. The aforementioned financial figures are far more than the initial planned budget of N$606 million for the 10 years implementation period.

Each of these studies were presented at a high level biodiversity financing meeting in July 2018, which involved the CBD Executive Secretary and senior Government policy makers.

The Environmental Economics Network of Namibia (EENN), a not for profit member governed network dedicated to advancing environmental economics in Namibia was established in 2015. EENN has conducted thirteen public presentations (*After-Work-Talks*) to create awareness on the aforesaid matters.

Namibia continued to conduct natural capital accounts in accordance with the SEEA framework. A study on natural resources account was conducted for eight main commercial fish to inform the Fisheries Account in 2016. The wildlife account was updated in 2015, but has not yet been published due by outstanding data on wildlife sales. The water account was also updated in 2015.

It is encouraging that biodiversity conservation and the sustainable use of natural resources was mainstreamed into Namibia's Fifth National Development Plan (NDP 5 2017-2022)

For the implementation measure, please indicate to which national or Aichi Biodiversity Target(s) it contributes

Target 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"

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes:

☐ Measure taken has been effective
☒ Measure taken has been partially effective
☐ Measure taken has been ineffective
☐ Unknown

Please explain the selection and where possible indicate the tools or methodology used for the assessment of effectiveness above

The NBSAP 2 steering committee members submit quarterly implementation reports to the NBSAP2 Secretariat, which reviews these reports. The committee also recently convened a meeting to review the 17 targets and the Aichi Biodiversity Target Poster. Each lead institution that implements a specific target provides updates on major progress made on that particular target and assessments were then carried out based on this information.

Considerable progress on this target was made in the following areas:

- Baseline Assessment of Economic Instruments for Biodiversity Conservation in Namibia was completed in 2017.
- Baseline of Biodiversity Expenditure in Namibia was completed in 2017.
- Completion of Ecosystem Inventory of Namibia and the Economics of Ecosystems and Biodiversity studies.
- Formulation of Biodiversity Resource Mobilization Strategy.
- Training on economic valuation of ecosystem services with local experts, students as well members of the Parliamentary Standing Committee on the Management of Natural Resources.
- High level briefing session on biodiversity financing was held in August 2018.
- Three summer schools were conducted in the area of Ecosystem services and Resource Economics with the Namibia University of Science and Technology.
- Training on environmental fiscal reform was conducted with local experts, students and potential trainers.

Relevant websites, web links and files
https://resmob.org

Other relevant information
See the link to the TEEB and other studies on the web link https://resmob.org

Relevant websites, web links and files
https://allafrica.com/stories/201810010394.html

Obstacles and scientific and technical needs related to the measure taken:

Target 2 presented no major obstacles to Namibia however the next major step is the implementation of the financing instruments identified in the Biodiversity Resource Mobilization Strategy to increase investment in biodiversity conservation. Further information is included on this aspect under Target 17.

Relevant websites, web links and files
None.

Implementation measures taken, assessment of their effectiveness, associated obstacles and scientific and technical needs to achieve national targets

Describe a measure taken to contribute to the implementation of your country's national biodiversity strategy and action plan

Introduction of Environmental Levies on harmful products

The Ministry of Environment and Tourism (MET) and the Environmental Investment Fund (EIF) has identified various potential products/sectors upon which to impose environmental levies. This includes selected electronic and electrical products, all forms of mechanical oils and lubricants, incandescent bulbs as well as various types of batteries. Cabinet directed that 30% of the revenue from these levies is accrued to the EIF for it to support environment-related projects. This commenced in 2018.

Cabinet also adopted a resolution to introduce levies on the usage of light weight plastic bags in 2018. It is envisaged that this will gradually lead to the phase out of plastic bags and the revenue accrued from this levy will be re-invested into waste management and recycling projects. A ban on the use of plastic bags in protected areas was brought into effect in 2018.

Inventories of PCBs, pesticides and “new” Persistent Organic Pollutants also commenced in 2018 with a view to identifying interventions to improve their management.

For the implementation measure, please indicate to which national or Aichi Biodiversity Target(s) it contributes

Target 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”

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes:

☐ Measure taken has been effective
☒ Measure taken has been partially effective
☐ Measure taken has been ineffective
☐ Unknown

Please explain the selection and where possible indicate the tools or methodology used for the assessment of effectiveness above

The NBSAP 2 steering committee members submit quarterly implementation reports to the NBSAP2 Secretariat, which reviews these reports. The committee also recently convened a meeting to review the 17 targets and the Aichi Biodiversity Target Poster. Each lead institution that implements a specific target provides updates on major progress made on that particular target and assessments were then carried out based on this information.

The introduction of levies to reduce usage of harmful products has been a significant success as has been the directive to re-invest some of this revenue into environmental protection.

Other relevant information

See the website and web links from the EIF (www.eif.org.na)

Relevant websites, web links and files

http://www.nla.org.na/fileadmin/user_upload/11_Authorities/Government_Gazette_No_6019_Environmental_Levy_01.pdf
https://www.namibian.com.na/152861/archive-read/Environmental-tax-to-start-on-Monday
https://www.eif.org.na

Obstacles and scientific and technical needs related to the measure taken:

One of the main obstacles has been in ensuring that revenue from the environmental levies is re-invested into environmental protection projects. This has now partially been achieved. Namibia would benefit from exhanges with countries embarking on similar environmental fiscal reform processes.

Relevant websites, web links and files

None.

Implementation measures taken, assessment of their effectiveness, associated obstacles and scientific and technical needs to achieve national targets

Describe a measure taken to contribute to the implementation of your country’s national biodiversity strategy and action plan

Improved Sectoral Coordination

Various measures were undertaken to improve sectoral coordination and planning on environmental matters.

Namibia has applied integrated land use planning at the regional level through the development of Integrated Regional Land Use Plans (IRLUPs) for its regions. Land use planning is a cross-sectoral and integrative decision-making process that facilitates the allocation of land to the uses that give the greatest sustainable benefit. Modern concepts of land use planning consider the integration of different perspectives, needs and restrictions in the land use planning process - this approach to land use planning is called Integrated Land Use Planning (ILUP).

ILUP is the only way to make the most effective use of land and natural resources, to link social and economic development with environmental protection, to minimise land-related conflicts and to achieve the objectives of sustainable development. Strategic Environmental Assessments (SEAs) are also integrated within the IRLUPs. IRLUPs were developed for the following regions: Hardap, //Kharas, Kavango West, Kunene, Omaheke, Ohangwena, Zambezi and Oshikoto.

In order to improve management of the coastal zone, an Integrated Coastal Zone Management Bill was drafted and consultations were undertaken. This Bill had been approved in principle by Cabinet but not been enacted by the time of reporting.

With the intention to use it as a decision support tool for policy makers, the process to develop a second Integrated State of Environment Report commenced. By the time of reporting, a draft compendium of environmental statistics had been compiled according to the UN framework on environmental statistics. This will form the basis of the second State of Environment Report.

More than 19 Important Bird Area (IBAs) are designated by BirdLife International in Namibia which totals 108,400 km^2 equivalent to about 13% of the land area. 17 of the sites are important for species of global conservation concern. More than 40 important Plant Areas have preliminarily been identified (NBRI weblink).

For the implementation measure, please indicate to which national or Aichi Biodiversity Target(s) it contributes

Target 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

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes:

☐ Measure taken has been effective
☒ Measure taken has been partially effective
☐ Measure taken has been ineffective
☐ Unknown

Please explain the selection and where possible indicate the tools or methodology used for the assessment of effectiveness above

The NBSAP 2 steering committee members submit quarterly implementation reports to the NBSAP2 Secretariat, which reviews these reports. The committee also recently convened a meeting to review the 17 targets and the Aichi Biodiversity Target Poster. Each lead institution that implements a specific target provides updates on major progress made on that particular target and assessments were then carried out based on this information.

The following milestones were considered in this assessment:

- Development of IRLUPs and SEAs for regions
- Development of draft ICZM Bill
- Operationalization of the Sustainable Development Advisory Council
- Development of draft Integrated State of the Environment Report (ISOER)
- Identification of Important Bird Areas (19) by Bird International in Namibia and Important Plant Areas

Other relevant information
None.

Relevant websites, web links and files
http://www.nbri.org.na
www.sdacnamibia.org
www.mlr.gov.na

Obstacles and scientific and technical needs related to the measure taken:

- Lack of guidelines and regulations for the implementation of IRLUPs
- Continued need for improved inter-sectoral cooperation

Relevant websites, web links and files

http://www.mlr.gov.na/ca/irlups?p_p_id=58&p_p_lifecycle=0&p_p_state=maximized&p_p_mode=view&saveLastPath=false&_58_struts_action=%2Flogin%2Flogin
http://www.the-eis.com

Implementation measures taken, assessment of their effectiveness, associated obstacles and scientific and technical needs to achieve national targets

Describe a measure taken to contribute to the implementation of your country's national biodiversity strategy and action plan

Management of inland fisheries and marine resources

Marine Resources
Namibia has 7 main commercial marine species. These species are managed based on right allocation and determination of Total Allowable Catch (TAC). Hake, Horse Mackerel, Pilchard, Monk, Seal and Crabs are managed through annual scientific surveys that determine the Total Allowable Catch while the TAC for the Rock Lobster is determined through effort or catch indices, Catch Per Unit Effort (CPUE). The scientists present their finding to the Marine Resource Advisory Committee (MRAC), for recommendation to the Minister to set the TAC. A moratorium was placed on the harvesting of Pilchards for purposes of stock recovery. The Ministry has developed Management Plans for all commercial species.

The Namibian coastline is controlled by fisheries inspector for enforcement. Inspections are done from two main ports Lüderitz and Walvis Bay. From 2012-2018, a total of 3,357 coastal patrol were undertaken and 52 road blocks were set up for joint inspections with the Namibian police. During that period, 648 illegal activities were reported and fines and warrants of arrest were issued.

Onshore monitoring takes place at harbours and at factories and at midwater during transfer of fish to refer vessels. At Walvis, 1,954 landings were inspected since from 2013-2018.

The conservation of sea birds is implemented through the National Plan of Action (2016). About 75% of all hake vessels carry necessary bird scaring devices. The effectiveness of these devices is being reviewed with the aim for them to be installed on all pelagic longline vessels.

Marine Spatial Planning and EBSAs
Namibia and its regional partners (Angola and South Africa) are implementing Marine Spatial Planning (MSP) under the framework of the Benguela Current Convention (BCC). Namibia defines MSP as a participative decision-making process that guides where and when human activities occur in the marine space.

The process is being implemented through an Inter-Ministerial National Technical Working Group (NWG) which developed and adopted strategies on Data and Information Management as well as Stakeholder Engagement which assisted the practical implementation of the MSP process in Namibia. To ensure coordination across national jurisdictions with the bordering countries, a Regional Technical Working Group under the BCC developed an agreed MSP strategy to ensure consistency and coherence in MSP across the three BCC Parties.

The NWG has successfully compiled a Current Status Report (CSR) as a baseline report, which identifies key issues and conflicts needing to be addressed through MSP. In April 2018 the NWG organized a multi-sector stakeholder workshop to verify and validate the information and data used in the CSR. The workshop was well attended by 89 stakeholders representing civil society groups, non-governmental organisations, industries and governmental agencies.

The NWG has commenced with the actual planning process for the first Marine Spatial Plan which will cover the central ocean space. By mid-year June 2019 the first draft of the plan is expected to be ready for consultation and verification with stakeholders.

Namibia is progressing well with the process of identifying new areas that meet the Ecologically or Biologically Significant Marine Area (EBSA) criteria and updating the existing recognized EBSAs within the marine space, incorporating new scientific knowledge. The process is implemented through an EBSA Inter-Ministerial Task Team (EBSA TT). Namibia has identified seven (7) areas as meeting the EBSA criteria in total. Four (4) areas are within national jurisdictions and three (3) are trans-boundary (i.e. two shared with South Africa and one with Angola). Among the seven (7) EBSAs, two are newly identified to meet the EBSA criteria. The five (5) existing EBSAs were reviewed and boundaries and descriptions updated and refined.

The new and updated EBSAs were presented to the NBSAP Steering Committee in April 2018 and were approved for submission to the Regional EBSA Working Group under the CBD for peer-review and validation. In July 2018 the EBSAs were presented at regional level for scrutiny and validation. This meeting was implemented together with experts from the CBD's EBSA informal advisory group to ensure international standards and quality. The suggestions made during the EBSA RWG meeting have been incorporated in the EBSA descriptions, which are now ready for submission to the CBD. The EBSA process was also presented at a side event during COP 14 in Egypt in November 2018 and received positive feedback by the international community.

The EBSAs will be fed into the MSP process with agreed conservation and management measures in the plan's regulations.

Inland Fisheries

The Ministry of Fisheries and Marine Resources (MFMR), through stakeholder consultations and research, developed and gazetted new regulations for the conservation of inland fisheries, which came into effect on 1st December 2016.

The abovementioned regulations are listed as follows:

- **Government Gazette No. 298 of 2016:** Prohibition on issuing of licences for monofilament nets to be used as regulated fishing gear under section 22(3) of the Inland Fisheries Resources Act, 2003 (Act No. 1 of 2003).

- **Government Gazette No. 297 of 2016:** Declaration of Zambezi / Chobe River system as fisheries reserve: The Zambezi / Chobe River system shared with Zambia and Botswana is declared as a fisheries reserve for the period 1 December to 28 February every year. The Inland waters of the Zambezi / Chobe River shared with Zambia and Botswana is closed for all the fishing activities, for the mentioned period.

- **Government Gazette No. 298 of 2016:** Declaration of the Kasaya Channel, in the Impalila Conservancy area, of which the geographic boundaries are set out in the Schedule as a fisheries reserve. The fishing activities permitted within the Kasaya Channel Fisheries Reserve and the conditions are set out in the Schedule.

With regard to community fishing areas, a 4 day training workshop was conducted by Dr Clinton Hayand with support from Namibia Nature Foundation (NNF) staff in Rundu from 25-29 June 2018 for MFMR, MET and Non-Governmental Organisations. The training included aspects of CBNRM, supporting legislation, Guidelines for the establishment of Fish

Protected Areas (FPAs), science-based management, law enforcement and developing FPA Management Plans. The discussions indicated a desire to strengthen the supporting legislation.

Two FPAs were gazetted (Sikunga and Impalila conservancies), and eight other fish protection areas were identified and submitted for gazetting. Discussions were held on the possible establishment of FPAs on the Kwando River in the Zambezi region where a frame survey was planned to assess the viability of FPAs within the region. MFMR staff established two community related projects: 1) Monitoring the fish catches from communities around the Kamutjonga village and 2) Socio-economic study on fish usage in the Kamutjonga-Bagani-Divundu area.

The MFMR started with fish ranching experiments in the Makena area next to the Kavango River. Communities have been briefed on the viability of fish ranching and showed an interest in this endeavour.

With regard to compliance and enforcement in inland areas, the Lüderitz office conducted 27 southern inland patrol in the Orange River towards Oranjemund. 36 nets were confiscated and a total of 1,272 fish were confiscated. At Katima Mulilo, 304 land patrols were conducted as well as 150 river patrols. 69 fines were issued for a range of non-compliance issues with 14 drag nets, 25 multi filaments, 15 mosquito nets, 1 shade nets, 2 canoes, and various fishing equipment being confiscated. A joint operation with Namibia police arrested 200 illegal fishermen. 18 awareness campaigns were conducted.

Aquaculture and Mariculture
An aquaculture master plan has been developed and a task team is expected to be established to oversee its implementation. It is reported that EIAs are routinely carried out for all aquaculture-related projects

The MFMR drafted molluscan shellfish sanitation, monitoring and control regulations. However, these regulations are still in a draft format and are not yet finalized. Though, restrictions on fish movement are practiced when disease outbreaks are observed.

The MFMR regularly conducts surveillance of aquatic diseases on annual basis, as listed by the OIE and it takes place during scheduled visits to aquaculture facilities, fish farms, and surveys of perennial rivers and national water reservoirs. Disease surveillance of all aquatic ecosystems are carried out according to the International standards and specifications set forth by the OIE.

For the implementation measure, please indicate to which national or Aichi Biodiversity Target(s) it contributes
Target 5
"By 2022, all living marine and aquatic resources are managed sustainably and guided by the ecosystem approach"

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes:
☐ Measure taken has been effective
☒ Measure taken has been partially effective
☐ Measure taken has been ineffective
☐ Unknown

Please explain the selection and where possible indicate the tools or methodology used for the assessment of effectiveness above
The NBSAP 2 steering committee members submit quarterly implementation reports to the NBSAP2 Secretariat, which reviews these reports. The committee also recently convened a meeting to review the 17 targets and the Aichi Biodiversity Target Poster. Each lead institution that implements a specific target provides updates on major progress made on that particular target and assessments were then carried out based on this information.

Considerable progress was achieved in the following areas:

- New regulations to prevent overfishing in inland fishing areas

- Monitoring of marine fish stocks to determine Total Allowable Catches (TAC)
- The establishment of the MSP national working group
- Identification of new EBSAs

Other relevant information
None.

Relevant websites, web links and files
http://www.benguelacc.org/index.php/en/activities/2016-12-13-09-13-15/msp-workstream/msp-in-namibia

Obstacles and scientific and technical needs related to the measure taken

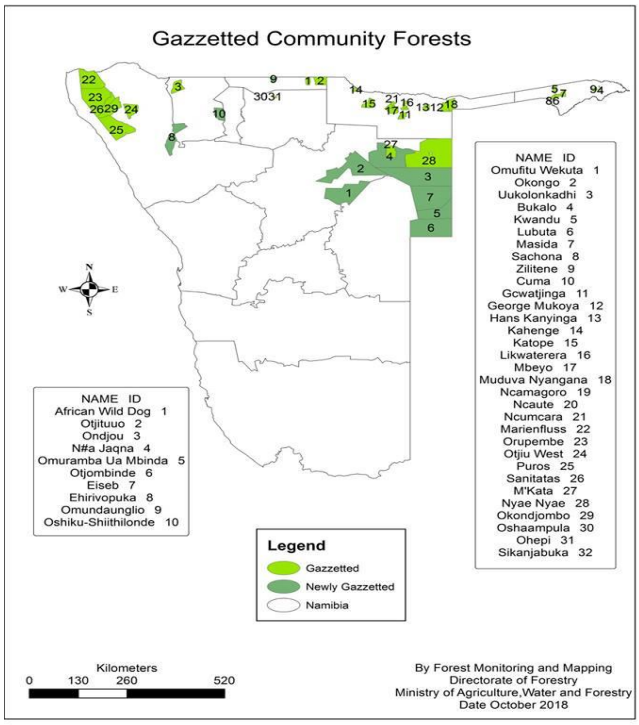
Lack of finances to implement some of the regulations and other activities such as marine research and monitoring present big obstacles to implementing the national target.

Relevant websites, web links and files
www.mfmr.gov.na, www.benguelacc.org

Implementation measures taken, assessment of their effectiveness, associated obstacles and scientific and technical needs to achieve national targets

Describe a measure taken to contribute to the implementation of your country's national biodiversity strategy and action plan

Sustainable Rangeland, Forest Management and Agriculture Initiatives
The Government of the Republic of Namibia has rolled out the CBNRM policy that provides local communities with rights to manage forest resources, through the formation and registration of Community Forests (CFs). At the approval of the NBSAP2 there were 32 gazetted community forests. In 2018, 10 new community forests were gazetted bringing the total number of gazetted community forests to 43. The new 10 Community Forests gazetted are Otshiku-shiIthilonde, Omundaungilo, Otjituuo, Omuramba ua Mbinda, Epukiro, Eiseb, Otjombinde, African Wild Dog, Ehi-rovipuka, Na#jagna and Odjou Community Forests, respectively. This increases the total area for CFs submitted for gazettement from 5.67 million ha to 8,79 million ha in 2018.



Map showing the new and previously gazetted Community Forests.

It was recognized during the formulation of NBSAP 2 that many of Namibia's large scale agricultural schemes had not undertaken EIAs and were operating without EMPs. There were concerns regarding instances of human wildlife conflict at some Green Scheme sites and there were further concerns regarding possible pesticides and fertilizer usage. During the reporting period, EIAs were undertaken for the Namibia Green Scheme Project and Crop Production, Katima farm, Liselo irrigation project and Cape Orchard irrigation. Increasing awareness raising was also carried out to sensitize stakeholders on the need to carry out EIAs for listed activities.

Land degradation and bush encroachment are recognized as major threats to the productivity of agricultural land in Namibia. Concerted efforts have therefore been made to implement the concept of land degradation neutrality and to counteract the problem of bush encroachment.

