

BOTSWANA THIRD NATIONAL REPORT ON
IMPLEMENTATION OF THE CONVENTION ON
BIODIVERSITY

SUBMITTED MAY 2005

BOTSWANA GOVERNMENT

CONTENTS

| | |
|--|-----|
| A. REPORTING PARTY | 3 |
| Information on the preparation of the report..... | 3 |
| B. PRIORITY SETTING, TARGETS AND OBSTACLES | 4 |
| Priority Setting..... | 5 |
| Challenges and Obstacles to Implementation..... | 6 |
| 2010 Target..... | 8 |
| Global Strategy for Plant Conservation (GSPC)..... | 38 |
| Ecosystem Approach | 54 |
| C. ARTICLES OF THE CONVENTION..... | 56 |
| Article 5 – Cooperation..... | 56 |
| Article 6 - General measures for conservation and sustainable use..... | 58 |
| Biodiversity and Climate Change..... | 60 |
| Article 7 - Identification and monitoring..... | 61 |
| Decisions on Taxonomy | 63 |
| Article 8 - In-situ conservation [Excluding paragraphs (a) to (e), (h) and (j)]..... | 67 |
| Programme of Work on Protected Areas (Article 8 (a) to (e)) | 68 |
| Article 8(h) - Alien species..... | 71 |
| Article 8(j) - Traditional knowledge and related provisions | 75 |
| GURTS | 75 |
| Status and Trends | 76 |
| Akwé:Kon Guidelines..... | 76 |
| Capacity Building and Participation of Indigenous and Local Communities | 77 |
| Support to implementation..... | 78 |
| Article 9 - Ex-situ conservation..... | 79 |
| Article 10 - Sustainable use of components of biological diversity..... | 80 |
| Biodiversity and Tourism..... | 83 |
| Article 11 - Incentive measures | 84 |
| Article 12 - Research and training..... | 86 |
| Article 13 - Public education and awareness..... | 87 |
| Article 14 - Impact assessment and minimizing adverse impacts..... | 91 |
| Article 15 - Access to genetic resources | 94 |
| Article 16 - Access to and transfer of technology..... | 97 |
| Programme of Work on transfer of technology and technology cooperation | 98 |
| Article 17 - Exchange of information..... | 100 |
| Article 18 - Technical and scientific cooperation | 101 |
| Article 19 - Handling of biotechnology and distribution of its benefits | 104 |
| Article 20 – Financial resources | 105 |
| D. THEMATIC AREAS | 110 |
| Inland water ecosystems..... | 112 |
| Marine and coastal biological diversity | 114 |
| General..... | 114 |
| Implementation of Integrated Marine and Coastal Area Management | 115 |
| Marine and Coastal Living Resources | 115 |
| Mariculture | 117 |
| Alien Species and Genotypes | 118 |
| Agricultural biological diversity | 119 |
| Annex to decision V/5 - Programme of work on agricultural biodiversity..... | 120 |
| Forest Biological Diversity..... | 124 |
| General..... | 124 |
| Expanded programme of work on forest biological diversity | 125 |
| Biological diversity of dry and sub-humid lands..... | 130 |
| Mountain Biodiversity | 132 |
| E. OPERATIONS OF THE CONVENTION..... | 136 |
| F. COMMENTS ON THE FORMAT..... | 136 |

A. REPORTING PARTY

| | |
|--|--|
| Contracting Party | Republic of Botswana |
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| Date of submission | 14 May 2005 |

Information on the preparation of the report

Box I.

Please provide information on the preparation of this report, including information on stakeholders involved and material used as a basis for the report.

Most of the information is from the Stocktake report and the BSAP. The stakeholders were from government departments; non governmental organizations; community based organizations who attended workshops.

B. PRIORITY SETTING, TARGETS AND OBSTACLES

Box II.

Please provide an overview of the status and trends of various components of biological diversity in your country based on the information and data available.

The Biodiversity Strategy and Action Plan Stocktaking Report identified seven distinct eco-regions. These are Zambebian flooded Grasslands, Zambebian Halophytics, Zambebian and Mopane Woodlands, Kalahari Acacia, Kalahari Xeric Savanna, South African Bushveld and Zambezia Baikiaea Woodlands. Of these ecoregions four are vulnerable i.e. South African Bushveld (deforestation, overgrazing, range degradation and veld fires), Zambezia Baikiaea Woodlands (cattle and overgrazing and change in vegetation communities), Zambezia Halophytics (mining, rangeland degradation, fires, wind erosion, fires, water extraction, fencing, increased salinity of surface water, decreased surface fresh water, overgrazing, lack of protection for critic avian breeding sites, uncontrolled tourism/ disturbance and wildlife conflicts) and Kalahari Acacia (increased cattle ranching, land transformation and degradation, fires, fences, climate change, poaching and invasive alien species). The status of the rest of the ecoregions is stable and intact.