Namibia conducted a national field data assessment of the three UNCCD indicators namely land cover, net primary productivity and soil organic carbon. Bush density was also added as an indicator. More detailed assessments were carried out in the Otjozondjupa and Omusati regions. The major form of land degradation in Otjozondjupa was bush encroachment. Recommendations to remediate and reverse the infestation of bush encroachment were provided to decision-makers, while five hotspot areas were identified as being most vulnerable to land degradation. On-the-ground interventions to prevent and reverse land degradation at these sites are planned to be implemented through a GEF 6-funded project known as Namibia Integrated Landscape Management Approach for Improving Livelihoods and Environmental Governance to Eradicate Poverty (NILALEG) (2019-2025).

Subsequently a study on the economics of land degradation with particular emphasis on bush encroachment was conducted and provided information regarding the economic losses of uncontrolled bush encroachment. Bush encroachment affects an estimated area of 45 million hectares of the country's land mass and has severe negative consequences on key ecosystem services, especially agricultural productivity and groundwater recharge.

The LDN assessment and the economic study on bush encroachment has prompted Namibia and GIZ to develop and implement the Bush Control and Biomass Utilization (BCBU) project to strategically counteract the bush encroachment problem. To date, the BCBU project has come up with a range of value chain products derived from bush harvesting

including charcoal, wood chips used for energy productions, bush-based animal feed, as well as wood carving and flooring/decking materials.

The BCBU project has also undertaken a SEA on bush harvesting and developed Guidelines for Bush Harvesting that were launched in 2017 to ensure that large scale bush harvesting does not disrupt / disturb the ecological balance. The ultimate aim is to improve the rangeland condition as well as enhancing fauna and flora biological diversity as opposed to dominance of particular invasive species.

For the implementation measure, please indicate to which national or Aichi Biodiversity Target(s) it contributes

Target 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"

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes:

☐ Measure taken has been effective
☒ Measure taken has been partially effective
☐ Measure taken has been ineffective
☐ Unknown

Please explain the selection and where possible indicate the tools or methodology used for the assessment of effectiveness above

The NBSAP 2 steering committee members submit quarterly implementation reports to the NBSAP2 Secretariat, which reviews these reports. The committee also recently convened a meeting to review the 17 targets and the Aichi Biodiversity Target Poster. Each lead institution that implements a specific target provides updates on major progress made on that particular target and assessments were then carried out based on this information.

Significant successes achieved in this area include:

- Gazetting of 10 new Community Forests.
- 2017 Management Effectiveness Assessment Report for Oshaampula, Okongo, Otjiu-West and Uukolonk Community Forests.
- Completion of Forest Inventories.
- Increasing compliance of green scheme projects with the Environmental Management Act.
- SEA on Bush Harvesting and publication of Guidelines for Bush Harvesting.
- Land Degradation Neutrality Assessments and identification of hotspot areas for priority interventions.

Other relevant information

None.

Relevant websites, web links and files

None.

Obstacles and scientific and technical needs related to the measure taken

- Weak institutional capacities to support CBNRM processes (planning, enforcement, research/knowledge, value addition)
- Inadequate support to Sustainable Forest Management technologies on the ground.

Relevant websites, web links and files

https://info.undp.org/docs/pdc/Documents/NAM/Prodoc%20PIMS%204626%20Namibia%20NAFOLA%20UNDP%20Prodoc-%2027%20JUL%202014.docx

Implementation measures taken, assessment of their effectiveness, associated obstacles and scientific and technical needs to achieve national targets

Describe a measure taken to contribute to the implementation of your country's national biodiversity strategy and action plan

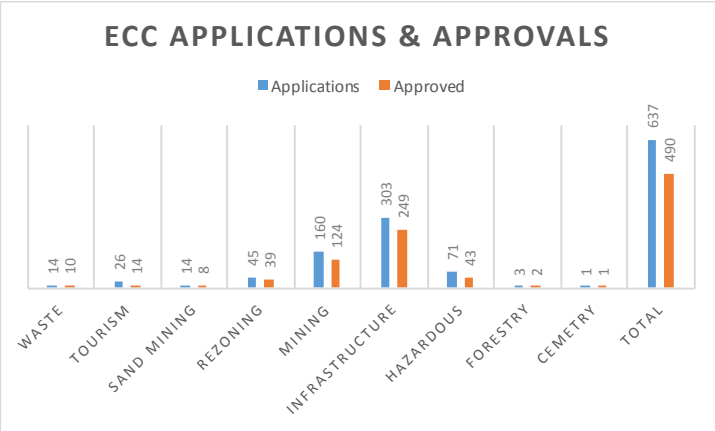
Enforcement of the Environmental Management Act of 2007

The use of EIAs is an important tool to minimize adverse impacts on the environment as outlined in Article 14 of the CBD.

The Environmental Management Act (EMA) was enacted by Parliament in 2007 (Act. No.7 of 2007), came into legal force in 2012 and provides the legal basis for EIAs in Namibia. It therefore has an important role to play in regulating activities which may have harmful impacts on the environment. The list of activities that may not be undertaken without an environmental clearance certificate is published in the Government Gazette No. 4878, dated 6th February 2012. These activities include:

- Energy Generation, Transmission and Storage Activities
- Waste Management, Treatment, Handling and Storage Activities
- Mining and Quarrying Activities
- Forestry Activities
- Land Use and Development Activities
- Tourism Development Activities
- Agriculture and Aquaculture Activities
- Water Resource Developments
- Hazardous Substance Treatment, Handling and Storage
- Infrastructure.

The MET continued to sensitize stakeholders on the need to undertake EIAs for these activities. At the time of NBSAP2 formulation, approximately 100 EIAs were being received annually. This increased to 655 in the 2017/18 financial year.



ECC applications and approvals for the 2017/18 financial year.

A number of high profile cases relating to the implementation of the Environmental Management Act have raised awareness of its importance in protecting ecosystem health and functioning. These have included:

- Application for environmental clearance for marine phosphate mining, which is currently before the High Court after an appeal was made against its granting;
- Investigation into the operations of the Dundee Precious Metals Tsumeb Smelter after complaints were made by residents and workers about air quality, skin rashes and water quality due to the Smelter operations. This resulted in a major project to monitor the environment in the area, to upgrade the technologies applied at the Smelter and improvements to the health and safety operations of the company.
- Moratorium placed on timber harvesting and transportation in November 2018 in response to concerns regarding the environmental impacts from logging operations in the north-eastern part of the country.
- Illegal sand mining - a number of awareness meetings on the issue have been with Traditional Authorities in the communal areas. As a result of these meetings, new procedures were developed and are being applied for sand mining in communal areas. These procedures seek to improve compliance and involve a detailed questionnaire and allow for Traditional Authorities and Regional Councils to be the proponent in cases of sand mining. These procedures will be fully implemented in 2018/19.

Increasing efforts have been made to step up monitoring and compliance with the Environmental Management Act on-the-ground. In 2017/18 , approximately 82 sites were inspected across the country. These covered a wide range of sites including waste disposal sites, mines, sand-mining operations, clinics, hospitals, tourism operations, schools and hostels. A total of 24 compliance orders and notifications were issued during the 2017/18 financial year.

Pollution is a major risk from Namibia's waste disposal sites. With increasing industrialization and urbanization taking place, the issue of waste management has become a critical national concern and was identified as a priority area in Namibia's Fifth National Development Plan. Current waste management practices in Namibia present significant human and environmental health risks and high volumes of litter are now evident across the country, while the majority of Local Authorities are ill-equipped to manage waste in an environmentally sound manner.

In response to this situation and in line with the provisions of the Environmental Management Act, a National Solid Waste Management Strategy was launched in 2018. The Vision of the Strategy is for Namibia to become the leading country in Africa in terms of standards of solid waste management by 2028. It lays out a clear step by step approach for Namibia to achieve the strategic objectives of the Strategy, which are to:

i. To strengthen the institutional, organizational and legal framework for solid waste management, including capacity development;
ii. To install a widespread culture of waste minimization and to expand recycling systems;
iii. To implement formalized solid waste collection and management systems in all populated areas, including under the administration of Regional Councils;
iv. To enforce improvements in municipal waste disposal standards;
v. To plan and implement feasible options for hazardous waste management (includes healthcare waste management).

Namibia also commenced the process to update its National Implementation Plan to the Stockholm Convention and started with new inventories of PCBs, pesticides and "new" Persistent Organic Pollutants in 2018.

In addition to the Environmental Management Act, the following legal instruments are also important for the achievement of the NBSAP2 objectives:

- Integrated Water Resources Management Act (Act No. 11 of 2013)
- Marine Resources Act (Act. No. 27 of 2000)
- Forest Act (Act No. 12 of 2001)
- National Solid Waste Management Strategy (MET, 2018)

For the implementation measure, please indicate to which national or Aichi Biodiversity Target(s) it contributes

Target 7
”By 2022, pollution, including from excess nutrients, has been brought to levels that are not detrimental to biodiversity and ecosystem health and functioning”

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes:

☐ Measure taken has been effective
☒ Measure taken has been partially effective
☐ Measure taken has been ineffective
☐ Unknown

Please explain the selection and where possible indicate the tools or methodology used for the assessment of effectiveness above

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The following milestones were attained:

- National Solid Waste Management Strategy (MET, 2018) and establishment of National Solid Waste Management Advisory Panel. This Strategy seeks to improve standards at waste disposal sites.
- Improved enforcement of the Environmental Management Act to curb harmful activities such as sand mining, timber harvesting as well as pollution from mining activities.
- Ratification of the Minamata Convention.
- Commencement of inventories of PCBs, pesticides and new POPs through the Stockholm Convention.

Other relevant information

None.

Relevant websites, web links and files

None.

Obstacles and scientific and technical needs related to the measure taken

- Good legal instruments, but shortages of funding and technical capacity for implementation.
- Lack of coordination between line ministries in implementing legislation.
- Insufficient compliance and monitoring implementation of environmental management plans.
- Need to develop environmental quality standards.

Relevant websites, web links and files

None.

Implementation measures taken, assessment of their effectiveness, associated obstacles and scientific and technical needs to achieve national targets

Describe a measure taken to contribute to the implementation of your country’s national biodiversity strategy and action plan

Alien Invasive Species

Some follow up measures were undertaken to build on the National Report on Alien Invasive Species of 2004. The alien invasive booklet and poster was updated to include 50 species but there was no funds to publish the booklet.

A citizen science project is to be piloted through the Environmental Information Service, as an ongoing atlas project to create awareness, monitor the spread of alien invasive species and to provide input into the distribution maps to allow for updated distribution maps to be available for the revision of the alien invasive species in 2022.

A project proposal was developed to curb the spread of invasive cacti by means of the introduction of biological agents. The project will be overseen by the Namibian Chamber of the Environment (NCE) and the Botanical Society of Namibia. The Biological agents will be introduced by an international expert on biological control agents. An Environmental Impact Assessment (EIA) is currently being conducted to assess the potential impact of use of biological control agents for controlling AIS in selected localities. Trial sites around Windhoek and in the north east of Namibia were identified for cacti biocontrol using cochineal agents.

Monitoring activities continued with regard to the *Salvinia molesta* aquatic alien plant in the four rivers system in the Zambezi region, however at a slow pace due to budgetary constraint, as well as for Prosopis species along the Fish River.

Following are some of important links to track the implementation of target 8:
- ATLAS of Alien Plants App was developed (http://www.the-eis.com/atlas/?q=atlas-of-alien-plants)
- Poster including a map of Prosopis invasion in Namibia was created (http://www.the-eis.com/data/literature/GIZ%20Biomass%20Project_Encroacher%20species_Poster.pdf)
- Quick guide to invasive cacti in Namibia (http://www.the-eis.com/atlas/sites/default/files/QUICKGUIDE%20TO%20INVASIVE%20CACTI%20IN%20NAMIBIA.pdf)

For the implementation measure, please indicate to which national or Aichi Biodiversity Target(s) it contributes
Target 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"

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes:
☐ Measure taken has been effective
☐ Measure taken has been partially effective
☒ Measure taken has been ineffective
☐ Unknown

Please explain the selection and where possible indicate the tools or methodology used for the assessment of effectiveness above

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Due to lack of funding, Namibia is yet to update previous work done on National Invasive Alien Species (IAS) and to develop management measures for problem species.

Other relevant information
None.

Relevant websites, web links and files
None.

Obstacles and scientific and technical needs related to the measure taken
Alien invasive species are a challenge that cut across a variety of institutions and mandates. This challenge is yet to comprehensively addressed.

Implementation measures taken, assessment of their effectiveness, associated obstacles and scientific and technical needs to achieve national targets

Describe a measure taken to contribute to the implementation of your country's national biodiversity strategy and action plan

National Climate Change Strategy and Action Plan (2013 – 2020)

National Climate Change Strategy and Action Plan (NCCSAP) was developed in order to implement the National Policy on Climate Change. Furthermore, it addresses the growing concerns focusing on climate variability and climate change risks as well as impacts affecting Namibia's social, environmental and economic development potential. The NCCSAP aims to build Namibia's adaptive and mitigation capacities by identifying potential adaptation options to pursue opportunities towards low carbon development pathway.

The NCCSAP also helps to clarify national goals and objectives regarding climate change and lay out a plan for implementing, reporting and monitoring a series of priority activities in pursuit of this aim. Finally, it enables Namibia to be more active participant to global effort to combat climate change. The NCCSAP has assisted Namibia to coordinate climate change adaptation and mitigation initiatives and it has been able to mobilize a number of significant projects through the Green Climate Fund and other sources, which are under implementation such as:

1. Climate Resilient Agriculture in three of the Vulnerable Extreme northern crop-growing regions (CRAVE) Project (GCF-funded)
2. Empower to Adapt: creating Climate-Change Resilient Livelihoods through Community-Based Natural Resource Management in Namibia (GCF-funded). The project is being implemented countrywide and is expected to benefit more than 15,000 people directly and 61 000 indirectly.
3. Improving rangeland and ecosystem management practices of smallholder farmers under conditions of climate change in Sesfontein, Fransfontein, and Warmquelle areas (GCF-funded).
4. Pilot Rural Desalination Plants using renewable power and membrane technology (Adaptation Fund).
5. Scaling up Community Resilience to Climate Change (GEF-funded).

For the implementation measure, please indicate to which national or Aichi Biodiversity Target(s) it contributes
Target 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

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes:
☐ Measure taken has been effective
☒ Measure taken has been partially effective
☐ Measure taken has been ineffective
☐ Unknown

Please explain the selection and where possible indicate the tools or methodology used for the assessment of effectiveness above

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Biodiversity Target Poster. Each lead institution that implements a specific target provides updates on major progress made on that particular target and assessments were then carried out based on this information.

Major milestones have included the approval of the above-mentioned projects and their implementation.

Other relevant information
None.

Relevant websites, web links and files
https://www.eif.org.na/cbnrm/#applications

Obstacles and scientific and technical needs related to the measure taken

- Lack of capacity for Community-Based Organizations to submit proposals for EDA grants.
- Severe and frequent drought events.
- Water shortages and the need for alternative supply sources.
- Lack of large scale investment in renewable energy development.

Relevant websites, web links and files
http://unfccc.int/files/adaptation/application/pdf/namibia-bur2_10_november_2016_.pdf
http://www.met.gov.na/files/files/National%20Climate%20Change%20Strategy%20and%20Action%20Plan%20brochure%202013%20-%202020.pdf

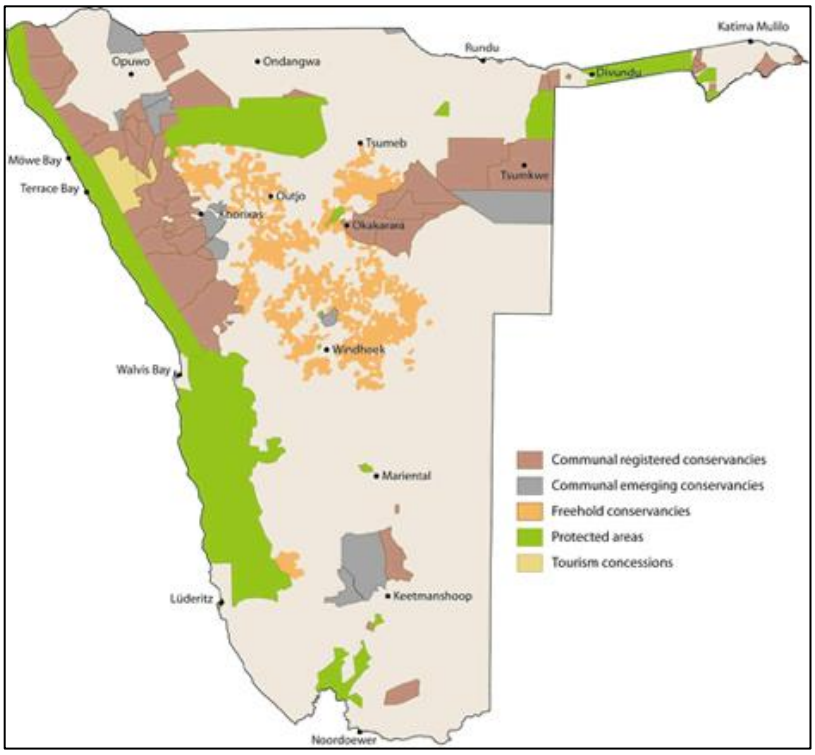
Implementation measures taken, assessment of their effectiveness, associated obstacles and scientific and technical needs to achieve national targets

Describe a measure taken to contribute to the implementation of your country's national biodiversity strategy and action plan

Improving Management of Protected Areas
Namibia's has a rich biodiversity endowment, high species richness, habitat diversity, biological distinctiveness, and an endemism hotspot for many species, which are of global significance.

To protect the rich biodiversity endowment, Namibia has established an impressive system of 21 state-managed Protected Areas (PAs) with a goal of protecting and conserving biological diversity, and also generate much needed revenue through tourism.

The Protected Areas (PAs) are being complemented by a strong Community-Based Natural Resource Management (CBNRM) through communal conservancies. In total, the state managed Protected Areas and community conservancies covers 44% of the country's land area (terrestrial). In-addition the protected areas also covers the entire coastline (about 1,570 km), stretching from the Orange River mouth in the south (border with South Africa) to the Kunene River mouth in the north (border with Angola). The series of protected areas covering the coastline is unique and includes the Sossusvlei-Namib World Heritage Site.



More than > 44% of Namibia is under some form of Protection

Namibia also has a marine protected area, which covers a stretch of about 400 kilometers from Meob Bay (north of Lüderitz) to Chaimas Bay (south of Lüderitz) and 30 kilometers into the Atlantic Ocean, covering a total surface area of 12,000 square kilometers. Namibia's has a rich marine ecosystem, as a result of the Benguela upwelling system, which brings the nutrient rich waters from around 200–300 m depth and fuel high rates of phytoplankton growth, making it one of the most productive marine ecosystems in the world.

Park Management Plans

National Parks / Protected areas are managed in accordance with Park Management Plans. Management plans are fixed term strategic documents (e.g 5 years), with specific management objectives, outputs, targets and key performance indicators. The indicators have been developed in accordance with the S-M-A-R-T criteria (Specific – Measurable – Achievable – Relevant and time-bound, to enable progress tracking and assessment of whether the protected areas were meeting their objectives targets or not.

For the period 2017/2018 financial year, MET reported that 11 out of 21 National parks have valid and are managed in accordance with the park management plans. For the other 10 National parks, the management plans have expired (exceeded the implementation period) and were therefore subjected to review.

Incident Book Monitoring System

The event book system is a grassroots natural resource monitoring system that is designed to collect information and record observations on a daily basis. Over time, the information collected becomes data and enables the park management to measure and assess if the park targets and objectives were being met. In essence, the IBMS enable the park management to understanding of what is going on in the park and whether the interventions (park activities) were yielding the desired results and the impact against the outputs and targets. If the IBMS indicates that the park activities were not yielding the desired results, it signals a need for new interventions as adaptive management measures.

The IBMS has been adopted as the basis for park monitoring across all 21 National parks in Namibia. However the consistency in collecting information and implementation effectiveness varies among the 21 protected areas. For

the reporting period, the five protected areas in the North-eastern part of the country were the most consistent in the application of the IBMS system, particularly the coordination and cross-fertilization with conservancies adjacent to the national parks.

METT Assessment

The Management Effectiveness Tracking Tool (METT) is one of most widely used and globally adapted systems. The objective of the METT is to assess management effectiveness of the protected area or National park (in the Namibian context), and it is closely associated with the Park Management Plans and the Incident Book Monitoring System (IBMS). As narrated above, the park Management Plan provides the guideline for park manage as well as the outputs and targets to be achieved, whilst the IBMS, is the tool used record observations, collet information and build data. Whereas the METT is tool that assess the achievement of targets by evaluating the data collected via the IBMS.

The METT has been design to track and monitor progress towards the management effectiveness of protected areas worldwide. In essence, it is a rapid assessment based on a scorecard questionnaire. Generally, the scorecard includes all six elements of management identified in the IUCN-WCPA Framework, and has an emphasis on context, planning, inputs, processes and outcomes. It provides a mechanism for the monitoring of the management effectiveness (impact) towards the PA objectives over time and it enables park managers and other stakeholders (e.g current and potential donors) to identify needs, constraints and priority actions to improve the effectiveness of protected area management.

The METT is a common tracking tool worldwide and it is particularly used to assess the management effectiveness of PAs towards the CBD objectives, and it is synonymous with donor institutions such as the World Bank, the Global Environment Facility (GEF), as well as the World Heritage and Ramsar Conventions. Most of the donors use the METT as a treasury evaluation and accountability audit.

Similar to the IBMS, Namibia has adopted the application of the METT assess tracking tool to assess the management effectiveness of all protected areas in Namibia. Below are the METT assessment scores for nine (9) of the Protected Areas that received financing from GEF (PASS project) for the period 2014 to 2018:

Protected Area	Baseline Score	TE Score	Diff. from Baseline	Remarks
Nkasa Rupara	62	78	+16	The METT score increased from 62 at Baseline to 78 at Terminal evaluation. The increase is attributed to: • Construction of park headquarters (station) at Shisinze with co-financing from KfW through the Namparks 3 program. • Increased tourism activities and subsequently, increased economic benefits for both the Park and the community (employment, park entry and lodging revenue); • Enhanced operations of the joint venture tourism facility (lodge) and the trophy hunting concession in the park; and • Enhanced management effectiveness of the Park (staff movement, particularly during the rainy season etc). • Provision of specialized anti-poaching equipment, enhanced anti-poaching operations (i.e Amphibious Boats, Water Tank Trailers, Metal Detectors, Camping Gear, Satellite Phones etc). • Enhanced understanding in fire management through the development and implementation of the integrated fire management strategy. The strategy guides the implementation of early burning as an effective tool for fire management and of biodiversity conservation.
Mudumu	75	75	0	• Although positive intervention (particularly, improved law enforcement to curb poaching), were made during the assessment period (2014 – 2018), the METT score did not change between the Baseline and Terminal evaluation due to: • The protected area is threatened by growing population (communities adjacent to the park) and livestock that constantly graze in the park.

				• The freshwater system (Kwando River) is infested with Kariba weed, an alien invasive plant (*Salvinia molesta).*
Bwabwata West	71	66	-5	The METT score decreased from 71 at Baseline to 66 at Terminal evaluation. Although positive interventions such as Improved law enforcement activities, such as the provision of specialized anti-poaching equipment (i.e Water Tank Trailers, Camping Gear, Satellite Phones, Metal Detectors, etc), and upgrading of Delta and Nova de Marsh anti-poaching patrol camps led to a decrease in illegal hunting of elephants, the park is threatened by the following factors: • Outbreak of Anthrax, a deadly disease that killed 135 hippopotamus, three buffalos and two black- faced impalas (in 2017). • Increased threat from livestock farming (grazing) and growing human settlements. Bwabwata is zoned in wildlife core areas (exclusive areas for wildlife) and Multiple use area (where human settlements and livestock farming are allowed). It has been observed that the community in the multiple use areas is growing and new settlements (homesteads, kraals, gardens) are continuously extending into the wildlife core areas. In-addition, the number of livestock per household is increasing, leading to increasing range overlap and competition with wildlife.
Bwabwata East	71	78	7	The METT score increased from 71 at Baseline to 78 at Terminal evaluation, and the increase is attributed to: • Similar to Bwabwate West, Bwabwata East is also experiencing similar challenges of poaching and increasing threat from livestock farming and human settlements, but these threats are much lower in Bwabwata East as compared to Bwabwata West. e.g in 2014, about 40 elephants were poached in Bwabwata West as compared to 8 elephants poached in Bwabwata East during the same period, hence the significant difference in METT scores. • The Provision of specialized anti-poaching equipment (i.e Amphibious boats to access waterlogged areas (rivers, swamps, flood plains) that are otherwise not accessible with vehicles, Water Tank Trailers, Camping Gear, Satellite Phones, Metal Detectors, etc), are aimed at enhancing anti-poaching operations. • The operationalization of the Mukwanyati and Guesha anti-poaching camps, that enabled the fully deployment of anti-poaching units in these poaching hotspots areas as well as the enablement of intensified foot and vehicle patrols. • The management of fire activities was also strengthened through the provision of the integrated fire management strategy as a tool for effective fire management in protected areas.
Mangetti	51	76	+25	The METT score increased from 51 at Baseline to 76 at Terminal evaluation, and the increase is attributed to: • Improved water provision for wildlife (drilling of 1 x borehole as co-financing from GPTF, 2016) • The management of fire activities was also strengthened through the provision of the integrated fire management strategy as a tool for effective fire management in protected areas. • Upgrading of an old borehole from diesel operation (fossil fuel) to solar (renewable energy and more sustainable) in 2016. In the past the borehole did not function consistently due to delays in the procurement of diesel and the costly (labor and time intensive) process of collecting diesel from Rundu, 300 km (2 – way). • De-bushing along the park boundary fence, leading to improved accessibility, monitoring and repairs of the park boundary fence, conducting anti-poaching patrols, monitoring water points, veld condition assessment, wildlife mortalities. The de-bushing also acts as a firebreak to aids fire-fighting operations during fire outbreaks. • During the baseline, the park was not open for tourism activities, and that has since been changed and the park is now open for tourism activities (2015), with game drives being the only tourism activity at the moment (no camping site or lodging facility by Mid-term, 2016)

				• Establishment of a new tourist road (71 km) through the park, which enhances game drives and improves the tourism value (visitor satisfaction) as well revenue collection through park entry fees. • Apart from the positive aspects, there is a concern that the Mangetti Park and Neighbors Collaborative Management Committee is dormant (collaboration with park and neighbors has potential to enhance anti-poaching operations, intelligence gathering, coordination of human wildlife conflict and fire management).
Khaudum	59	69	+10	The METT score increased from 59 at Baseline to 69 at Terminal evaluation, and the increase is attributed to: • Improvements with the collection of park fees. During the baseline, the park did not have facilities to collect park fees, but that has since changed and park fees are now collected in the park. There are 2 x collection points, one at Khaudum station for visitors entering from the northern side of the park and the other collection point at Sikereti, for visitors entering the park from the southern side of the park. In-addition, bookings and payments can be through the regional office in Rundu or the Head Office in Windhoek. • Construction of park stations (one at Khaudum, and one at Sikereti Tourist Park Entries) through funding from Namparks 3. • The management of fire activities has been strengthened through the provision of the integrated fire management strategy as a tool for effective fire management in protected areas. • At Baseline, the park only had 2 x old campsites (with poor infrastructure). The Park has since issued to Tourism Concessions with the neighboring communities (George Mukoya and Muduva Nyangana Conservancies), and the conservancies has entered into Joint Venture (JV) agreements with Private Tour Operators to build new tourism facilities. By mid-term, the 2 x campsites have been upgraded (new facilities), and construction of new Lodge at Khaudum (northern part of the park) has started. It has been reported that a JV to construct a new lodge at Sikereti (southern part of the park) has also been secured. If completed, the new tourism facilities are expected to add economic value to the park and the neighboring community.
Etosha – West	50	63	+13	The METT score increased from 50 at Baseline to 63 at Terminal evaluation, and the increase is attributed to: • Improved wildlife crime prevention activities through intensified anti-poaching operations (establishment of patrol camps (Skelpieon Bult and Onangombati), procurement of camping gears, water provision, communication devices etc. using solely external funding). • Inauguration of Skorpion built anti-poaching patrol camp that will act a model for the anti-poaching patrol camps in the future • Strengthening park security by re-enforcing MET and NAMPOL officials with NDF Special Force to combat poaching. • Establishment of the Joint Operational Centre (JOC), with the necessary equipment to enhance the daily coordination of anti-poaching activities; • Implementation of the Computerized Electronic Permitting System (CEPS), in 2014 • Formation of Park and Neighbour Forums • Improved patrol techniques due to ad hoc aerial operations in the poaching hotspot areas in the park. • Improved fire management activities through the provision of fire equipment, repairing and servicing of fire-fighting equipment • Effective community policing and awareness raising to neighboring communities. The park management is receiving substantial political support
Etosha – Central	55	72	+17	The METT score increased from 55 at Baseline to 72 at Terminal evaluation, and the increase is attributed to:

				• Improved wildlife crime prevention activities through intensified anti-poaching operations (establishment of patrol camps, camping gear, water provision (water tank trailers and water containers), communication devices (satellite phones) • Establishment of the Joint Operational Centre (JOC), with the necessary equipment to enhance the daily coordination of anti-poaching activities; • Implementation of the Computerized Electronic Permitting System (CEPS) • Strengthening park security by re-enforcing MET and NAMPOL officials with NDF Special Force to combat poaching. • Improved patrol techniques due to ad hoc aerial operations in the poaching hotspot areas in the park. • Improved fire management activities through the provision of fire equipment, repairing and servicing of fire-fighting equipment
Etosha - East	52	66	+14	The METT score increased from 52 at Baseline to 66 at Terminal evaluation, and the increase is attributed to: • Improved crime wildlife prevention activities through intensified anti-poaching operations (establishment of patrol camps, camping gear, water provision, communication devices etc.) • Establishment of the Joint Operational Centre (JOC), with the necessary equipment to enhance the daily coordination of anti-poaching activities; • Implementation of the Computerized Electronic Permitting System (CEPS) in 2014. • Improved patrol techniques due to ad hoc aerial operations in the poaching hotspot areas in the park. • Improved fire management activities through the provision of fire equipment, repairing and servicing of fire-fighting equipment • Strengthening park security by re-enforcing MET and NAMPOL officials with NDF Special Force to combat poaching. • Furthermore, the score for Etosha East is affected by poor housing for staff as they did not benefit from the MCA financing that constructed new staff accommodation in Etosha West and Etosha Central, respectively.
Skeleton Coast Park	41	56	+15	The METT score increased from 41 at Baseline to 56 at Terminal evaluation, and the increase is attributed to: • Provision of law enforcement equipment and materials (camping equipment, metal detectors and patrol boots etc.). • Improved communication due to provision of communication devices (Satellite Phones). • However, the park still faces challenges such as off-road driving (driving in restricted areas), littering by holiday makers and poor solid waste disposal systems, illegal fishing and poor park infrastructure (park gates, staff accommodation, offices), amongst others.
Waterberg Plateau Park	73	78	+5	The METT score increased from 73 at Baseline to 78 at Terminal evaluation, and the increase is attributed to: • Provision of camping equipment / law enforcement equipment. • Improved communication system (upgrading of the 2 – way radio communication system from analog to digital) and procurement of c-more phones for anti-poaching operations • Improved fire management as a result of provision of fire management equipment. • Upgrading of patrol camps (water provision for anti-poaching patrol camps). • Construction of the Law Enforcement Training Centre (2015 – 2016) and training for anti-poaching personnel in Water berg.

				• Provision of law enforcement training to all anti-poaching personnel in the park. The training was offered at the Law Enforcement Training Centre.

Protected Areas Investments

It is acknowledged that there is a funding gap in the management of Protected Areas (PAs), owing to the recent expansion of the PA estate and new management challenges such as poaching and human wildlife conflict. Also the revenue generated from PAs is not reinvested into the management of the PAs. Hence, there is a need to strengthen MET's capacity to be able to effectively address the issue of sustainable PA financing. The aim is to place MET in a good position to secure stable and sufficient long-term financial resources in order to ensure that PAs are effectively and efficiently managed.

In 2018, MET conducted an assessment to determine the financial requirements for the country's 21 Protected areas, including potential sources of revenue and sustainability. The study indicates that Namibia's protected areas continue to experience substantial underfunding. A study conducted in 2010 study estimated that about N$8.8 million per annum was required to maintain Namibia's protected area at that stage (just to maintain the status quo), while N$113 million per annum was required to achieve sustainability, representing a gaping financing gap of N$104.2 million.

Funds required to maintain PA management Status quo in 2010	**Funds required to achieve Sustainability**	**Funding Gap**
N$ 8.8 million pa	N$ 113 million pa	N$ 104.2 million pa

The MET has been reasonably successful in leveraging grant funding from the development partners despite Namibia having been classified by the World Bank as an upper-middle income country. This classification impedes Namibia's ability to access financing for development quite significantly.

GEF / UNDP Financing (2005 – 2018)

Project Name	Implementation Period	Amount (U$)	Amount (average rate of U$ 1 = N$ 15)
SPAN	2005 – 2012	5.0 million	75.0 million
NAMPLACE	2011 – 2015	4.5 million	67.5 million
PASS	2014 – 2017	4.0 million	60.0 million
TOTAL		13.5 million	202.5 million

MCA financing (2009 – 2014)

Project Name	Implementation Period	Amount (estimate for Etosha) (U$)	Amount (average rate of U$ 1 = N$ 15)
MCA - Etosha	2009 – 2014	23.8 million	357 million

KfW financing (2005 – 2018)

Project Name	Implementation Period	Amount (€)	Amount (an average rate of € 1 = N$ 17)
NAMPARKS 1	2005 – 2012	2.5 million	42.5 million
NAMPARKS 2	2011 – 2015	3.5 million	59.5 million
NAMPARKS 3	2014 – 2017	12.0 million	204.0 million
NAMPARKS 4	2016 – 2018	14.0 million	238.0 million
Total		**32.0 million**	**544.0 million**

Waste Management Strategy for Protected Areas

The MET has recognized the need to improve solid waste management in Namibia, particularly in protected areas. The National Solid Waste Management Strategy is important to provide guidance, inform regulations and development of a National action plans to improve solid waste management.

As a result, in 2018, the National Solid Waste Management strategy was finalized and endorsed, and the regulations to ban the use of plastic bags in protected areas is also approved and gazetted. The plastic ban in protected areas is being implemented and will be strengthened with public awareness campaigns in 2019.

Tourism and Trophy Hunting Concessions

The tourism concession are guided by the Concession and Tourism Policies. The policies provides a framework for the mobilization of resources in order to realize long-term national objectives. As articulated in the National Development Plan 5 and Vision 2030, these are sustained economic growth, employment creation, poverty reduction, reduced inequalities in income, gender and economic empowerment at large. The aim is to ensure that a sustainable and responsible tourism industry contributes to the economic development of country through job creation and economic growth.

For the reporting period (end 2018), the summary of active concessions is as follows:

- 5 x Trophy Hunting Concessions, generating a total revenue about N$ 19.5 million in 2017 and about 24 million in 2018.
- 14 x Tourism concessions (Lodges) + 7 x 4x4 trail concessions, generating a combined revenue of about N$ 40 million per annum

Human Wildlife Conflict Management

Successful conservation efforts and the growth of communal conservancies in the North West of Namibia during the past 20 years has resulted in an increase of wildlife populations (including of elephants and lions).

Despite these successes, the MET recognizes that living with wildlife often carries a cost. Wildlife populations and their home ranges have expanded deep into communal farming areas resulting in more frequent conflicts between people and wild animals, particularly elephants and predators. Increased HWC incidences result in livestock and crop losses, damage to water installations and, in some instances, loss of human lives.

As a result, the MET is planning to review the North West Human-Lion Conflict Management Plan and Elephant management plan in 2019. The aim is to

- Develop a long-term vision for elephant and lion conservation and management that fits within the existing legal and policy frameworks of Namibia.
- Identify mitigation strategies and develop a logical framework with specific outputs and the activities required to achieve these outputs.

In 2018, the MET started with the implementation of strategies to mitigate Human-Elephant Water Conflict, which included:

- Replace Diesel engines with Solar Pumps to ensure sufficient water supply for both wildlife and the community.
- Water supply network to the homesteads to avoid people and elephant drinking and collecting water from the same water points.
- Water provision for wildlife (far from homesteads),
- Provision for baby elephants that are unable to drink from 2m high dams / reservoirs.
- Elephant Protection walls to protect water infrastructure.
- Water provision in the wildlife core areas to reduce the movement of elephants into the villages / settlements, in search for water.

Trans-Frontier Conservation Areas (TFCAs)

Namibia is party to three (3) Trans-Frontier Conservation Areas, namely:

- The Kavango – Zambezi TFCA comprising of Botswana, Zimbabwe, Zambia, Angola and Namibia,
- The /Ai-/Ais – Richtersveld TFCA, treaty between Namibia and South Africa, and

- Iona – Skeleton Coast TFCA, a treaty between Namibia and Angola
- The SADC TFCA monitoring and evaluation framework was approved in November 2017.
- The KAZA TFCA held a symposium in 2017 and drafted the status of KAZA TFCA, which was due for final review and approval by the end of 2018
- Iona (Angola) – Skeleton Coast TFCA Memorandum of Understanding (MoU) was signed by the two governments (Namibia and Angola) in May 2018. Draft Implementation Plan for Iona - Skeleton Coast Transfrontier Park was tabled in June 2018 and will be used as for the piloting phase, pending final review and bi-lateral adoption.
- There are ongoing collaborative and development activities for the Ai-Ais Richtersveld TFCA as guided by the joint management board.

For the implementation measure, please indicate to which national or Aichi Biodiversity Target(s) it contributes
Target 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

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes:
☐ Measure taken has been effective
☒ Measure taken has been partially effective
☐ Measure taken has been ineffective
☐ Unknown

Please explain the selection and where possible indicate the tools or methodology used for the assessment of effectiveness above

The NBSAP 2 steering committee members submit quarterly implementation reports to the NBSAP2 Secretariat, which reviews these reports. The committee also recently convened a meeting to review the 17 targets and the Aichi Biodiversity Target Poster. Each lead institution that implements a specific target provides updates on major progress made on that particular target and assessments were then carried out based on this information.

The following milestones were attained:
- Incident Book Monitoring System (IBMS) implemented.
- Management Effectiveness Tracking Tool (METT) implemented.
- Human Wildlife Conflict mitigation measures implemented.

Other relevant information
None.

Relevant websites, web links and files
None.

Obstacles and scientific and technical needs related to the measure taken:

The IBMS has been adopted as the basis for park monitoring across all 21 National parks in Namibia. However the consistency in collecting information and implementation effectiveness varies among the 21 protected areas. For the reporting period, The five protected areas in the North-eastern part of the country were the most consistent in the application of the IBMS system, particularly the coordination and cross-fertilization with conservancies adjacent to the national parks.

Namibia needs continued scientific and technical cooperation in terms of wildlife monitoring and research, human wildlife conflict mitigation as well as good practice examples of parks management and the re-investment of revenue into parks management. Materials, techologies and equipment to combat poaching and illegal wildlife trade are needed.

Relevant websites, web links and files

http://www.met.gov.na/services/permits-registrationscertificates-licences/173/

Implementation measures taken, assessment of their effectiveness, associated obstacles and scientific and technical needs to achieve national targets

Additional information (Please provide information on the evidence used in the assessment of this target, drawing upon relevant information provided in section II, including obstacles in undertaking the assessment).

Species Management Initiatives

Under the Red List project of the National Botanical Research Institute (NBRI), the following activities are ongoing:

- A long term monitoring programme is in place to monitor population parameters of dwarf succulents over time in order to obtain better risk assessments for these species. Data for two squares in southern Namibia was obtained but more is needed to see a pattern. The locations of 46 monitoring squares for 5 Lithops species spread across the country were mapped on Google Earth.
- NBRI submitted a research paper on Lithops ruschiorum to Bothalia ABC.
- NBRI also re-assessed the conservation status of 2 species and a further 19 species that were not assessed before, were assigned a national status.
- Seedlings of the Critically Endangered *Gazania thermalis* are being maintained at the NBRI for transplanting to Gross Barmen later by the Millennium Seed Bank Partnership but the project remains dormant until the next really good rainy season because the seedlings can only be transplanted if there is sufficient groundwater to cause the spring to surface.

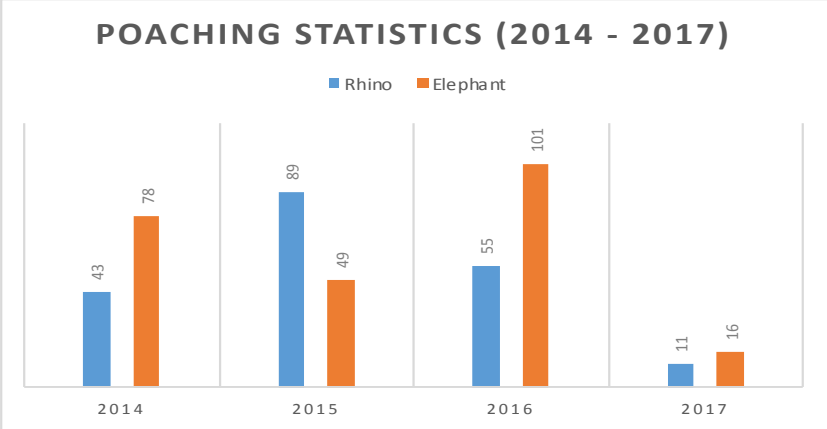
The MET conducted 2 workshops on the Biodiversity Monitoring Framework for the Tsau //Khaeb National Park. These workshops culminated in the identification of 79 plant species from the Red Data Book that occur almost exclusively in the park and more specifically along the Orange River or along the Coast line and therefore needs to be re-evaluated using IUCN Red List criteria as these species are now under threat of one or more development projects. All the coordinates of these species were mapped on Google Earth Pro as a first step towards re-evaluating their status. Subsequently, a list of the most critical plant areas in the Tsau //Khaeb National Park was finalised (and critical areas for other species by MET). These are the areas with biodiversity most vulnerable to human impact and should be monitored on a regular basis to ensure minimum disturbance once the tourism plan is implemented.