Eco-regions of special concern or ecological uniqueness include the Zambebian Flooded Grasslands, the Miombo Woodlands and the wetland habitats. These eco-regions are globally important because they support a rich diversity of birds as well as large populations of elephants, buffalo and lechwe. The Zambebian Flooded Grasslands are the world's largest flooded savannas with extraordinary concentrations of large vertebrates. The Miombo Woodlands support some of the richest floras and bird assemblages with the most diverse and relatively intact woodland and savanna area of Southern Africa.

Climatic conditions and landforms are rather uniform in Botswana and so there are few distinct agro-ecosystems and farming systems. The Molapo farming system in the north-western part of the country has evolved to maximize production through the exploitation of receding moisture in the riverbeds

Although there has never been a comprehensive survey of plants in Botswana it is estimated that there are between 2,150 and 3,000 species of plants representing some 128 botanical families. There is a low level of endemism with only 15 species currently listed in the IUCN Red Data List (RDL), of which 9 are data deficient. According to the RDL there are 43 Red Data plant species in Botswana, 3 of which are endangered, 10 are vulnerable, 8 are near threatened and 17 are endemic to Southern Africa.

Vast wilderness areas support high densities of mammals making Botswana one of the last refuges for species requiring large areas e.g. elephant and wild dog. Botswana has a rich and diverse mammalian fauna with 147 identified species of which 111 are Red Data species. According to the Botswana Bird Atlas there are 570 bird species found in Botswana although only one species is near endemic. There is a total of 99 fish species found mainly in the large permanent river ways of the Limpopo, Chobe-Linyanti-Kwando system and the Okavango Delta. A total of 34 amphibian species and 131 reptile species can be found in Botswana. There are 3 endemic reptile species in the country. Invertebrate species richness in Botswana is extraordinary but still largely under-described.

Agro-biodiversity in Botswana is still rich in species at traditional farm level, although the commercial farms tend to focus on few species. Traditional crops and animals are gaining popularity and commanding a growing demand in the market as evidenced by increased sale of traditional products in informal markets in villages and towns. The main cereal crops of maize and Sorghum normally make up to 70% of area planted in a country with 28 crop species.

Cattle and goats are the most important species of the livestock kept in the country. The composition of cattle breeds is not fully known and the purity of the Tswana breed is also in question, due to popularity of exotic breeds and the long history of crossbreeding programme. However, an estimation of 50% of cattle is of Tswana breed. Goat and sheep breeds include Tswana, Boer and Saanen for goats and the Black headed Persian, Dorper, Damara and Karakul for sheep. As with cattle breed composition is not fully known.

There is still much missing in terms of available data, distribution of species, breeds and varieties. This lack of knowledge on diversity, status of some species and critical habitats seriously complicates the efforts of conservation and act as constraints to the conservation of biodiversity in the country.

Priority Setting

1. Please indicate, by marking an "X" in the appropriate column below, the level of priority your country accords to the implementation of various articles, provisions and relevant programmes of the work of the Convention.

| Article/Provision/Programme of Work | Level of Priority | | |
|--|-------------------|----------|-----|
| | High | Medium | Low |
| a) Article 5 – Cooperation | X | | |
| b) Article 6 - General measures for conservation and sustainable use | X | | |
| c) Article 7 - Identification and monitoring | X | | |
| d) Article 8 – <i>In-situ</i> conservation | X | | |
| e) Article 8(h) - Alien species | X | | |
| f) Article 8(j) - Traditional knowledge and related provisions | | X | |
| g) Article 9 – <i>Ex-situ</i> conservation | | X | |
| h) Article 10 – Sustainable use of components of biological diversity | | X | |
| i) Article 11 - Incentive measures | | X | |
| j) Article 12 - Research and training | X | | |
| k) Article 13 - Public education and awareness | X | | |
| l) Article 14 - Impact assessment and minimizing adverse impacts | X | | |
| m) Article 15 - Access to genetic resources | | X | |
| n) Article 16 - Access to and transfer of technology | | X | |
| o) Article 17 - Exchange of information | X | | |
| p) Article 18 – Scientific and technical cooperation | X | | |
| q) Article 19 - Handling of biotechnology and distribution of its benefits | | X | |
| r) Article 20 - Financial resources | X | | |
| s) Article 21 - Financial mechanism | N/A | | |
| t) Agricultural biodiversity | X | | |

| | | | |
|---|------------|--|--|
| u) Forest biodiversity | X | | |
| v) Inland water biodiversity | X | | |
| w) Marine and coastal biodiversity | N/A | | |
| x) Dryland and subhumid land biodiversity | X | | |
| y) Mountain biodiversity | N/A | | |