The Millennium Seed Bank Partnership initiated the re-introduction of the Critically Endangered species Gazania thermalis. Seeds were germinated but transplanting at the type locality can only take place when sufficient ground water is available for the spring to surface. A long term monitoring programme is in place to monitor population parameters of dwarf succulents in order to obtain better risk assessments. A list of the most critical plant areas in the Tsau //Khaeb National Park was finalised as part of the Biodiversity Monitoring Framework for the Park. Conservation assessments for 74 species were done. The list of protected tree species was revised by NBRI and gazetted by the Directorate of Forestry. A first step was taken in exporting data from the stand-alone Red List databases to the Botanical Research and Herbarium Management System (BRAHMS) database for easy upload of Red List assessments to the IUCN Red List database. One (1) peer reviewed paper has been published while three (3) are in preparation.

Mutation breeding and crop cultivars

- In 2016, MAWF DARD has reported they had commenced with mutation breeding for early crop varieties seeds above their seeds to be planted and released next season.
- During 2018, mutation breeding for early crop varieties seeds were planted and released, and a milestone of 11 early maturing crop varieties bred using mutation techniques were released to farmers.

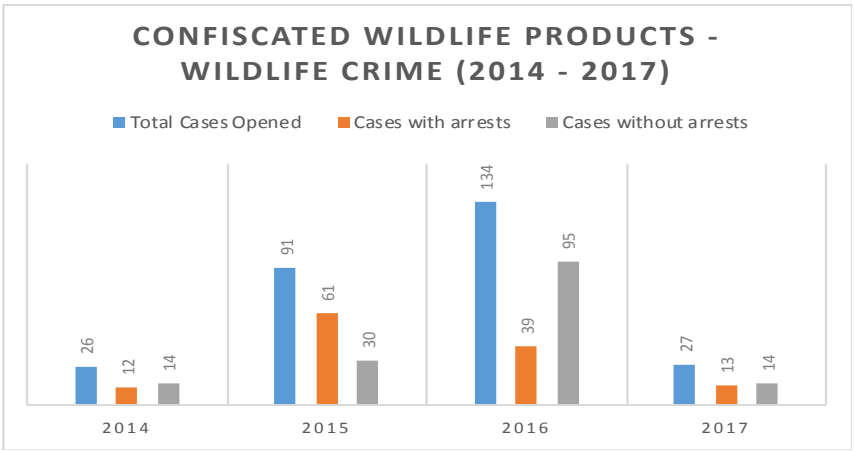
Poaching of high value species (Rhinos and elephants)
From 2014 and 2015, the MET and other Law Enforcement agencies devised and executed a plan to conduct intensive aerial and foot Patrols, Monitoring and Surveillance program that lead to big poaching discoveries of particularly Rhino in Etosha National Park and Kunene region and elephants in the Bwabwata National Park.



Rhino and Elephant Poaching Statistics (2014 – 2017)

As indicated in the poaching statistics above, the Namibian authorities have intensified security measures in protected areas and the poaching of high value species declined significantly since reaching its high point in 2016.

Statistics for Confiscated Wildlife Articles: 2014 to 2017
The information for wildlife products confiscated at border crossings is integrated with the national data for overall wildlife products confiscated. It is important to note that, most of the attempted illegal trade of wildlife products were detected at the border crossings and less were confiscated within the interior.



Wildlife Crime Database
The MET continued with the development of a Wildlife Monitoring System and database to ensure the capturing of relevant data throughout the country and at all border crossings, international airports and the harbours. The system is co-financed by the German funded GIZ - Resource Mobilization Project and it is due for finalization in 2019. The database will including incidences outside protected areas (game farms and communal conservancies)

National Anti-poaching Awareness Campaign
Over the past 5 years, Namibia experienced very high and unprecedented levels of poaching of particularly high value species (rhinos and elephants), which are being poached for rhino horn and elephant ivory respectively. As a result, the MET embarked upon an anti-poaching awareness campaign with the aim to (a) raise awareness to the

public, (b) discourage poaching activities or involvement thereof, (c) and encourage the public to report poaching activities.

The awareness materials developed, constructed and disseminated to the public includes, national anti-poaching awareness billboards, Pull up banners, banner walls, vehicle stickers, vehicle license discs and flyers.

Establishment of the Wildlife Law Enforcement Training Centre
The MET constructed the specialized Wildlife Law enforcement Training Centre in the Waterberg National Park to ensure that the new anti-poaching unit undergoes specialized anti-poaching training and continuous training for all law enforcement agencies, including prosecutors, in-order to enhance preventative (anti-poaching patrols and strategies), investigations and comprehensive prosecution.

Protected Areas and Wildlife Management Bill
To strengthen the prosecution of wildlife crimes, the MET is working on the new Parks and Wildlife Management Bill. The Bill is at an advanced stage and is expected to be finalized in 2019.

Wildlife Translocations
The MET has a game translocation programme called Wildlife Breeding Stock Loam Scheme (WBSLS). The wildlife loan scheme entails loaning a specified number of wild animals to a qualifying farmer (e.g 50 Oryx), allow them calculated time to build a healthy and viable herd of oryx e.g 150, and then ask the beneficiary to return the equivalent number of animals initially advanced and then advanced the new stock to a new beneficiary and the trend continues (similar to a revolving fund).

From 2009-2015, a total of 1,983 head of wildlife, comprising of eland, springbok, oryx, plain and mountain zebra, were translocated to 114 farms (15 in Otjozondjupa, 14 in //Kharas, 36 in Hardap, 35 in Omaheke, 4 in Khomas, 2 in Erongo, 6 in Kunene, 2 in Oshikoto). This only includes species that were translocated to commercial/resettlement farms under the WBSLS.

Confiscated Forestry Articles
For the financial year 2017/2018, the Directorate of Forestry (DoF) reported that 22 Fines were issued to those that contravened the laws and regulations and forest products were confiscated, namely charcoal 39,575 tons, firewood 11,945 tons, droppers 91,229 , poles 22,895, mopane roots 175 tons, wood carving 469.

For the implementation measure, please indicate to which national or Aichi Biodiversity Target(s) it contributes
Target 11
By 2016, threatened and vulnerable species lists are updated and measures implemented by 2019 to improve their conservation status

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes:
☐ Measure taken has been effective
☒ Measure taken has been partially effective
☐ Measure taken has been ineffective
☐ Unknown

Please explain the selection and where possible indicate the tools or methodology used for the assessment of effectiveness above

The NBSAP 2 steering committee members submit quarterly implementation reports to the NBSAP2 Secretariat, which reviews these reports. The committee also recently convened a meeting to review the 17 targets and the Aichi Biodiversity Target Poster. Each lead institution that implements a specific target provides updates on major progress made on that particular target and assessments were then carried out based on this information.

The following milestones were attained:
- Millennium Seed Bank Partnership report
- Biodiversity Monitoring Framework for the Tsau //Khaeb National Park

- Reduction in poaching cases for high value species

Other relevant information
None

Relevant websites, web links and files
http://www.nbri.org.na

Obstacles and scientific and technical needs related to the measure taken:
None.

Relevant websites, web links and files
http://www.the-eis.com/data/literature/MET%20Buffalo%20Management%20Plan.pdf
http://www.nbri.org.na

Implementation measures taken, assessment of their effectiveness, associated obstacles and scientific and technical needs to achieve national targets

Maintaining Genetic Diversity

An On-farm Conservation survey was conducted in the Kavango East and West with a total of 30 respondents participating in the survey.143 seed samples were collected during the survey and the NPGRC distributed 28 seed samples of three (3) species. The NPGRC attended the Technical Cooperation Programme (TCP) inception meeting, the work plan and budget were prepared and sent to the SADC Plant genetic Resources Centre (SPGRC) as the implementer of the project as requested. The project aims at bridging the gap between the Genebanks, Farmers and Breeders in terms of plant genetic resource for food and agriculture.

The MAWF is working on the Seed and Seed Variety Bill and the Plant Breeders and Farmers Right Bill both of which have been approved by Cabinet for tabling to the National Assembly. The Seed and Seed Variety Bill aims to safeguard the quality and safety of crops to ensure good yields. Whereas the Plant Breeders and Farmers Right provides for the establishment of an effective system for the protection of plant varieties, the development of new plant varieties, the rights of plant breeders and farmers and setting up a Community Gene Fund.

Namibia enacted the Biosafety Act in 2006, (Act No. 7, 2006) and its related regulations and guidelines are in place. As per section 6 of the Biosafety Act, the NCRST established the Biosafety Council to consider all applications for permits for handling GMOs and derived products, and to make recommendations to the Minister of Higher Education, Training and Innovation as the national competent authority for approval or rejection. Below are some highlights of key activities relating to the implementation of biosafety measures in Namibia:

1) First National Biosafety Clearing House Training Workshop: the workshop provided the key stakeholders with a common understanding of the format of the BCH records as well as the methods for finding information and the procedures for registering and publishing biosafety related decisions.
2) Mock Application Evaluation Training Workshop on GMOs and derived products: the workshop targeted individuals and institutions involved in the evaluation of GMO related applications for permits. Participants were introduced to basic principles of handling GMO applications, gained basic understanding of risk analysis in decision-making pathways and acquired a better understanding of socio-economic issues that may be considered during evaluation of applications.

For the implementation measure, please indicate to which national or Aichi Biodiversity Target(s) it contributes
Target 12
By 2020, Genetic diversity of cultivated plants and farmed animals is maintained and enhanced

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes:
☐ Measure taken has been effective
☒ Measure taken has been partially effective
☐ Measure taken has been ineffective
☐ Unknown

Please explain the selection and where possible indicate the tools or methodology used for the assessment of effectiveness above

The NBSAP 2 steering committee members submit quarterly implementation reports to the NBSAP2 Secretariat, which reviews these reports. The committee also recently convened a meeting to review the 17 targets and the Aichi Biodiversity Target Poster. Each lead institution that implements a specific target provides updates on major progress made on that particular target and assessments were then carried out based on this information.

The following milestones were attained:

- Number of crop cultivars and livestock breeds with tolerance to abiotic stresses adopted by farmers.
- Awareness campaign and number of stakeholders reached.
- Strategy to develop and promote indigenous livestock breeds and crop varieties for adoption by local farmers.
- National Biosafety Clearing House Training Workshop administered.
- Mock Application Evaluation Training Workshop on GMOs and derived products.

Other relevant information
The National Plant Genetic Resources Centre (NPGRC) collection now stands at 4 320 accessions, after the Millennium Seed Bank Partnership collected 70 new accessions. Currently, 31% of Namibia's indigenous wild plant species are represented in the seed collection at the NPGRC (1,200 out of 4,000 indigenous species), whereas 69% of the collection consists of crop species.

Relevant websites, web links and files
http://bch.ncrst.na

Obstacles and scientific and technical needs related to the measure taken
Lack of finances for in-situ and ex-situ conservation is identified as a major challenge.

Relevant websites, web links and files

http://www.met.gov.na/services/permits-registrationscertificates-licences/173/

Implementation measures taken, assessment of their effectiveness, associated obstacles and scientific and technical needs to achieve national targets

Management of critical ecosystems
Wetlands are particularly important ecosystems for Namibia. The Water Resource Management Act of 2013 was passed by Parliament and provides for the management, protection, development, use and conservation of water resources; to provide for the regulation and monitoring of water services and to provide for incidental matters. The Act makes provision for the establishment of the Water Advisory Council and Water Regulator and officials to serve on the board were appointed in 2016. The Act further makes provision for the establishment of Water Basin Management Committees at the local level to regulate water issues. Currently, there are eight existing and operating Basin Management Committees. Basin management plans for 5 BMCs have been developed for implementation. Namibia continues to honour its international obligations by participating in River Basin Organizations Commissions i.e. OKACOM, ZAMCOM, JPTC, ORASECOM, PWC and CUVELAI.

In terms of land-based ecosystems, the CBNRM Programme has created an environment where people in communal areas can actively manage their ecosystems. Ever since its independence, Namibia has steadily given more rights to the local communities to manage their natural resources. In the mid-nineties, legally recognized community conservation organisations such as conservancies and community forests were formalized under the Nature Conservation Amendment Act of 1996 and the Forest Act of 2001. Since then, a total of 82 conservancies and 42 community forests have been registered and gazetted. In 2017, 45 conservancies were financially self-sustainable and the total income of about US$ 10 million generated by CBNRM activities in 2017.

Ongoing work has continued in terms of rehabilitating sites damaged through mining and other harmful activities. A revision of the Environmental Management Act of 2007 was undertaken during the period under review and there will be new strengthened provisions for rehabilitation and offsets in the amended Act.

For the implementation measure, please indicate to which national or Aichi Biodiversity Target(s) it contributes
Target 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

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes:
☐ Measure taken has been effective
☒ Measure taken has been partially effective
☐ Measure taken has been ineffective
☐ Unknown

Please explain the selection and where possible indicate the tools or methodology used for the assessment of effectiveness above

The NBSAP 2 steering committee members submit quarterly implementation reports to the NBSAP2 Secretariat, which reviews these reports. The committee also recently convened a meeting to review the 17 targets and the Aichi Biodiversity Target Poster. Each lead institution that implements a specific target provides updates on major progress made on that particular target and assessments were then carried out based on this information.

The following milestones were attained:

- Community based natural resource management (CBNRM) Programme.
- Water Resources Management Act (2013).
- Management Plan for the newly declared Bwabwata Okavango Ramsar site developed and in place.
- Continuous wetland bird counts on Namibia's wetlands.

Other relevant information
None.

Relevant websites, web links and files
www.met.gov.na

www.nacso.org.na

Obstacles and scientific and technical needs related to the measure taken

- The regulations for the new (2013) Water Resources Management Act have not been finalized (draft format) and that implies that the new Act cannot be applied as yet.
- There is a need to increase the financial sustainability of the CBNRM Programme and to strengthen community beneficiation from natural resources management.

Relevant websites, web links and files
None.

Implementation measures taken, assessment of their effectiveness, associated obstacles and scientific and technical needs to achieve national targets

Access and Benefit Sharing (ABS)

In May 2014, Namibia became the 35th country to ratify the Nagoya Protocol. The MET is the Namibian Government's responsible entity for the implementation of this international treaty. Although work on preparing legislation with respect to Access and Benefiting Sharing started in 1998, the draft "Bill on Access to Genetic Resources and Associated Traditional Knowledge" was only tabled in parliament for the first time in November 2015 and was enacted in 2017. The Act sets out the parameters for ABS implementation in Namibia. The MET is currently finalising the regulations to guide the implementation of the Act.

The Access to Genetic Resources and Associated Traditional Knowledge Act (2017) aims at the following:

- To regulate access to genetic resources and associated traditional knowledge based upon prior informed consent;
- To protect local communities' rights over 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; and
- To provide for matters connected thereto.

Awareness activities were carried out targeting the Khwe communities in Bwabwata National Park and Topnaar community in Namib-Naukluft Park following continuous exploitation of their resources. Awareness activities were also carried out in Ohangwena, Omusati, Oshana and Oshikoto regions prior to the commencement of the Marula harvesting season on benefit sharing mechanisms as per the Act.

One of the objectives of the Access to Biological and Genetic Resources and Associated Traditional Knowledge Act is to ensure the effective participation of concerned local communities, with a particular focus on women, in making decisions as regards the distribution of benefits which may derive from the use of their biological and genetic resources and associated traditional knowledge. The Act recognizes the right holders (indigenous and local communities) to have the following rights over biological and genetic resources and associated traditional knowledge (a) the right to collectively share the benefits arising from the utilisation of biological and genetic resources and associated traditional knowledge; (b) the right to protect their biological and genetic resources and associated traditional knowledge as traditional custodians and users, and in terms of customary law and practices; (c) the inalienable right to use their biological and genetic resources and associated traditional knowledge in the course of sustaining their livelihood systems, conservation and sustainable use of biological diversity. Furthermore, the draft regulations will further provide for the administrative measures that Namibia will have to undertake in order to ensure that the objectives of the Act are being addressed or implemented.

The Act also calls for the establishment of a research and development facility on indigenous biological natural resources to support and promote access and benefit sharing, biotrade and bioprospecting as a means to address poverty alleviation, support sustainable livelihoods and furthering sustainable development. A feasibility study was undertaken for the establishment of this facility.

For the implementation measure, please indicate to which national or Aichi Biodiversity Target(s) it contributes

Target 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"

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes:

☐ Measure taken has been effective
☒ Measure taken has been partially effective

☐ Measure taken has been ineffective
☐ Unknown

Please explain the selection and where possible indicate the tools or methodology used for the assessment of effectiveness above

- Access to Biological and Genetic Resources and Associated Knowledge, (Act No. 2 of 2017)
- Namibia ABS Country Diagnostic Stakeholder Consultations report of 2015
- Final consultative workshop Report on draft regulations of the Access to Biological and Genetic Resources and Associated Knowledge, Act No. 2 of 2017

Other relevant information

None.

Relevant websites, web links and files

http://www.met.gov.na/files/files/COUNTRY%20STATUS%20REVIEW%20PAPER%20ON%20ACCESS%20AND%20BENEFIT%20SHARING%20-%20Paper%20prepared%20for%20the%20Regional%20Agricultural%20and%20Environmental%20Initiatives%20Network%202012.pdf
http://www.lac.org.na/laws/annoSTAT/Access%20to%20Biological%20and%20Genetic%20Resources%20and%20Associated%20Traditional%20Knowledge%20Act%202%20of%202017.pdf
https://saiia.org.za/research/the-interface-between-access-and-benefit-sharing-and-biotrade-in-namibia-exploring-potential-areas-of-synergy/
http://www.loc.gov/law/foreign-news/article/namibia-bill-on-access-to-biological-and-genetic-resources-and-associated-traditional-knowledge/

Obstacles and scientific and technical needs related to the measure taken

- Awareness is an ongoing process with respect to ABS in Namibia. Although a small group of experts have been training and providing technical advice on the value of genetic resources and its associated knowledge including the importance of Prior Informed Consent, it remains a challenge for communities to understand and appreciate the value of the resources as a result of the lack of tangible benefits.
- Capacity at all levels (legal, socio-economic, financial and human resources). Given the low level of awareness of ABS, considerable capacity building will be necessary to allow Namibia to implement and benefit from the concept in an optimal fashion. This should target all levels including decision makers, technical level stakeholders (genetic resources unit), regional and local level stakeholders.
- Establishment of an effective and competent genetic resources unit because of competing national priorities.
- Defining and strengthening the role of Traditional Authorities and customary law as relates to ABS in accordance with Article 100 of the Namibian Constitution.
- Design and implementation of a mechanism for the documentation and protection of traditional knowledge.
- Lack of coordinated research and development into genetic resources with potential commercial applications.
- Ensuring sustainable harvesting of resources in cases where demand for that resource is increasing

Relevant websites, web links and files

None.

Implementation measures taken, assessment of their effectiveness, associated obstacles and scientific and technical needs to achieve national targets

Describe a measure taken to contribute to the implementation of your country's national biodiversity strategy and action plan

Respecting and Promoting Traditional Knowledge

The Access to Biological and Genetic Resources and Associated Traditional Knowledge (Act 2 of 2017) has put in place provisions to ensure that traditional knowledge is respected and promoted.

Part 6 makes provision for offences, penalties and forfeiture to be enforced. This is done to a person who accesses biological or genetic resources and associated traditional knowledge without a permit issued in terms of the Act or fails to comply with a condition imposed by a permit issued under this Act or fails to provide, or wilfully withholds, or provides false, information required under section 9(3); obtains access and benefit sharing agreement by any dishonest means; possesses, any biological or genetic resources or any associated traditional knowledge - in Namibia for commercial purposes; and commits an offence and is liable to a fine not exceeding N$150,000 or to imprisonment for a period not exceeding 10 years, or to both such fine and such imprisonment. In the event of a conviction in terms of this Act the court may order that any damage to the environment resulting from the offence be repaired by the person so convicted, to the satisfaction of the Minister.

The Access to Biological and Genetic Resources and Associated Traditional Knowledge Act 2 of 2017 has a section on prior informed consent and notes as follows:

- Access to biological or genetic resources and associated traditional knowledge is subject to written prior informed consent of the concerned right holders of such biological or genetic resources and associated traditional knowledge.
- Any person intending to approach right holders for obtaining prior informed consent must first notify the Office and take the necessary guidance from the Office.
- In order to obtain prior informed consent, the user is required to provide a full explanation as prescribed of how the biological and genetic resources and associated traditional knowledge is to be acquired and used.
- The concerned rights holders may refuse access to their biological or genetic resources or associated traditional knowledge.
- The Minister, when required in terms of the provisions of the Nagoya Protocol, may with reasons and in compliance with Article 18 of the Namibian Constitution reverse the decision made under subsection (4)

The Bwabwata Biocultural Community Protocol was finalized with the assistance of Natural Justice of South Africa.

Traditional Authorities in the North Central regions (Omusati, Ohangwena, Oshana and Oshikoto) and Topnaar Traditional authorities were empowered to manage and grant access to biological and genetic resources found within their jurisdiction.

For the implementation measure, please indicate to which national or Aichi Biodiversity Target(s) it contributes

Target 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"

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes:
☐ **Measure taken has been effective**
☐ **Measure taken has been partially effective**
☒ **Measure taken has been ineffective**
☐ **Unknown**

Please explain the selection and where possible indicate the tools or methodology used for the assessment of effectiveness above

The NBSAP 2 steering committee members submit quarterly implementation reports to the NBSAP2 Secretariat, which reviews these reports. The committee also recently convened a meeting to review the 17 targets and the Aichi Biodiversity Target Poster. Each lead institution that implements a specific target provides updates on major progress made on that particular target and assessments were then carried out based on this information.

This target has been lagging behind and the following work still requires more efforts to finalize:

- Incorporation of traditional knowledge in schools and tertiary curricula
- Documenting of traditional knowledge associated with indigenous resources
- ABS regulations

Other relevant information, including case studies to illustrate how the measure taken has resulted in (or is expected to result in) outcomes that contribute to the implementation of the NBSAP
None**.**

Relevant websites, web links and files
None.

Obstacles and scientific and technical needs related to the measure taken

Lack of funds and technical knowledge is the major obstacle associated with implementation of the target.

Implementation measures taken, assessment of their effectiveness, associated obstacles and scientific and technical needs to achieve national targets

Describe a measure taken to contribute to the implementation of your country's national biodiversity strategy and action plan

Research, Science and Technology relating to biodiversity

The NCRST prepared the National Science, Technology and Innovation Infrastructure Strategy, designed to complement the National Programme on Research, Science, Technology and Innovation in realising the national research agenda by providing direction on how to equitably utilise access to existing research infrastructure / facilities.

EduVentures Namibia extended the storage (built in store-room) for the Sperrgebiet collection of invertebrates (baseline data). New cooling system and fire proof cabinet was installed for holo- and paratypes for the national arachnid collection. Purchase of new collection equipment such as microscopes, computers, software was done. The renovation of the science laboratory at the National Museum was undertaken (flooring, furniture, burglar grit, alarm system, Network & Power Plug Trunking).

The NBRI has implemented the use of the globally used Botanical Research and Herbarium Management System (BRAHMS) database developed by the University of Oxford Innovation Limited as a first step towards the one-stop-shop for institutional botanical data. The system currently holds 95,812 records. The "Flora of Namibia" project commenced and is aimed at producing an uptodate and easily accessible "Flora of Namibia" by completing taxonomic revisions of all plant taxa in Namibia in aid of informing decision makers and environmentalists.

Three (3) publications were published while 15 taxonomic papers, at different stages of preparation, are in progress. "A Checklist of Namibian Indigenous and Naturalised Plants" published in 2013 is currently being updated. Namibian governmental institutions as well as tertiary institutions participated in regional initiatives, such as the Southern African Science Service Centre for Climate Change and Adaptive Land Management (SASSCAL). The Sustainable Management of Economically Important Indigenous Plant Resources project focusses on conducting research into the socio-economic and environmental impacts and benefits of natural resources with the aim of developing policies and strategies for the use of natural resources under pressure through subprojects, e.g. "Establishing the sustainability/sustainable use of *Marsdenia macrantha*", in collaboration with MET.

EduVenture Namibia (NMN) established a Mobile Classroom (EduMobile) to promote knowledge and understanding of Namibia's biodiversity and ecosystems services in remote areas of the regions in northern and central Namibia (2014-2017) funded by SODI Berlin.

A number of research were recommended by the MET research committee investigating best practices in the management, conservation and sustainable use of biodiversity and ecosystems.

The EIF continued to support the undergraduates and post graduates with bursaries. To date, the EIF has spent up to N$ 34 million on 34 students studying in the field of environmental law, biodiversity conservation, water management, natural resource economic and marine biology.

The breakdown of financial and other support provided by EIF is as follows:

- 34 bursaries warded
- 27 internships awarded for workplace grooming and coaching
- 48 student and young professionals supported through DRFN Summer Desertification School

The EIF and Gobabeb continue to conduct the Summer Drylands Programme to train young professional on various environmental issues. The theme for the 2016/2017 course was: Impacts of artificial water points for wildlife conservation in the Namib.

The National Botanical Research Institute (NBRI) hosts a website that informs the public about all of its activities, publications research, services and links to other biodiversity sites at www.nbri.org.na and is updated on quarter basis. Gobabeb Research Training Center and the Namibian Chamber of Environment also support research initiatives linked to biodiversity.

For the implementation measure, please indicate to which national or Aichi Biodiversity Target(s) it contributes
Target 16
"By 2022, knowledge, science base and technologies relating to biodiversity and ecosystem management are improved and made relevant to political decision makers"

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes:
☐ **Measure taken has been effective**
☐ **Measure taken has been partially effective**
☒ **Measure taken has been ineffective**
☐ **Unknown**

Please explain the selection and where possible indicate the tools or methodology used for the assessment of effectiveness above

The NBSAP 2 steering committee members submit quarterly implementation reports to the NBSAP2 Secretariat, which reviews these reports. The committee also recently convened a meeting to review the 17 targets and the Aichi Biodiversity Target Poster. Each lead institution that implements a specific target provides updates on major progress made on that particular target and assessments were then carried out based on this information.

This target has been lagging behind mainly due to poor inter-sectoral coordination, particularly between Government institutions and Tertiary Institutions.

Other relevant information, including case studies to illustrate how the measure taken has resulted in (or is expected to result in) outcomes that contribute to the implementation of the NBSAP
None.

Relevant websites, web links and files (Please use this field to indicate any relevant websites, web links or documents where additional information can be found)

www.nbri.org.na, www.eifnamibia.com, www.gobabebtrc.org, www.n-c-e.org

Obstacles and scientific and technical needs related to the measure taken: Please describe what obstacles have been encountered and any scientific and technical needs for addressing these, including technical and scientific cooperation, capacity development activities or the need for guidance materials.
Need for improved collaboration on biodiversity-related research.

Implementation measures taken, assessment of their effectiveness, associated obstacles and scientific and technical needs to achieve national targets

Describe a measure taken to contribute to the implementation of your country's national biodiversity strategy and action plan

Biodiversity Resource Mobilization Strategy
The Ministry of Environment and Tourism commissioned the development of a comprehensive resource mobilisation strategy for biodiversity conservation in 2017. The strategy was finalized in 2018 pending the approval of the document by Cabinet. The vision of this national strategy is that *"Biodiversity conservation is sustainably financed through a range of effective and efficient instruments to safeguard biodiversity and improve the livelihoods of all Namibia's while stimulating economic growth."*

The overall goals of the strategy are:
a) To incentivize biodiversity conservation practices;
b) To discourage those practices which are currently degrading ecosystems and biodiversity;
c) To develop instruments that will support (a) and (b) above, and thus
d) Raise financing for biodiversity conservation as well as

e) Improve and regenerate ecosystems that can then provide at their maximum capacity what is needed for economic and societal development

These goals are envisaged to be achieved through the (further) development and implementation of prioritized instruments (i.e. financial solutions) that will mobilize financing through the adjusting of current systems, particularly institutional and policy changes will need to be put in place.

The following ten key instruments are envisaged to be rolled out, with different time horizons:

1. **Government Financing**: Biodiversity will need to be mainstreamed into current government budget allocations. The government will also need to support the implementation of other instruments, including, particularly supporting the restructuring of park pricing and institutional change (instrument 2), and undergoing some fiscal reforms to implement the environmental levies in instrument 3

2. **Park Pricing and Restructuring:** The current park prices (set at 2005) are up to three times lower than the park prices in neighbouring countries. Willingness to Pay by visiting tourists show that tourists are willing to pay more than three times the amount they currently pay. In addition, many recommendations, including the resolutions of the Second National Land Conference, hold that park entrance fees should go directly back into park management. Currently, park management is under budgeted by N$ 60 million. Revenue from park entrance fees could bring in an estimated N$ 150 million per year.

3. **Environmental Levies:** The EIF has already spearheaded the identification of several products that could be charged an environmental levy, including electronic equipment (the levy of which could be earmarked to improving e-waste management and recycling), lubricant oil, batteries. In addition, plastic bag levies, carbon emissions tax on vehicles, levies on non-returnable bottles and cans, and a levy on incandescent light bulbs could also be charged. It is recommended that a certain percentage (35%) is earmarked for conservation, with the total of the plastic bag levy making up most of this revenue. Smaller percentages from other levies (including carbon emissions tax, levy on incandescent light bulbs) could go directly into ecosystem-based adaptation projects as per the NBSAP2.

4. **Payment for Ecosystem Services (Communal Conservancies):** Internationals and tourists were willing to pay (according the one of the TEEB study reports) for the continued conservation of wildlife over and above other fees directly involved with visitation and exposure. A conservation fee (collected at port of entry and/or online) charged to visitors (and through non-visitor donations) would be able to direct resources to landscapes of biodiversity value regardless of their tourism potential. The conservation fee, packaged as a Payment for Ecosystem Services (PES) could offer the opportunity to directly incentivize conservation action on communal lands, by linking the global community that values and benefits from wildlife conservation in communal conservancies in Namibia. Collection and distribution plans are outlined in more detail in the strategy.

5. **Ecolabeling:** Ecolabeling might not bring direct revenue in but it could certainly help change attitudes and behaviours towards directly attaining some of the goals of the NBSAP2, particularly biodiversity and ecosystem friendly land use and production systems. Ecolabeling with a focus on the tourism and meat production sectors would be the first feasible implementation options.

6. **Green Finance:** Mobilisation of green finance instruments could help close the financing gap, and there are some examples that could be further build on e.g. Go Green Fund Nedbank, the Bank Windhoek cooperation with the French Development Agency to increase lending for renewable energy, and the SUNREF initiative. A set of minimum standards and disclosure framework on Green Finance are essential for efficient allocation of financial resources to green projects and assets, market and risk analysis, benchmarks, and development of new products that could be offered on a comparable basis. Further investigation would be warranted to take next steps.

7. **Environmental Lottery:** In Namibia, a law allowing a state lottery has been around since 2002, but the new act aims to regulate this lottery. Currently, no environmental lottery is implemented in Namibia. Plans to start a state lottery have been proposed in the Harambee Prosperity Plan (HPP) as a strategy to attain the economic and social advancement goals of the HPP. Where national lotteries are used to advance social and environmental

outcomes, the allocation of funds collected through lotteries is not subjected to strict legal restrictions (as opposed to e.g. taxes and other revenue-generating activities). A lottery could contribute financially to closing the biodiversity expenditure gap in Namibia. It would have to be decided if an environmental lottery should be implemented in isolation, or as part of the national lottery (with percentage proceeds towards biodiversity and ecosystems, as part of a larger systems thinking framework: environment, society, economic advancement).

8. **Biodiversity Offsetting:** This instrument has by far the largest risks and would need to be developed under close consideration of the Precautionary Principle and Namibia context. Notwithstanding these potential pitfalls, offsetting does have the potential to contribute in closing the financing gap for biodiversity expenditure in Namibia. Offsetting could build on the existing enabling initiatives such as the Land Use Planning Policy and the Strategic Environmental Assessments built into them. However, several structural constraints have to be addressed first, including the need to create an enabling legal and biodiversity knowledge environment to place offsets in their appropriate spatial context (wildlife and ecosystems are largely under-researched in large parts of Namibia). In fact, legally, it should be placed under the Environmental Management Act No 7 of 2007. And before this, a national offset strategy will need careful application of a homegrown mix of mechanisms and offset models and transparent governance, and should take into account the cumulative impacts of development, identify priority sites, promote aggregated offsets, and integrate offset and compensation projects with national biodiversity objectives based on a scientific assessment of biodiversity irreplaceability.

9. **Donor Funding:** The EIF is an established Namibian environmental fund that has been a channeling conduit for various donor-funded schemes (including the Green Climate Fund). It is currently building a sustainability fund that could become a central contact for donor-funding opportunities and provide a database for new and existing initiatives. However, there is no fund specifically targeting biodiversity issues. This said, biodiversity could easily fall under climate change adaptation priorities, and many projects are aligning the two (particularly in the CBNRM arena). It might be useful, given the possible gaps in funding, for EIF to have a dedicated biodiversity fund (or at least as part of the sustainability fund - as it is a direct contributor to sustainability and sustainable development), which then has all the unfunded components of the NBSAP2 as key projects that require funding. Through this, a comprehensive biodiversity fundraising strategy could be developed, with clear goals and project objectives (as per NBSAP2 components that lack funding).

10. **Crowdfunding:** Crowdfunding in the case of closing the financing gap could be used in conjunction with donor-funding, and could be set up through the same strategy. The MET, through the EIF, could set up its own crowdfunding platform, or could discuss options to use Namstarter as a platform. The process could also be decentralized in a manner that 'how to source funding through crowdfunding' training is given to small NGOs and individuals who are implementing activities towards the goals but have not had access to the required financing of such activities (although a centralized system through EIF would decrease competition between NGOs and individuals and instead financing could be allocated to specific NBSAP2 activities conducted by those NGOs/individuals).

For the implementation measure, please indicate to which national or Aichi Biodiversity Target(s) it contributes
Target 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"

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes:
☐ Measure taken has been effective
☐ Measure taken has been partially effective
☐ Measure taken has been ineffective
☒ Unknown

Please explain the selection and where possible indicate the tools or methodology used for the assessment of effectiveness above

Other relevant information
None.

Relevant websites, web links and files
http://www.met.gov.na/services/resource-mobilisation-project-/237/
https://www.international-climate-initiative.com/en/nc/details/?projectid=368&iki_lang=en
https://resmob.org/wp-content/uploads/2018/03/Resource-Mobilisation-Strategy-for-Namibia-ppt-14-March-2018-for-website.pdf
https://resmob.org

Obstacles and scientific and technical needs related to the measure taken: Please describe what obstacles have been encountered and any scientific and technical needs for addressing these, including technical and scientific cooperation, capacity development activities or the need for guidance materials.

Assessing Namibia's Approach to the Biodiversity Resource Mobilization Agenda

Policy Architecture (Macro)
There is no official policy on green finance or on biodiversity resource mobilization. The Namibia Financial Sector Strategy 2011-2021 by the Bank for Namibia sets out a long-term strategy and vision for overall financial sector development in Namibia. Unfortunately, this crucial long-term vision does not treat green finance or biodiversity resource mobilization matters. The NDP 5 's Implementation Plan does provide for explicit support for environmental sustainability to cover for programmes pertaining to conservation of land, land degradation, protected areas, CBNRM, species conservation and the development of biodiversity economy. The macro level therefore needs to ensure the immersion of biodiversity resource mobilisation and green finance within the follow-up work in the Financial Sector Strategy beyond 2021. The Draft Country Strategy to Green Climate Fund (May 2017) is absent on a few pertinent matters such as the identification of economic opportunities that emanate as a result of climate change.

Institutional Architecture (Meso)
The creation of the EIF provided for the development of a coordinated and coherent institutional framework to ensure the country's green financing agenda. However, a much more explicit and strategic thrust is to be attained through the creation of a Environmental Fiscal Commission with the EIF serving as a secretariat. The EFC will then operate and report into the Financial Sector Inclusion Council, which emanates from the Financial Sector Strategy. This will ensure that green finance issues will be incorporated duly into Namibia's overall financial sector strategy development.

Economic Agent Level (Micro)
There is very little evidence of micro level activities such as the development of biodiversity-linked value chains. The development of the Biodiversity Economy as contained in the NDP 5 will provide for an enabling platform to ensure the coherent development of the micro-level. In addition promoting investment as well as appropriate economic incentives will help to increase the funding envelope that can be attained.

Relevant websites, web links and files
None.

Section 3. Assessment of progress towards each national target

Assessment of progress towards each national target

Target 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

Category of progress towards the implementation of the selected target:
☐ On track to exceed target
☒ On track to achieve target
☐ Progress towards target but at an insufficient rate
☐ No significant change
☐ Moving away from target
☐ Unknown

Date the assessment was done:
30 October 2018

Additional Information:
The main measures undertaken to implement and achieve the selected target were described in Section 2 and are summarized as follows:

- Finalization of the CEPA Strategy.
- Finalization of the Environmental Education and Education for Sustainable Development Policy.
- Annual commemoration of International Biodiversity Day and other environment-related days.
- Hosting of Youth and Environment Summits (7) on different environmental topics.
- Operationalization of the BCH mechanism.
- Hosting of 2 editions of Namibia's Sustainable Development Awards.
- Development of environmental awareness survey to be undertaken in 2019.

Awareness is however recognized as a difficult variable to measure.

Indicators used in this assessment

Key performance indicator:
Results of surveys for pre-defined target groups using the Biodiversity Barometer Tool

Other indicators used were:

- Baseline information on biodiversity awareness available and trends monitored;
- Biodiversity Clearing House Mechanism operational;
- Biodiversity issues in curricula;
- Number of trained environmental educators;
- Number of environmental educations centers and clubs;
- Celebration of biodiversity day and other related environmental days;
- Trends in funding from all sources towards biodiversity;
- Number of new international cooperation agreements on biodiversity awareness issues.

Please describe any other tools or means used for assessing progress

- Progress reports / presentations from lead agencies assigned to implement specific strategic initiatives under the NBSAP;
- Interviews / reports on implementation status with lead agencies.

Relevant websites, web links and files
http://bch.ncrst.na/about-us/

Level of confidence of the above assessment
☒ Based on comprehensive evidence
☐ Based on partial evidence
☐ Based on limited evidence

Please provide an explanation for the level of confidence indicated above.
Assessment was done periodically by each lead agency on the implementation status of each strategic initiative required to meet the national target. Comparison and analysis of the periodic report was undertaken to ensure that comprehensive evidence was available to arrive at a conclusive assessment.

Adequacy of monitoring information to support assessment
☒ Monitoring related to this target is adequate
☐ Monitoring related to this target is partial (e.g. only covering part of the area or issue)
☐ No monitoring system in place
☐ Monitoring is not needed

Please describe how the target is monitored and indicate whether there is a monitoring system in place

- A strong coordination framework through the NBSAP2 Steering Committee is in place to ensure that implementation is carried out in an integrated and harmonized manner, and to mainstream biodiversity and NBSAP2 priorities into other sectors at all levels.
- The monitoring and evaluation of NBSAP2 is coordinated by the Division of Multilateral Environmental Agreements under the MET, with support from the cross-sectoral NBSAP2 Steering Committee. The Division of Multilateral Environmental Agreements serves as Secretariat to the Committee, and provision has been made in the Terms of Reference of the Committee for it to support the monitoring and evaluation of NBSAP2. All of the activities prioritized in NBSAP2 are to be implemented by institutions represented on the NBSAP2 steering committee, which should facilitate the process of coordination and monitoring and evaluation.
- Key institutions represented on the NBSAP2 steering committee provide quarterly reports and high-level stakeholders on an annual basis in terms of their progress and challenges with regard to achieving the targets and strategic goals of NBSAP2. The MET is responsible to compile these reports and provide the status of implementation of each target. This process serves as a guide for future strategic planning, and contributes information towards Namibia's national reporting to the CBD.

Relevant websites, web links and files
None.

Target 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

Category of progress towards the implementation of the selected target:
☐ On track to exceed target
☒ On track to achieve target
☐ Progress towards target but at an insufficient rate
☐ No significant change
☐ Moving away from target
☐ Unknown

Date the assessment was done:
30 October 2018

Additional information (Please provide information on the evidence used in the assessment of this target, drawing upon relevant information provided in section II, including obstacles in undertaking the assessment).

The main measures undertaken to implement and achieve the selected target were described in Section 2 and the main evidence used to assess progress is as follows:

- Publication of reports and studies including the TEEB Study, Baseline Biodiversity Expenditure Framework and Ecosystem Services Inventory
- Biodiversity Resource Mobilization Strategy (draft)
- Establishment of Environmental Economics Network
- High level briefing session on biodiversity financing
- Training events undertaken and summer school on the economic valuation of ecosystem services
- Mainstreaming of biodiversity and sustainable management of natural resources within NDP5.

Indicators used in this assessment
Please provide a list of indicators used for the assessment of this target
Key performance indicators:

- SEA regulations gazetted;
- Integration of biodiversity issues within NDP5;
- Integration of biodiversity into sectoral, regional and local plans and respective budgetary allocations.