Challenges and Obstacles to Implementation

| 2. Please use the scale indicated below to reflect the level of challenges faced by your country in implementing the provisions of the Articles of the Convention (5, 6,7, 8, 8h, 8j, 9, 10, 11,12, 13, 14, 15,16, 17, 18, 19 and 20) | | | | | | | | | | | | | | | | | | |
|---|----------|---|---|---|----|----|---|----|--|----|----|----|----|----|----|----|----|----|
| 3 = High Challenge | | | | | | | | | 1 = Low Challenge | | | | | | | | | |
| 2 = Medium Challenge | | | | | | | | | 0 = Challenge has been successfully overcome | | | | | | | | | |
| N/A = Not applicable | | | | | | | | | | | | | | | | | | |
| Challenges | Articles | | | | | | | | | | | | | | | | | |
| | 5 | 6 | 7 | 8 | 8h | 8j | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| a) Lack of political will and support | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |
| b) Limited public participation and stakeholder involvement | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 3 | 2 | 1 | 3 | 1 | 2 | 1 | 2 | 1 | 1 |
| c) Lack of mainstreaming and integration of biodiversity issues into other sectors | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 0 | 1 | 1 | 1 |
| d) Lack of precautionary and proactive measures | 2 | 2 | 2 | 2 | 3 | 3 | 1 | 1 | 2 | 1 | 0 | 1 | 1 | 3 | 0 | 1 | 2 | 1 |
| e) Inadequate capacity to act, caused by institutional weakness | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| f) Lack of transfer of technology and expertise | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 0 | 1 | 3 | 3 | 2 | 3 | 3 | 1 |
| g) Loss of traditional knowledge | 2 | 2 | 2 | 2 | 2 | 3 | 1 | 2 | 1 | 1 | 1 | 0 | 3 | 0 | 2 | 0 | 0 | 0 |
| h) Lack of adequate scientific research capacities to support all the objectives | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 0 | 0 | 2 | 2 | 1 | 2 | 2 | 0 |
| i) Lack of accessible knowledge and information | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 1 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| j) Lack of public education and awareness at all levels | 1 | 2 | 2 | 1 | 3 | 3 | 2 | 1 | 2 | 1 | 0 | 2 | 2 | 0 | 1 | 1 | 1 | 0 |
| k) Existing scientific and traditional knowledge not fully utilized | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 2 | 1 | 0 |
| l) Loss of biodiversity and the corresponding goods and services it provides not properly understood and documented | 2 | 2 | 2 | 1 | 3 | 3 | 1 | 1 | 1 | 1 | 0 | 0 | 2 | 0 | 1 | 1 | 1 | 0 |
| m) Lack of financial, human, technical resources | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 2 |
| n) Lack of economic incentive measures | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 1 | 0 | 2 | 2 | 2 | 2 |
| o) Lack of benefit-sharing | 2 | 2 | 2 | 2 | 0 | 3 | 2 | 2 | 0 | 1 | 0 | 0 | 3 | 1 | 2 | 1 | 2 | 0 |
| p) Lack of synergies at national and international levels | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 3 | 1 | 1 | 2 | 1 |
| q) Lack of horizontal cooperation among stakeholders | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 1 |
| r) Lack of effective partnerships | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 0 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| s) Lack of engagement of scientific community | 2 | 2 | 1 | 0 | 2 | 2 | 1 | 2 | 1 | 0 | 0 | 1 | 3 | 2 | 1 | 1 | 2 | 0 |
| t) Lack of appropriate policies and laws | 2 | 2 | 1 | 1 | 2 | 3 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 0 |
| u) Poverty | 3 | 3 | 1 | 2 | 1 | 3 | 2 | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| v) Population pressure | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| w) Unsustainable consumption and production patterns | 2 | 2 | 0 | 1 | 1 | 3 | 1 | 3 | 2 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 2 | 1 |
| x) Lack of capacities for local communities | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 3 | 0 | 2 | 1 | 2 | 0 |
| y) Lack of knowledge and practice of ecosystem-based approaches to management | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 0 | 1 | 0 | 1 | 2 | 0 | 1 | 1 | 1 | 0 |
| z) Weak law enforcement capacity | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 0 |
| aa) Natural disasters and environmental change | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 0 | 0 | 2 | 1 | 0 | 1 | 1 | 1 | 1 |
| bb) Others (please specify) | | | | | | | | | | | | | | | | | | |

2010 Target

The Conference of the Parties, in decision VII/30, annex II, decided to establish a provisional framework for goals and targets in order to clarify the 2010 global target adopted by decision VI/26, help assess the progress towards the target, and promote coherence among the programmes of work of the Convention. Parties and Governments are invited to develop their own targets with this flexible framework. Please provide relevant information by responding to the questions and requests contained in the following tables.