Other indicators used were:

- Cross-sectoral environmental economics network in place and number of training programmers and people trained;
- Number of ecosystem services evaluations;
- Annual report and its dissemination to key decision-makers and the general public;
- Briefings on economic case for biodiversity for key decision makers;
- Budgetary allocations for biodiversity in national and regional plans;
- Biodiversity priorities in national, regional, local and sectoral plans, and trends in financial allocations to biodiversity-friendly initiatives in the respective plans.

Please describe any other tools or means used for assessing progress

- Progress reports / presentations from lead agencies assigned to implement specific strategic initiatives under the NBSAP;
- Reports on implementation status with lead agencies.

Relevant websites, web links and files
https://resmob.org/news/
http://www.met.gov.na/files/downloads/179_ResMob-Inventory%20report2-final.pdf

Level of confidence of the above assessment
☐ Based on comprehensive evidence
☒ Based on partial evidence
☐ Based on limited evidence

Please provide an explanation for the level of confidence indicated above.
Assessment was done periodically by each lead agency on the implementation status of each strategic initiative required to meet the national target. Comparison and analysis of the periodic report was undertaken to ensure that comprehensive evidence was available to arrive at a conclusive assessment.

Adequacy of monitoring information to support assessment
☐ Monitoring related to this target is adequate
☒ Monitoring related to this target is partial (e.g. only covering part of the area or issue)
☐ No monitoring system in place
☐ Monitoring is not needed

Please describe how the target is monitored and indicate whether there is a monitoring system in place

This target is being monitored through the inclusion of biodiversity issues into the National Development Plan (NDP) particularly NDP5. Furthermore, the Ministry of Land Reform is in the process of developing regional land use plans and central to that development is the inclusion on biodiversity issues (Wildlife, Biotrade, Nature Based Tourism) into planning processes. There is monitoring in place for this target.

Relevant websites, web links and files
https://www.npc.gov.na/?wpfb_dl=294

Target 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

Category of progress towards the implementation of the selected target:
☐ On track to exceed target
☒ On track to achieve target
☐ Progress towards target but at an insufficient rate
☐ No significant change
☐ Moving away from target
☐ Unknown

Date the assessment was done:
30 October 2018

Additional information
The main measures undertaken to implement and achieve the selected target were described in Section 2 and the main evidence used to assess progress is as follows:

- Policy paper on environmental levies (EIF)
- Schedule of environmental levies as published in the Government Gazette
- Cabinet directive to introduce levies on the usage of light weight plastic bags, ban the import and any domestic production of plastic bags containing Calcium Carbonate ($CaCO_3$) and to ban the use of plastic carrier bags in Namibia's Protected Areas and became effective in 2018.
- Biodiversity Resource Mobilization Strategy (draft)

Indicators used in this assessment
Key performance indicators:

- 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

Other indicators used were:

- Incentives assessment study report analysing incentives affecting biodiversity (ResMob willingness to pay study)
- Number of environmental taxes and levies, their monetary value and their reinvestment into environmental sustainability initiatives

Please describe any other tools or means used for assessing progress

- Progress reports / presentations from lead agencies assigned to implement specific strategic initiatives under the NBSAP;
- Interview reports on implementation status with lead agencies.

Relevant websites, web links and files

http://www.nla.org.na/fileadmin/user_upload/11_Authorities/Government_Gazette_No_6019_Environmental_Levy_01.pdf
https://www.pwc.com/na/en/assets/pdf/Enviromental%20Alert%20%20-%20Special%20edition%20July%202016.pdf
https://www.eif.org.na

Level of confidence of the above assessment

☐ Based on comprehensive evidence
☒ Based on partial evidence
☐ Based on limited evidence

Please provide an explanation for the level of confidence indicated above.

Assessment was done periodically by each lead agency on the implementation status of each strategic initiative required to meet the national target. Comparison and analysis of periodic reports was undertaken to ensure that comprehensive evidence was used to arrive at a conclusive assessment.

Adequacy of monitoring information to support assessment

☒ Monitoring related to this target is adequate
☐ Monitoring related to this target is partial (e.g. only covering part of the area or issue)
☐ No monitoring system in place
☐ Monitoring is not needed

Please describe how the target is monitored and indicate whether there is a monitoring system in place

The target is being monitored through the Environmental Economics Division of the Ministry of Environment and Tourism and the EIF. The environmental fiscal policy framework provided an opportunity for stock taking including detailed analysis of negative impacts on biodiversity and possible instruments to minimise harmful practices. The introduction and operationalization of tax instruments serve as a monitoring tool as well as for investments from these taxes towards biodiversity management.

Relevant websites, web links and files

None further.

Target 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

Category of progress towards the implementation of the selected target:

☐ On track to exceed target
☒ On track to achieve target
☐ Progress towards target but at an insufficient rate
☐ No significant change
☐ Moving away from target
☐ Unknown

Date the assessment was done:
30 October 2018

Additional information (Please provide information on the evidence used in the assessment of this target, drawing upon relevant information provided in section II, including obstacles in undertaking the assessment).

The main measures undertaken to implement and achieve the selected target were described in Section 2 and the main evidence used to assess progress is as follows:

- Four completed IRLUPs and SEAs
- Important Bird Areas and Important Plant Areas identified
- Operationalization of the Sustainable Development Advisory Council
- Enforcement of the Environmental Management Act
- Compendium of environmental statistics (draft – this is to be developed into State of Environment Report)
- Integrated Coastal Zone Management Bill (draft)

Indicators used in this assessment
Key performance indicators:

- Participatory Integrated Regional Land Use Plans with SEA approved by Cabinet for all Regions;
- Delineation of ecological corridors;
- Criteria for key biodiversity areas.

Other indicators used were:

- Number of IRLUPs
- Area and location of key biodiversity areas identified and protected;
- Number of Important Bird Areas; Important Plant Areas;
- Number of EMPs being adhered to, Inspectorate sub-division in place within DEA and number of inspections carried out;
- Number of SEAs and uptake of their recommendations through implemented SEMPs;
- Number of national ISOERs produced;
- Number of meetings of the Sustainable Development Advisory Council and number of biodiversity-related interventions.

Please describe any other tools or means used for assessing progress

- Progress reports / presentations from lead agencies assigned to implement specific strategic initiatives under the NBSAP;
- Reports on implementation status with lead agencies.

Relevant websites, web links and files

http://www.mlr.gov.na/ca/irlups?p_p_id=58&p_p_lifecycle=0&p_p_state=maximized&p_p_mode=view&saveLastPath=false&_58_struts_action=%2Flogin%2Flogin
http://www.the-eis.com
http://www.nbri.org.na
http://www.the-eis.com/data/RDPs/RDP31%20Important%20Bird%20Areas%20in%20Namibia.pdf

Level of confidence of the above assessment
☒ Based on comprehensive evidence
☐ Based on partial evidence
☐ Based on limited evidence

Please provide an explanation for the level of confidence indicated above.

Assessment was done periodically by each lead agency on the implementation status of each strategic initiative required to meet the national target. Comparison and analysis of periodic reports was undertaken to ensure that comprehensive evidence was used to arrive at a conclusive assessment.

Adequacy of monitoring information to support assessment
☒ Monitoring related to this target is adequate
☐ Monitoring related to this target is partial (e.g. only covering part of the area or issue)
☐ No monitoring system in place
☐ Monitoring is not needed

Please describe how the target is monitored and indicate whether there is a monitoring system in place

Targets is being monitoring through:

- The number of IRLUPs being developed and that include biodiversity issues through SEAs;
- Annual reports of the implementation of the Environmental Management Act, which are tabled to Cabinet and Parliament
- Annual reports of the Sustainable Development Advisory Council

Relevant websites, web links and files
https://sdacnamibia.org/
https://www.namibian.com.na/index.php?id=104518&page=archive-read
https://conferences.iaia.org/2015/Final-Papers/20150416_IRLUP%20Namibia_SEA_ES.pdf

Target 5
By 2022, all living marine and aquatic resources are managed sustainably and guided by the ecosystem approach

Category of progress towards the implementation of the selected target:
☐ On track to exceed target
☒ On track to achieve target
☐ Progress towards target but at an insufficient rate
☐ No significant change
☐ Moving away from target
☐ Unknown

Date the assessment was done:
30 October 2018

Additional information

The main measures undertaken to implement and achieve the selected target were described in Section 2 and the main evidence used to assess progress is as follows:

- New regulations to prevent overfishing in inland fishing areas
- Monitoring of marine fish stocks to determine Total Allowable Catches (TAC)
- Issuing of a moratorium on pilchard harvesting
- The establishment of the MSP national working group
- Identification of new EBSAs and establishment of working group

Indicators used in this assessment
Key performance indicators:

- Stocks of commercial fisheries resources at sustainable levels as proven by scientific data;
- 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 maricultural industries

Other indicators used were:

- Number of management plans for vulnerable marine species
- Trends in state of stocks; trends in total allowable catch
- State of the Ecosystem Information System (SEIS) - trends in marine trophic index; sea surface temperature; Southern Oscillation Index; Dissolved oxygen levels
- Number of fisheries observer's trips; sea and air patrols; harbor and factory inspections; violations reported by enforcement officers
- MSP framework in place and functional
- Coverage and number of EBSAs
- Management structures for the Benguela Current Commission in place
- Reduced incidents of illegal fishing
- Fisheries working group created in TFCA activities
- Amendment of the Inland Fisheries Act
- Aquaculture Master Plan; number of viable fish farms
- Number of aquaculture and mariculture centers operating according to environmental management plans
- Number of aquaculture and mariculture using indigenous species
- Aquatic animal disease laboratory

Please describe any other tools or means used for assessing progress

- Progress reports / presentations from lead agencies assigned to implement specific strategic initiatives under the NBSAP.

Relevant websites, web links and files

None further.

Level of confidence of the above assessment

☒ Based on comprehensive evidence
☐ Based on partial evidence
☐ Based on limited evidence

Please provide an explanation for the level of confidence indicated above.

Assessment was done periodically by each lead agency on the implementation status of each strategic initiative required to meet the national target. Comparison and analysis of periodic reports was undertaken to ensure that comprehensive evidence was used to arrive at a conclusive assessment.

Adequacy of monitoring information to support assessment

☒ Monitoring related to this target is adequate
☐ Monitoring related to this target is partial (e.g. only covering part of the area or issue)
☐ No monitoring system in place
☐ Monitoring is not needed

Please describe how the target is monitored and indicate whether there is a monitoring system in place

The target is being monitored through the current statistics on stock of commercial fisheries resources, the operations of the Benguela Current Commission, the establishment of MSP and EBSAs in Namibia, report on surveillance in the marine area, as well as through reviewing current legislation and policies to address fishery challenges and opportunities.

Relevant websites, web links and files
http://cmr.mandela.ac.za/EBSA-Portal

Target 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

Category of progress towards the implementation of the selected target:
☐ On track to exceed target
☐ On track to achieve target
☒ Progress towards target but at an insufficient rate
☐ No significant change
☐ Moving away from target
☐ Unknown

Date the assessment was done:
30 October 2018

Additional information
The main measures undertaken to implement and achieve the selected target were described in Section 2 and the main evidence used to assess progress is as follows:

- Land Degradation Neutrality Assessment of 2015 and identification of priority sites for interventions.
- Intended Nationally Determined Contribution of 2015.
- SEA on Bush Harvesting (2016) and Bush Harvesting Guidelines (2017).
- Gazetting of 10 new Community Forests.
- 2017 Management Effectiveness Assessment Report for Oshaampula, Okongo, Otjiu-West and Uukolonkadhi Community Forests.
- Completion of Forest Inventories.
- Increasing compliance of green scheme projects with the Environmental Management Act.
- Moratorium on the harvesting and transportation of timber.

Indicators used in this assessment
Key performance indicators:

- 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

Other indicators used were:

- Number of community forests gazetted and coverage; number of community forests financially self-sufficient; number of community forests operating according to integrated land use plans
- Number of planning and local level fire management implementation committees; number of "planned" fires managed in line with the National Fire Management Plan
- Number of EIAs undertaken on green scheme projects and EMPs under implementation
- Status of agriculture and rangeland report showing good practice coverage
- Offtake rate and trends in the cattle population in the northern communal areas; auction infrastructure constructed and number of auction events
- Area covered by and number of farmers engaged in conservation agriculture, organic farming and drip irrigation
- Number of arrests and prosecutions for illegal logging

- Area of land de-bushed annually; employment and revenue generated through de-bushing; SEA on charcoal industry.

Please describe any other tools or means used for assessing progress

- Progress reports / presentations from lead agencies assigned to implement specific strategic initiatives under the NBSAP; Directorate of Forestry reports, Interviews, CBNRM Reports, Communal Rangeland info from Directorate of Agriculture Research and Development.

Relevant websites, web links and files

http://extwprlegs1.fao.org/docs/pdf/les149694.pdf
https://www.dasnamibia.org/

Level of confidence of the above assessment

☒ Based on comprehensive evidence
☐ Based on partial evidence
☐ Based on limited evidence

Please provide an explanation for the level of confidence indicated above.

Assessment was done periodically by each lead agency on the implementation status of each strategic initiative required to meet the national target. Comparison and analysis of periodic reports was undertaken to ensure that comprehensive evidence was used to arrive at a conclusive assessment.

Adequacy of monitoring information to support assessment

☒ Monitoring related to this target is adequate
☐ Monitoring related to this target is partial (e.g. only covering part of the area or issue)
☐ No monitoring system in place
☐ Monitoring is not needed

Please describe how the target is monitored and indicate whether there is a monitoring system in place

The monitoring is being done through the annual Community Conservation Report by Namibia Association for Community Based Natural Resource Support Organisation (NACSO). Community forests, Conservancies and other community conservation organisations gather data throughout the year for their own management applications, which are submitted to NACSO for consolidation and monitoring (progress tracking).

The monitoring of Bush encroachment is conducted through a National De-bushing committee and the BCBU project report on the area cleared of bush and the functioning of the various value chain products.

Relevant websites, web links and files

http://www.nacso.org.na/sites/default/files/State%20of%20Community%20Conservation%20book%20web%202017.pdf
http://www.nacso.org.na/resources/state-of-community-conservation-2017

Assessment of progress towards each national target

Target 7
By 2022, pollution, including from excess nutrients, has been brought to levels that are not detrimental to biodiversity and ecosystem health and functioning

Category of progress towards the implementation of the selected target:

☐ On track to exceed target
☐ On track to achieve target
☒ Progress towards target but at an insufficient rate
☐ No significant change
☐ Moving away from target
☐ Unknown

Date the assessment was done:
30 October 2018

Additional information
The main measures undertaken to implement and achieve the selected target were described in Section 2 and the main evidence used to assess progress is as follows:

- National Solid Waste Management Strategy (MET, 2018) and establishment of National Solid Waste Management Advisory Panel.
- Annual Reports on the Implementation of the Environmental Management Act.
- Improved enforcement of the Environmental Management Act to curb harmful activities such as sand mining, timber harvesting as well as pollution from mining activities.
- Ratification of the Minamata Convention and completion of Mercury inventory.
- Commencement of inventories of PCBs, pesticides and new POPs through the Stockholm Convention.

Indicators used in this assessment
Key performance indicators:

- 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

Other indicators used were:

- Waste management and Pollution Control Act
- Soil, water, air and occupational health standards met by public and private sector
- 3rd and 4th Greenhouse Gas Inventory
- Emergency committee in place
- 2 NIPs in place
- Number of towns implementing EMPs
- Volumes of waste recycled annually
- Number of bio-gas digesters; amount of solid waste utilized

Please describe any other tools or means used for assessing progress

- Progress reports / presentations from lead agencies assigned to implement specific strategic initiatives under the NBSAP;
- Interview reports on implementation status with lead agencies.

Relevant websites, web links and files (Please use this field to indicate any relevant websites, web links or documents where additional information related to this assessment can be found).
http://www.met.gov.na/files/downloads/43e_NSWM%20Strategy.pdf

Level of confidence of the above assessment
☒ Based on comprehensive evidence
☐ Based on partial evidence
☐ Based on limited evidence

Please provide an explanation for the level of confidence indicated above.
Assessment was done periodically by each lead agency on the implementation status of each strategic initiative required to meet the national target. Comparison and analysis of periodic reports was undertaken to ensure that comprehensive evidence was used to arrive at a conclusive assessment.

Adequacy of monitoring information to support assessment
☒ Monitoring related to this target is adequate
☐ Monitoring related to this target is partial (e.g. only covering part of the area or issue)
☐ No monitoring system in place
☐ Monitoring is not needed

Please describe how the target is monitored and indicate whether there is a monitoring system in place

This target is being monitored through the report on the implementation of the Environmental Management Act of 2007 (Act No. 7 of 2007) each financial year, which is tabled to both Cabinet and Parliament. Reports to related Conventions such as Minamata and Stockholm also serve as monitoring tools towards obtaining the target.

Relevant websites, web links and files
None further.

Target 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

Category of progress towards the implementation of the selected target:
☐ On track to exceed target
☐ On track to achieve target
☒ Progress towards target but at an insufficient rate
☐ No significant change
☐ Moving away from target
☐ Unknown

Date the assessment was done:
30 October 2018

Additional information
The main measures undertaken to implement and achieve the selected target were described in Section 2 and the main evidence used to assess progress is as follows:

- ATLAS of Alien Plants App was developed
- Poster including a map of Prosopis invasion in Namibia was created
- Quick guide to invasive cacti in Namibia

Indicators used in this assessment
Key performance indicators:

- Updated National Review;

- Management Plans implemented to control most threatening alien invasive species

Indicators
- Dedicated policy or programme on alien invasive species; management plans for invasive species; establishment of working group on alien invasive
- Updated National Report

Please describe any other tools or means used for assessing progress
- Progress reports / presentations from lead agencies assigned to implement specific strategic initiatives under the NBSAP;
- Reports on implementation status with lead agencies.

Relevant websites, web links and files
http://www.the-eis.com/data/literature/GIZ%20Biomass%20Project_Encroacher%20species_Poster.pdf)
(http://www.the-eis.com/atlas/sites/default/files/QUICKGUIDE%20TO%20INVASIVE%20CACTI%20IN%20NAMIBIA.pdf)
(http://www.the-eis.com/atlas/?q=atlas-of-alien-plants)
http://www.academia.edu/19597758/Prosopis_encroachment_along_the_Fish_River_at_Gibeon_Namibia._II._Harvestable_wood_biomass
https://www.researchgate.net/publication/286447226_Prosopis_encroachment_along_the_Fish_River_at_Gibeon_Namibia_I_Habitat_preferences_population_densities_and_the_effect_on_the_environment
http://www.nbri.org.na/sites/default/files/Prosopis%20encroachment%20along%20the%20Fish%20River%20at%20Gibeon%2C%20Namibia.%20I.pdf

Level of confidence of the above assessment
☒ Based on comprehensive evidence
☐ Based on partial evidence
☐ Based on limited evidence

Please provide an explanation for the level of confidence indicated above.
Assessment was done periodically by each lead agency on the implementation status of each strategic initiative required to meet the national target. Comparison and analysis of periodic reports was undertaken to ensure that comprehensive evidence was used to arrive at a conclusive assessment.

Adequacy of monitoring information to support assessment
☐ Monitoring related to this target is adequate
☒ Monitoring related to this target is partial (e.g. only covering part of the area or issue)
☐ No monitoring system in place
☐ Monitoring is not needed

Please describe how the target is monitored and indicate whether there is a monitoring system in place
- Actual monitoring is done by the respective institutions and NBSAP2 is only keeping track of overall implementation.

Relevant websites, web links and files
None further.

Target 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

Category of progress towards the implementation of the selected target:

☐ On track to exceed target
☐ On track to achieve target
☒ Progress towards target but at an insufficient rate
☐ No significant change
☐ Moving away from target
☐ Unknown

Date the assessment was done:
30 October 2018

Additional information
The main measures undertaken to implement and achieve the selected target were described in Section 2 and the main evidence used to assess progress has been the mobilization of the following projects:

1. Climate Resilient Agriculture in three of the Vulnerable Extreme northern crop-growing regions (CRAVE) Project (GCF-funded)
2. Empower to Adapt: creating Climate-Change Resilient Livelihoods through Community-Based Natural Resource Management in Namibia (GCF-funded). The project is being implemented countrywide and is expected to benefit more than 15,000 people directly and 61 000 indirectly.
3. Improving rangeland and ecosystem management practices of smallholder farmers under conditions of climate change in Sesfontein, Fransfontein, and Warmquelle areas (GCF-funded).
4. Pilot Rural Desalination Plants using renewable power and membrane technology (Adaptation Fund).
5. Scaling up Community Resilience to Climate Change (GEF-funded).

Indicators used in this assessment
Key performance indicators:

- Report on the vulnerability of Namibian ecosystems to climate change and associated anthropogenic pressures;
- Evaluation of implementation of appropriate measures

Other indicators used were:

- Assessment Study with adaptation recommendations under implementation

Please describe any other tools or means used for assessing progress

- National Reports to UNFCCC
- Biennial Update Reports to UNFCCC

Relevant websites, web links and files

http://www.met.gov.na/files/files/National%20Climate%20Change%20Strategy%20and%20Action%20Plan%20brochure%202013%20-%202020.pdf
http://unfccc.int/files/adaptation/application/pdf/namibia-bur2_10_november_2016_.pdf

Level of confidence of the above assessment

☒ Based on comprehensive evidence
☐ Based on partial evidence
☐ Based on limited evidence

Please provide an explanation for the level of confidence indicated above.
Assessment was done periodically by each lead agency on the implementation status of each strategic initiative required to meet the national target. Comparison and analysis of periodic reports was undertaken to ensure that comprehensive evidence was used to arrive at a conclusive assessment.

Adequacy of monitoring information to support assessment
☒ Monitoring related to this target is adequate
☐ Monitoring related to this target is partial (e.g. only covering part of the area or issue)
☐ No monitoring system in place
☐ Monitoring is not needed

Please describe how the target is monitored and indicate whether there is a monitoring system in place
The monitoring of this target is done through the national communication to the UNFCCC and include relevant information on national circumstances, GHG inventories, a vulnerability and adaptation assessment, mitigation assessment, financial resources and transfer of technology, and education, training and public awareness.

Relevant websites, web links and files (
None further.

Target 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

Category of progress towards the implementation of the selected target:
☒ **On track to exceed target**
☐ **On track to achieve target**
☐ **Progress towards target but at an insufficient rate**
☐ **No significant change**
☐ **Moving away from target**
☐ **Unknown**

Date the assessment was done:
30 October 2018

Additional information (Please provide information on the evidence used in the assessment of this target, drawing upon relevant information provided in section II, including obstacles in undertaking the assessment).

The main measures undertaken to implement and achieve the selected target were described in Section 2 and the main evidence used to assess progress is as follows:

- Park Management Plans
- Use of the Incident Book Monitoring System and METT Assessments
- Investment in National Parks
- Human wildlife conflict mitigation measures
- Tourism and trophy hunting concessions
- Management of Transfrontier Conservation Areas

Indicators used in this assessment
The following indicators were used:

- Approved management plans for all national parks
- Management Effectiveness of Namibia's terrestrial protected areas (national parks)
- Trends in investment into the protected area network
- Sustainable Financing Plans for Protected Area System
- Number of protected areas with connectivity corridors and managed buffer zones
- Financing of the protected area network

Please describe any other tools or means used for assessing progress

- Progress reports / presentations from lead agencies assigned to implement specific strategic initiatives under the NBSAP.
- Interview reports on implementation status with lead agencies.

Relevant websites, web links and files
http://www.met.gov.na/files/files/State%20of%20the%20Parks%20Report.pdf
http://www.nacso.org.na/all_tags/protected-area
http://www.mwt.gov.na/documents/98944/100185/NMPCP/a77e4969-8f7c-4661-b4ea-ddc39ed56694
http://www.the-eis.com/data/literature/National%20policy%20on%20protected%20areas%20neighbours%20and%20resident%20communities.pdf

http://www.the-eis.com/data/literature/Namibian%20islands%20Marine%20Protected%20Area%20WWF%20report.pdf
http://www.the-eis.com/data/literature/NACOMA_SEA_Karas_Hardap.pdf
http://webcache.googleusercontent.com/search?q=cache:6-aJQ-r-K9AJ:www.benguelacc.org/index.php/en/component/docman/doc_download/941-doc-lmr-2b-namibia-workshop-report-horse-mack-era-review-engl+&cd=6&hl=en&ct=clnk&gl=na&client=safari

Level of confidence of the above assessment
☒ **Based on comprehensive evidence**
☐ **Based on partial evidence**
☐ **Based on limited evidence**

Please provide an explanation for the level of confidence indicated above.
Assessment was done periodically by each lead agency on the implementation status of each strategic initiative required to meet the national target. Comparison and analysis of periodic reports was undertaken to ensure that comprehensive evidence was used to arrive at a conclusive assessment.

Adequacy of monitoring information to support assessment
☒ **Monitoring related to this target is adequate**
☐ **Monitoring related to this target is partial (e.g. only covering part of the area or issue)**
☐ **No monitoring system in place**
☐ **Monitoring is not needed**

Please describe how the target is monitored and indicate whether there is a monitoring system in place

- Records and monitoring through the incident book monitoring systems (IBMS)
- Application of the METT assessments to monitor management of protected areas using specific parameters such as wildlife populations, poaching cases etc.
- Tracking and monitoring the effectiveness and connectivity of corridors and their impact on wildlife migration.

Target 11
By 2016, threatened and vulnerable species lists are updated and measures implemented by 2019 to improve their conservation status

Category of progress towards the implementation of the selected target:
☐ On track to exceed target
☒ On track to achieve target
☐ Progress towards target but at an insufficient rate
☐ No significant change
☐ Moving away from target
☐ Unknown

Date the assessment was done:
30 October 2018

Additional information (Please provide information on the evidence used in the assessment of this target, drawing upon relevant information provided in section II, including obstacles in undertaking the assessment).

The main measures undertaken to implement and achieve the selected target were described in Section 2 and the main evidence used to assess progress is as follows:

- Millennium Seed Bank Partnership report
- Biodiversity Monitoring Framework for the Tsau //Khaeb National Park
- Poaching data records for high value species

Indicators used in this assessment

- Number of approved species management plans in place
- Regularly updated lists and programmes for rare, endangered, endemic and valuable species
- Number of annual game translocated; game introduction technical advisory group set up
- National database accessible to concerned stakeholders
- Training programmes on priority areas such as "crime-scene" training; joint law enforcement mechanisms and patrols; regional cooperation on wildlife crime in TFCAs
- Number of arrests and prosecutions for poaching and other wildlife crimes
- Number of arrests and prosecutions for illegal logging

Please describe any other tools or means used for assessing progress
None.

Relevant websites, web links and files

https://cmsdata.iucn.org/downloads/namibia_elephant_management_plan_dec__2007.pdf
http://www.the-eis.com/data/literature/MET%20Buffalo%20Management%20Plan.pdf
http://www.nbri.org.na
www.nacso.org.na

Level of confidence of the above assessment
☒ Based on comprehensive evidence
☐ Based on partial evidence
☐ Based on limited evidence

Please provide an explanation for the level of confidence indicated above.
Assessment was done periodically by each lead agency on the implementation status of each strategic initiative required to meet the national target. Comparison and analysis of periodic reports was undertaken to ensure that comprehensive evidence was used to arrive at a conclusive assessment.

Adequacy of monitoring information to support assessment
☒ Monitoring related to this target is adequate
☐ Monitoring related to this target is partial (e.g. only covering part of the area or issue)
☐ No monitoring system in place
☐ Monitoring is not needed

Please describe how the target is monitored and indicate whether there is a monitoring system in place

- Annual review of species management plans to determine the status and progress made towards the objectives.
- Annual reviews and updated lists and programmes for rare, endangered, endemic species.

- Annual game counts.
- Training needs assessments, joint patrols and regional cooperation on wildlife crime in TFCAs.
- Monitoring of wildlife crime investigations and prosecutions to determine effectiveness thereof.

Target 12
By 2020, Genetic diversity of cultivated plants and farmed animals is maintained and enhanced

Category of progress towards the implementation of the selected target:
☐ On track to exceed target
☒ On track to achieve target
☐ Progress towards target but at an insufficient rate
☐ No significant change
☐ Moving away from target
☐ Unknown

Date the assessment was done:
30 October 2018

Additional information
The main measures undertaken to implement and achieve the selected target were described in Section 2 and the main evidence used to assess progress is as follows:

- National Plant Genetic Resources Center collection.
- Seed and Seed Varieties Bill.
- Plant Breeders and Farmers Rights Bill.
- Awareness campaign and number of stakeholders reached.
- Strategy to develop and promote indigenous livestock breeds and crop varieties for adoption by local farmers.
- National Biosafety Clearing House Training Workshop administered.
- Mock Application Evaluation Training Workshop on GMOs and derived products.

Indicators used in this assessment

- Legislation in place to protect the genetic diversity of cultivated plants and farmed animals
- Characterization of livestock breeds; number of indigenous breed livestock improvement programmes; ex-situ conservation of breeds
- Number of germplasms collected and characterized
- Number of crop cultivars and livestock breeds with tolerance to abiotic stresses adopted by farmers
- Awareness campaign and the number of stakeholders reached
- 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

Please describe any other tools or means used for assessing progress
None.

Relevant websites, web links and files
None further.

Level of confidence of the above assessment
☒ Based on comprehensive evidence
☐ Based on partial evidence

☐ Based on limited evidence

Please provide an explanation for the level of confidence indicated above.
Assessment was done periodically by each lead agency on the implementation status of each strategic initiative required to meet the national target. Comparison and analysis of periodic reports was undertaken to ensure that comprehensive evidence was used to arrive at a conclusive assessment.

Adequacy of monitoring information to support assessment
☒ Monitoring related to this target is adequate
☐ Monitoring related to this target is partial (e.g. only covering part of the area or issue)
☐ No monitoring system in place
☐ Monitoring is not needed

Please describe how the target is monitored and indicate whether there is a monitoring system in place
- Annual monitoring of crop cultivars and livestock breeds adopted by farmers.
- Communication with farmers through awareness campaigns.

Target 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

Category of progress towards the implementation of the selected target:
☐ On track to exceed target
☒ On track to achieve target
☐ Progress towards target but at an insufficient rate
☐ No significant change
☐ Moving away from target
☐ Unknown

Date the assessment was done:
30 October 2018

Additional information
The main measures undertaken to implement and achieve the selected target were described in Section 2 and the main evidence used to assess progress is as follows:

- Community based natural resource management (CBNRM) Programme (Annual Reports).
- Water Resources Management Act (2013).
- Management Plan for the newly declared Bwabwata Okavango Ramsar Site.
- Continuous wetland bird counts on Namibia's wetlands.

Indicators used in this assessment

- Area under sustainable CBNRM and benefits to rural communities
- Enforcement of agreements reached under the different transboundary water commissions
- Implementation of Integrated Water Resources Management Plan
- Number of rehabilitation and restoration programs and area covered
- Number of conservancies and community forests with integrated management plans
- Water quality and quantity records
- Examples of regional integration in the transboundary management of river basins
- Approved management plans in place for Ramsar Sites; data on water quality; bird counts; restoration programme for Orange River Mouth
- Area of land de-bushed annually; employment and revenue generated through de-bushing; SEA on charcoal industry

Please describe any other tools or means used for assessing progress
None.

Relevant websites, web links and files

https://www.dasnamibia.org/download/policies/GIZ-deBushing-Bush-Harvesting-Guidelines-2017.pdf

Level of confidence of the above assessment
☒ Based on comprehensive evidence
☐ Based on partial evidence
☐ Based on limited evidence

Please provide an explanation for the level of confidence indicated above.
Assessment was done periodically by each lead agency on the implementation status of each strategic initiative required to meet the national target. Comparison and analysis of periodic reports was undertaken to ensure that comprehensive evidence was used to arrive at a conclusive assessment.

Adequacy of monitoring information to support assessment
☒ Monitoring related to this target is adequate
☐ Monitoring related to this target is partial (e.g. only covering part of the area or issue)
☐ No monitoring system in place
☐ Monitoring is not needed

Please describe how the target is monitored and indicate whether there is a monitoring system in place

- Annual assessment of CBNRM activities to determine communities and number of people benefiting from it.
- Progress reports on rehabilitation and restoration programs.
- Effectiveness of conservancies and community forests with integrated management plans.
- Collecting samples for water quality testing.
- Employment and revenue generated through de-bushing.

Relevant websites, web links and files
http://www.theeis.com/data/literature/The%20Economic%20Value%20of%20Namibias%20Protected%20Area%20System.pdf

Target 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

Category of progress towards the implementation of the selected target:
☐ On track to exceed target
☐ On track to achieve target
☒ Progress towards target but at an insufficient rate
☐ No significant change
☐ Moving away from target
☐ Unknown

Date the assessment was done:
30 October 2018

Additional information
The main measures undertaken to implement and achieve the selected target were described in Section 2 and the main evidence used to assess progress is as follows:

- Ratification of Nagoya Protocol
- Access to Biological and Genetic Resources and Associated Knowledge, (Act No. 2 of 2017)
- Namibia ABS Country Diagnostic Stakeholder Consultations report of 2015
- Final consultative workshop Report on draft regulations of the Access to Biological and Genetic Resources and Associated Knowledge, Act No. 2 of 2017
- Feasibility study on research and development facility

Indicators used in this assessment

- Gazetting of the 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
- Development of new products and markets; partnerships with the private sector and ABS agreements
- Research facility in place; investments, revenue and employment generated through biotrade and bioprospecting
- Dedicated research programme in place for these organisms.

Please describe any other tools or means used for assessing progress
Interim national report on implementation of the Nagoya Protocol on Access and Benefit-sharing

Relevant websites, web links and files
None further.

Level of confidence of the above assessment
☒ Based on comprehensive evidence
☐ Based on partial evidence
☐ Based on limited evidence

Please provide an explanation for the level of confidence indicated above.
Assessment was done periodically by each lead agency on the implementation status of each strategic initiative required to meet the national target. Comparison and analysis of periodic reports was undertaken to ensure that comprehensive evidence was used to arrive at a conclusive assessment.

Adequacy of monitoring information to support assessment
☐ Monitoring related to this target is adequate
☒ Monitoring related to this target is partial (e.g. only covering part of the area or issue)
☐ No monitoring system in place
☐ Monitoring is not needed

Please describe how the target is monitored and indicate whether there is a monitoring system in place
- Monitoring the effectiveness of partnerships with the private sector and ABS agreements.
- Monitoring and Research activities on investments, revenue and employment generated through biotrade and bioprospecting.

Relevant websites, web links and files
None further.

Target 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

Category of progress towards the implementation of the selected target:
☐ On track to exceed target
☒ On track to achieve target
☐ Progress towards target but at an insufficient rate
☐ No significant change
☐ Moving away from target
☐ Unknown

Date the assessment was done:
30 October 2018

Additional information
The main measures undertaken to implement and achieve the selected target were described in Section 2 and the main evidence used to assess progress is as follows:

- The Bwabwata Biocultural Community Protocol
- Access to Biological and Genetic Resources and Associated Knowledge, (Act No. 2 of 2017)
- Namibia ABS Country Diagnostic Stakeholder Consultations report of 2015
- Final consultative workshop Report on draft regulations of the Access to Biological and Genetic Resources and Associated Knowledge, Act No. 2 of 2017

Indicators used in this assessment

- Biocultural protocols and practices of local communities documented according to mutually agreed terms.
- Establishment of working group on biosystematics.
- New infrastructure including a conservation facility at national museum and modern equipment for biosystematics.
- Number of specialists and technicians trained and number of training programmes undertaken.
- Web-based biosystematics database.
- Knowledge base on microbial diversity developed.
- System(s) in place to protect and document traditional knowledge as a basis for research and development of commercial biodiversity products.

Please describe any other tools or means used for assessing progress
None further.

Relevant websites, web links and files
None further.

Level of confidence of the above assessment
☒ Based on comprehensive evidence
☐ Based on partial evidence
☐ Based on limited evidence

Please provide an explanation for the level of confidence indicated above.
Assessment was done periodically by each lead agency on the implementation status of each strategic initiative required to meet the national target. Comparison and analysis of periodic reports was undertaken to ensure that comprehensive evidence was used to arrive at a conclusive assessment.

Adequacy of monitoring information to support assessment
☐ Monitoring related to this target is adequate
☒ Monitoring related to this target is partial (e.g. only covering part of the area or issue)
☐ No monitoring system in place
☐ Monitoring is not needed

Please describe how the target is monitored and indicate whether there is a monitoring system in place

- Annual review to determine the effectiveness of working group on biosystematics
- Training needs assessments for specialists and technicians trained and number of training programmes undertaken

Relevant websites, web links and files
None.

Target 16
By 2022, knowledge, science base and technologies relating to biodiversity and ecosystem management are improved and made relevant to political decision makers

Category of progress towards the implementation of the selected target:
☐ On track to exceed target
☐ On track to achieve target
☒ Progress towards target but at an insufficient rate
☐ No significant change
☐ Moving away from target
☐ Unknown

Date the assessment was done:
30 October 2018

Additional information
The main measures undertaken to implement and achieve the selected target were described in Section 2 and the main evidence used to assess progress is as follows:

- National Science, Technology and Innovation Infrastructure Strategy
- Botanical Research and Herbarium Management System (BRAHMS) database
- Sustainable Management of Economically Important Indigenous Plant Resources Project (SASSCAL)
- EIF Annual Reports

Indicators used in this assessment

- Trends in the number of research papers published on biodiversity from NUST, UNAM and other academic research institutions
- Trends in the number of research projects on biodiversity undertaken by state research institutions (Gobabeb TRC, Etosha Ecological Institute, NBRI, NATMIRC, DART, DoF)
- Investment and partnerships in biodiversity-related research, technologies and infrastructure
- Policy briefs from research findings relating to biodiversity

Please describe any other tools or means used for assessing progress
None.

Relevant websites, web links and files
www.nbri.org.na
www.sasscal.org.

Level of confidence of the above assessment
☒ Based on comprehensive evidence
☐ Based on partial evidence
☐ Based on limited evidence

Please provide an explanation for the level of confidence indicated above.
Assessment was done periodically by each lead agency on the implementation status of each strategic initiative required to meet the national target. Comparison and analysis of periodic reports was undertaken to ensure that comprehensive evidence was used to arrive at a conclusive assessment.

Adequacy of monitoring information to support assessment
☐ Monitoring related to this target is adequate
☒ Monitoring related to this target is partial (e.g. only covering part of the area or issue)
☐ No monitoring system in place
☐ Monitoring is not needed

Please describe how the target is monitored and indicate whether there is a monitoring system in place
- Annual research papers published on biodiversity from NUST, UNAM and other academic research institutions

Relevant websites, web links and files
None further.

Target 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

Category of progress towards the implementation of the selected target:
☐ On track to exceed target
☒ On track to achieve target
☐ Progress towards target but at an insufficient rate
☐ No significant change
☐ Moving away from target
☐ Unknown

Date the assessment was done:
30 October 2018

Additional information
The main measures undertaken to implement and achieve the selected target were described in Section 2 and the main evidence used to assess progress is as follows:
- Biodiversity Baseline Expenditure Report
- Biodiversity Resource Mobilization Strategy (draft)

Indicators used in this assessment
- 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)
- Assessments and studies on Protected Area Financing

Please describe any other tools or means used for assessing progress
None further.

Relevant websites, web links and files
None further.

Level of confidence of the above assessment
☒ Based on comprehensive evidence
☐ Based on partial evidence
☐ Based on limited evidence

Please provide an explanation for the level of confidence indicated above.
Assessment was done periodically by each lead agency on the implementation status of each strategic initiative required to meet the national target. Comparison and analysis of periodic reports was undertaken to ensure that comprehensive evidence was used to arrive at a conclusive assessment.

Adequacy of monitoring information to support assessment
☐ Monitoring related to this target is adequate
☒ Monitoring related to this target is partial (e.g. only covering part of the area or issue)
☐ No monitoring system in place
☐ Monitoring is not needed

Please describe how the target is monitored and indicate whether there is a monitoring system in place
Relevant websites, web links and files
None further.

Section 4. Description of the national contribution to the achievement of each global Aichi Biodiversity Target

Using the template below, please describe your country's contribution towards the achievement of each global Aichi Biodiversity Target. This template should be replicated for each of the Aichi Biodiversity Targets.

For Parties whose national targets are identical to the Aichi Biodiversity Targets, some of this information may be captured in sections II and III above. Please provide additional descriptions of your country's national contribution to the achievement of each global Aichi Biodiversity Target.

IV. Description of national contribution to the achievement of each global Aichi Biodiversity Target
Please describe how and to what extent your country has contributed to the achievement of this Aichi Biodiversity Target and summarize the evidence used to support this description: Namibia's national targets are in line with the Aichi Targets and the contribution to the achievement of each global Aichi Biodiversity Target was therefore covered in Sections 1, 2 and 3. The evidence is also provided in those Sections. Namibia did not have a specific target to achieve target 4 of the Aichi Targets on sustainable consumption and production. This is being addressed through a strategic programme of NDP 5 on environmentally sound investments and production systems and this is seen as an important part of transitioning to a low carbon and climate resilient economy. Particular target sectors here include renewable energy and energy efficiency, water use efficiency, sustainable transportation systems, and reduced greenhouse gas emissions from industrial production processes. . Namibia also does not have coral reefs as per Target 10, but has embarked on a range of measures to strengthen climate resilience of vulnerable ecosystems as has been outlined in Sections 2 and 3. Namibia chose to combine targets 14 and 15 into one target, which is duly reported on Sections 2 and 3. Target 17 was also not reported on but Namibia clearly has in place a NBSAP that is being implemented in an effective and participatory manner.
Please describe other activities contributing to the achievement of the Aichi Biodiversity Target at the global level (optional)
Based on the description of your country's contributions to the achievement of the Aichi Biodiversity Targets, please describe how and to what extent these contributions support the implementation of the 2030 Agenda for Sustainable Development and the Sustainable Development Goals: **SDG 13: TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS** Target 9 under Namibia's NBSAP2 is supporting the implementation of the 2030 Agenda for Sustainable Development, especially SDG 13. Namibia is one of the countries most vulnerable to climate change. This was confirmed in the IPCC report of 2018, which identified Namibia as a hotspot for climate change impacts. Climate variability over the medium and long term is likely to further reduce the productivity of agricultural land, fisheries, and forestry and threatens the growth of the tourism sector. It is however recognized that climate change presents Namibia with an incentive to move towards low-carbon and climate-resilient development. This transition must include the sectors of energy, transport, industrial production, agriculture, water and waste management.

Climate change measures have been well-integrated into national policies, strategies and planning. Climate resilient and low carbon development is prioritized in NDP 5 to target the sectors of energy, transport, industrial production, agriculture, water and waste management. Namibia ratified the Paris Agreement in September 2016. The National Climate Change Strategy and Action Plan (2013-2020) and Intended Nationally Determined Contributions document of 2015 were also approved by Cabinet and are under implementation.

These contain ambitious targets for climate change adaptation and mitigation such as:

1. Reducing Greenhouse Gas Emissions by 89% by 2030
2. Increasing the share of renewables in electricity production to 70% by 2030
3. Reducing deforestation rate by 75 %;
4. Reforesting 20,000 hectares annually from 2018;
5. Restoring 15 million hectares of grassland by 2030;
6. Practicing conservation agriculture on 80,000 hectares by 2030;
7. Implementing agro-forestry systems on 5,000 hectares of land commencing in 2018

The implementation of the NCCSAP and INDC documents is monitored through a multi-stakeholder National Climate Change Committee. The Government continues to target the mobilization of resources through international windows to achieve its ambitious INDC targets. A Green Climate Fund (GCF) Strategy was finalized to prioritise and manage proposals to the GCF.

The following projects have been mobilized to strengthen climate change resilience:

1. Climate Resilient Agriculture in three of the Vulnerable Extreme northern crop-growing regions (CRAVE) Project (GCF-funded and launched in 2017)
2. Empower to Adapt: creating Climate-Change Resilient Livelihoods through Community-Based Natural Resource Management in Namibia (GCF-funded and launched in 2017). The project is being implemented countrywide and is expected to benefit more than 15,000 people directly and 61 000 indirectly.
3. Improving rangeland and ecosystem management practices of smallholder farmers under conditions of climate change in Sesfontein, Fransfontein, and Warmquelle areas (GCF-funded and approved in 2018).
4. Pilot Rural Desalination Plants using renewable power and membrane technology (Adaptation Fund and approved in 2017). The project aims to assist the treatment of poor local ground water quality to a level that complies with the national standards for drinking water using sun and wind energy to power the process known as reverse osmosis.
5. Scaling up Community Resilience to Climate Change (GEF-funded and under implementation from 2015-2019).
6. The Namibia Integrated Landscape Approach for enhancing Livelihoods and Environmental Governance to eradicate poverty (NILALEG) Project proposal was approved by the Global Environment Facility (GEF) Council in 2017. It will be worth US$10.8 million and is expected to be implemented from 2019-2025.

In line with efforts to mobilize resources for climate change adaptation and mitigation from a range of sources, the following measures were also undertaken:

- Namibia's ratification of the International Solar Alliance (ISA) was finalized. The ISA is a platform for cooperation among over 121 solar resource rich countries where the global community, including bilateral and multilateral organizations, corporates, industry, and other stakeholders, can make a positive contribution to assist and help achieve the common goals of increasing the use of solar energy in meeting energy needs of prospective ISA member countries in a safe, convenient, affordable, equitable and sustainable manner.
- A Memorandum of Understanding was signed with the Development Bank of Southern Africa for climate change cooperation with regard to Green Climate Fund programming.
- A visit was undertaken by the African Development Bank to scope out opportunities for renewable energy development in Namibia.

SDG 14: CONSERVE AND SUSTAINABLY USE THE OCEANS, SEAS AND MARINE RESOURCES FOR SUSTAINABLE DEVELOPMENT

Target 5 under Namibia's NBSAP2 is supporting the implementation of the 2030 Agenda for Sustainable Development, especially SDG 14. The range of measures being implemented are captured in Sections 2 and 3 of this document.

The Blue Economy is prioritized in NDP 5 and the ocean is recognized as an important resource for Namibia and includes key industries and resources such as fisheries and aquaculture, water resources, shipping and transport, tourism, marine renewable energy, minerals genetic resources, pharmaceutical, blue carbon trading, biotechnology and general sea based products. The Exclusive Economic Zone (EEZ) has a major role to play in Namibia's economic transformation agenda. This is particularly important because Namibia's EEZ could be enlarged significantly based on the country's submission of an application to the United Nations through the United Nations Convention of the Law of the Sea (UNCLOS) for the extension of its continental shelf. In order to capitalize on the potential of the blue economy it is essential to create a governance framework that strengthens linkages and minimizes conflict between fisheries, transport, environment, mining, tourism, and logistics since they all operate in the same coastal area.

The measures put in place to sustainably manage marine and inland fisheries resources during the period under review were outlined in Section 2 and include:

- New regulations to prevent overfishing in inland fishing areas
- Monitoring of marine fish stocks to determine Total Allowable Catches (TAC)
- Issuing of a moratorium on pilchard harvesting
- The establishment of the Marine Spatial Planning national working group
- Identification of new EBSAs and establishment of EBSAs working group

SDG 15: PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION, AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS

The implementation of Targets 2, 3, 4, 6, 9, 10, 11, 12, 13 and 14 under Namibia's NBSAP2 is making a strong contribution to the implementation of the 2030 Agenda for Sustainable Development, especially SDG 14.

Namibia continues to champion high levels of community participation in the management of her natural resources, which has led to an increase of communal conservancies from 66 in 2012 to 86 in 2018, covering over 54 percent of communal land. Community conservation generated approximately N$91.2 million for local communities and has facilitated the creation of 5,808 jobs in 2014, benefiting about 170,000 local community members. The number of Community Forests was also increased from 32 to 42 during the period under review. The communities in CFs generated income through issuing permits, selling of poles, droppers, thatch grass, seedlings, wood carvings, firewood and devil's claw.

In terms of SDG Target 15.3, land degradation and bush encroachment are recognized as major threats to the productivity of agricultural land in Namibia. Concerted efforts have therefore been made to implement the concept of land degradation neutrality and to counteract the problem of bush encroachment.

Namibia conducted a national field data assessment of the three UNCCD indicators namely land cover, net primary productivity and soil organic carbon. Bush density was also added as an indicator. More detailed assessments were carried out in the Otjozondjupa and Omusati regions. The major form of land degradation in Otjozondjupa was bush encroachment. Recommendations to remediate and reverse the infestation of bush encroachment were provided to decision-makers, while five hotspot areas were identified as being most vulnerable to land degradation. On-the-ground interventions to prevent and reverse land degradation at these sites are planned to be implemented through a GEF 6-funded project known as Namibia Integrated Landscape Management Approach for Improving Livelihoods and Environmental Governance to Eradicate Poverty (NILALEG) (2019-2025).

Subsequently a study on the economics of land degradation with particular emphasis on bush encroachment was conducted and provided information regarding the economic losses of uncontrolled bush encroachment. Bush encroachment affects an estimated area of 45 million hectares of the country's land mass and has severe negative consequences on key ecosystem services, especially agricultural productivity and groundwater recharge. A SEA on bush harvesting and Guidelines for Bush Harvesting were developed and launched in 2017 to ensure that large scale bush harvesting does not disrupt / disturb the ecological balance. The ultimate aim is to improve the rangeland condition as well as enhancing fauna and flora biological diversity as opposed to dominance of particular invasive species.

In terms of SDG target 15.4, it should be noted that there is no specific conservation programme for mountain ecosystems in Namibia although many important mountain ecosystems are incorporated with the network of protected areas and communal conservancies.

In terms of SDG target 15.5, Namibia continues to implement its National Biodiversity Strategy and Action Plan (2013-2022), as reported in this document.

Under SDG target 15.6 on access and benefit sharing, Namibia ratified the Nagoya Protocol and the National Assembly passed the “Access to Biological and Genetic Resources and Associated Traditional Knowledge Act” in May 2017 and it was signed into law by the President, His Excellency Dr. Hage Geingob in June 2017. The regulations to this Act are currently being finalized.

Under SDG targets 15.7 and 15.12 on poaching and trafficking of protected species, a National Strategy on Wildlife Protection and Law Enforcement was developed, which provides for specific measures and approaches on how to deal with the issue of wildlife protection and law enforcement in the country. This has resulted in improved collaboration to deter poaching activities and poaching of high value species has been found to have declined since 2016.

Under target 15.9, considerable work has been carried to establish the value of biodiversity and ecosystem services. The Economics of Ecosystems and Biodiversity was completed to determine the value of wildlife and protected areas to the economy and environment. These values have been partially integrated into local planning, development processes (NDP5), poverty reduction strategies and accounts. A resource mobilization strategy for biodiversity conservation was drafted and targets the introduction of a range of financial instruments to increase revenue generation and re-investment linked to biodiversity. These include payments for ecosystem services, raising park entrance fees, biodiversity offsetting, environmental levies, eco-labelling, proceeds from lotteries and gambling, donor funding, crowdfunding and green finance.

Section 5. Description of the national contribution to the achievement of the targets of the Global Strategy for Plant Conservation (completion of this section is optional)

V. Description of the national contribution to the achievement of the targets of the Global Strategy for Plant Conservation

Does your country have national targets related to the GSPC Targets?

☒ No, there are no related national targets

Please provide information on any active networks for plant conservation present in your country.
Indigenous Plant Task Team (IPTT)

The IPTT is a government-mandated, multi-stakeholder forum for the indigenous plants products industry in Namibia. It was formed originally as the Indigenous Fruits Task Team after the first Promotion of Indigenous Fruit workshop in April 2000, to develop a co-ordinated approach and strategy for the implementation of an economically sustainable promotion of indigenous fruit in Namibia.

The IPTT currently has 14 core members some of whom have voting rights and does co-opt additional, non-voting members from time to time. In addition, there are a large number of regular observers and guests are often also invited to attend meetings. Meetings are held every three months.

The overall objective of the IPTT is to promote the sustainable utilisation of Namibia's indigenous plant resources for:

1. greater household food security;
2. agricultural diversification;
3. income, employment and livelihood opportunities;
4. agro-industrial development;

Please describe the major measures taken by your country for the implementation of the Global Strategy for Plant Conservation.
n/a – these are mainly covered under the respective NBSAP2 targets in Sections 2 and 3.

Category of progress towards the target of the Global Strategy for Plant Conservation at the national level: GSPC Target 1, 2, 3…
☐ On track to achieve target at national level
☐ Progress towards target at national level but at an insufficient rate
☒ No significant change at national level

Please explain the selection above:
There is no country level strategy to implement the global strategy. There is no data to document country level implementation or progress.

Please describe how and to what extent your country has contributed to the achievement of this GSPC Target and summarize the evidence used to support this description:
N/a

Section 6. Additional information on the contribution of indigenous peoples and local communities (optional)

VI. Additional information on the contribution of indigenous peoples and local communities to the achievement of the Aichi Biodiversity Targets if not captured in the sections above
This is covered in Sections 2 and 3.

Section 7. Updated Biodiversity Country Profile

VII. Updated biodiversity country profile (Please review and update the text currently displayed at https://www.cbd.int/countries[1])

Biodiversity facts

Status and trends of biodiversity, including benefits from biodiversity and ecosystem services:

Namibia is the driest country in sub-Saharan Africa and contains two of the oldest deserts in the world, namely; the Namib and the Kalahari deserts. As a result, about 92% of the country is classified as hyper to semi-arid, and only about 8% is classified as dry to sub-humid. The mean annual rainfall ranges from about 25 mm along the coast to about 700 mm in the northeast. The rainfall gradient increases from the west to the east. Namibia has distinct wet and dry seasons. Most of the rain falls in the wet season (November to April), with the exception of southern part of the country, which receives winter rainfall (June to July).

Despite the dry conditions, Namibia's has a rich endowment of biodiversity, which is to a certain extent shaped by its climatic, topographic and geological diversity. Namibia possesses a remarkable variety of habitats and ecosystems ranging from deserts (with less than 25 mm of rainfall per year) to subtropical wetlands, savannas and woodlands (with about 700 mm of rainfall per year). Namibia is well known for its species richness, habitat diversity, biological distinctiveness, and as an endemism hotspot for many species, especially mammals, birds, and amphibians, which are of global significance.

Two of the global biodiversity hotspots are found in Namibia; the succulent Karoo ecosystem that constitutes a refuge for an exceptional level of succulent plant diversity, shaped by the winter rainfall and fog of the southern Namib Desert of which the large portion of its plants is endemic, and the rugged Namib Escarpment. These two biodiversity hotspots are also mineral rich and exploitation of the minerals is a threat that requires intensive management and monitoring.

Elephants and rhinos are classic examples of species that were decimated in the country before independence (hunted to near local extinction during the war), but most species have since recovered tremendously. Between 1995 and 2015, Namibia's elephant population is estimated to have almost tripled from about 7,500 to 22,300. The conservation and recovery of wildlife populations was achieved through notable wildlife policies that have since put Namibia at the forefront of biodiversity conservation and wildlife management and has led some to call Namibia's conservation efforts "The greatest African wildlife recovery story".

Namibia is also home to the world's largest cheetah population, and the lion population is also said to be increasing. Other common species such as oryx, springbok, and endemic species such as black faced impala and mountain zebra have shown signs of recovery and positive growth over the last 28 years.

Many Namibians rely directly and indirectly on the biological resources and the associated ecosystem services for their livelihoods. Therefore the maintenance of healthy ecosystems is of crucial importance to Namibia. Agriculture, fisheries, nature-based tourism, and indigenous natural plant products are all important contributors to Namibia's economy that rely directly on healthy ecosystems for their sustainability.

Main pressures on and drivers of change to biodiversity (direct and indirect):

Conservation of biological diversity refers to the maintenance of natural resources and ecosystems in a pristine state (un-disturbed). Such resources (wildlife, wild habitats or natural landscapes) have potential to generate income through non-consumptive means (e.g tourism). However, the same resources (e.g forest resources) are harvested by the rural communities as a source of energy (fire wood for cooking and lighting) or for timber (to build houses, kraas, homesteads) and so on. As a result, the demand to harvest increases the pressure on the resource and unsustainable harvesting will to lead loss of forest resources, loss of habitats and loss of biodiversity.

[1] *Note*: If the online reporting tool is being used, the text of the current biodiversity profile will be displayed. A time stamp will be added to indicate the date when the update was published.

In addition to overharvesting of natural resources to meet community needs, the other challenges to biodiversity conservation, is the expansion of uncontrolled mining and prospecting activities, which lead to unsustainable land management practices, some of these activities are concentrated in some of Namibia's most ecologically-sensitive areas. Several project and policy interventions are underway to address these threats.

Moreover, land degradation, and associated bush encroachment and desertification are major threats to land productivity in most parts of Namibia, negatively affecting socio-economic conditions of the landholders, while negatively impacting on the ecological function of the ecosystems.

Measures to enhance implementation of the Convention

NBSAP2 Development: Working towards achieve the 2020 Aichi Biodiversity Targets:

In 2012, Namibia started the process of developing its second generation National Biodiversity Strategy and Action Plan (NBSAP2) to directly tackle these threats and to meet its international commitments in line with Article 6 (a) of the Convention on Biological Diversity (CBD) and Target 17 of the Aichi Targets. Namibia's NBSAP2 also seeks to capitalize on Namibia's existing areas of comparative advantage in the areas of natural resource management, nature-based tourism and environmental protection.

The vision of NBSAP2 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. NBSAP2 contributes directly to Namibia's National Development Goals as set out in Vision 2030 and NDP 4 and NDP 5 and is closely aligned to the CBD Strategic Plan and Aichi Targets (2011-2020) and the Southern African Development Community (SADC) Regional Biodiversity Strategy and Action Plan.

Based on national and regional prioritization exercises, the framework of the CBD Strategic Plan has been maintained, however out of the 20 Aichi Targets, only 17 targets are applicable to Namibia and they have been refined to better reflect Namibia's priorities and circumstances.

A National NBSAP2 Steering Committee, which was originally created to oversee the formulation of NBSAP2, was established and formalized to oversee the implementation of the NBSAP2, including its monitoring and evaluation. The Steering Committee meets on quarterly basis to track the progress made by different stakeholders towards achieving the Aichi targets.

Biodiversity Conservation and Sustainable Use for Poverty Alleviation in Namibia

Biodiversity and the natural environment are of critical importance to Namibia. Natural resource-based sectors including mining, fisheries, agriculture and tourism are the basis of the Namibian economy, and around 70% 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 is recognized as the fastest growing sector in Namibia. The main tourism attractions are the wilderness and aesthetic values, complimented by contrasting and unique landscapes. It has been reported that, due to economic recession, over the past 2 years (2017 – 2018) tourism is the only sector that yielded positive growth. As indicated in the National Development Plans, tourism is one of the national priority sectors for socio-economic development.

As a result, tourism has potential to make a significant contribution to the national socio-economic development agenda, as guided by the growth at home strategy. Tourism creates much needed employment opportunities, particularly in the rural areas. Employment improves household income, enhances food security, and improves livelihoods. The benefits to the rural communities can be maximized by promoting the sustainable use of natural resources and the allocation of tourism and hunting concessions to local communities and enabling them to venture into profitable joint ventures with private investors. The MET policy on Wildlife Management, Utilization, and Tourism in Communal Areas is designed to provide a legal basis for communities to participate in the management of, and benefits from, natural resources through the establishment of conservancies.

In 2012, it was estimated that communal conservancies employed around 900 people permanently and 3,500 on a temporary basis, with over N$50 million being generated by communal conservancies in 2011, mainly through accommodation establishments (lodges) and trophy hunting.

Traditionally, certain activities may be considered to be more women-oriented. For example, men would be responsible for herding livestock, whilst women collect forest resources for food, making baskets, and carry out planting of crops. As a result, in certain instances, women are at the forefront of biodiversity management.

The CBNRM Programme presents new opportunities for socio-economic developmental activities, and through the gender policy, cultural barriers that previously set boundaries or limited women from partaking in certain activities have been removed. The NBSAP is another instrument which creates a platform for women empowerment through conservation, sustainable harvesting and gender equality in decision-making platforms.

Support mechanisms for national implementation (legislation, funding, capacity-building, coordination, mainstreaming, etc):

With proclamation of the Sperrgebiet, the diamond mining area forming part of the Succulent Karoo Ecosystem, and the upgrading of West Coast Recreational Area as a national park, the entire coastline of Namibia except the municipal areas are under protected area status. Namibia is now the only country in the world to have the entirety of its unique coastline protected as a national park, which serves as the sixth largest terrestrial protected area in the world and the largest in Africa.

To protect the rich biodiversity, Namibia has established an impressive system of 21 state-managed Protected Areas (PAs) with the goal of protecting and conserving biological diversity, and also generating much needed revenue through tourism.

These efforts are being complemented by the strong CBNRM Programme through communal conservancies and community forests. In total, the state managed Protected Areas and community conservancies' covers 44% of the country's land area (terrestrial). In-addition the protected areas also covers the entire coastline (about 1,570 km), stretching from the Orange River mouth in the south (border with South Africa) to the Kunene River mouth in the north (border with Angola). The series of protected areas covering the coastline is unique and includes the Sossusvlei-Namib World Heritage Site. Namibia also has a marine protected area, which covers a stretch of about 400 kilometers from Meob Bay (north of Lüderitz) to Chaimas Bay (south of Lüderitz) and 30 kilometers into the Atlantic Ocean, covering a total surface area of 12,000 square kilometers. Namibia has a rich marine ecosystem, as a result of the Benguela upwelling system, which brings the nutrient rich waters from around 200–300 m depth and fuels high rates of phytoplankton growth, making it one of the most productive marine ecosystems in the world.

Mechanisms for monitoring and reviewing implementation:
As focal point to the CBD, the MET, through its MultiLateral Environmental Agreements Division, oversees the monitoring and evaluation of NBSAP2 with the active and structured support of the NBSAP2 steering committee. The different key institutions represented on the NBSAP2 steering committee report back to the committee and high level stakeholders on an annual basis in terms of their progress and challenges with regard to achieving the targets and strategic goals of NBSAP2.

Periodical reporting (every three months and annually) has assist Namibia in establishing the contribution of each agency and sector towards achieving the NBSAP2 targets. A final evaluation of NBSAP2 will be undertaken in 2020, by which time it will be possible to assess Namibia's contribution towards the achievement of the CBD Strategic Plan (2011-2020) and the Aichi Targets. The final evaluation will also provide valuable insights, lessons and direction for the development of a third NBSAP for Namibia.