Box III.

| | | | |
|--|---|------------|--|
| Goal 1 | Promote the conservation of the biological diversity of ecosystems, habitats and biomes. | | |
| Target 1.1 | At least ten percent of each of the world's ecological regions effectively conserved | | |
| I) National target: Has a national target been established corresponding to the global target above? | | | |
| a) No | | | |
| b) Yes, the same as the global target | | | |
| c) Yes, one or more specific national targets have been established | | | X |
| Please provide details below. | | | |
| The National Biodiversity Strategy and Action Plan (NBSAP) has effectively catered for this objective under several specific targets for example Objective 2.2 establishes the need for a comprehensive protected area network to conserve ecosystems and species. | | | |
| II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es). | | | |
| Programme of work | Yes | No | Details |
| a) Agricultural | X | | The National Biodiversity Strategy and Action Plan (NBSAP) has effectively catered for this objective under several specific targets for example Objective 2.6.1 establishes the need for assessment of agricultural biodiversity, Obj 3.5 encourages adaptive land management procedures. Objective 3.8 and 2.6 also aim for the inclusion of farmers in the conservation and sustainable use of agricultural biodiversity. |
| b) Inland water | X | | |
| c) Marine and coastal | | N/A | |
| d) Dry and subhumid land | X | | |
| e) Forest | X | | |
| f) Mountain | | N/A | |
| III) Has the global or national target been incorporated into relevant plans, programmes and strategies? | | | |
| a) No | | | |

| | |
|--|----------|
| b) Yes, into national biodiversity strategy and action plan | X |
| c) Yes, into sectoral strategies, plans and programmes | |
| Please provide details below. | |
| Objective 2.2 of the NBSAP identifies the need for a comprehensive protected area network to conserve ecosystems and species; this includes taking Important Plant Areas and Important Bird Areas into consideration. Objective 2.3 establishes the need for effective ecosystems management practices including a review of current national and regional land management systems. Under Objective 2.7 the NBSAP calls for the rehabilitation of restoration or degraded ecosystems and habitats. | |
| IV) Please provide information on current status and trends in relation to this target. | |
| The National Stocktaking Exercise for the NBSAP identified seven ecoregions according to the WWF ecoregions criteria. These are the Zambebian Flooded Grasslands, Zambebian Halophytics, Zambebian and Mopane Woodlands, Kalahari Acacia, Kalahari Xeric Savanna, South Africa Bushveld, Zambezia Baikiaea Woodlands. The Zambebian Flooded Grasslands, Zambebian and Mopane Woodlands and the Kalahari Xeric Savanna ecoregions are in a stable and intact state. The other four ecoregions are in a vulnerable state i.e. Zambezia Baikiaea Woodlands (cattle and overgrazing and change in vegetation communities), South Africa Bushveld (deforestation, overgrazing, range degradation, fire and poaching), Kalahari Acacia (increased cattle ranching, land transformation and degradation, fire, climate change and poaching); and Zambebian Halophytics (mining, rangeland degradation, fire, wind erosion, water extraction, algae blooms, overgrazing, lack of protection for critical avian breeding sites and poaching). | |
| V) Please provide information on indicators used in relation to this target. | |
| In determining the conservation status of each of the ecoregions several indicators and criteria were used to develop a priority rank amongst the different ecoregions. These were Protection Level, Species Richness, Endemism, Red Data species and value to the nation. | |
| VI) Please provide information on challenges in implementation of this target. | |
| The Stocktaking Report shows that there are several challenges facing the conservation of ecosystems/ ecoregions in Botswana. Although most ecoregions are adequately covered by the Protected Areas system there are some ecoregions that do not fall within this protection especially in the eastern parts of the country. Also, there is no nationally agreed ecosystem/ ecoregions classification system which makes it difficult to inventory or monitor ecoregions. This is further complicated by the low level of data/ information on ecosystems. The country urgently needs an ecosystem/ ecoregions inventory. Nationally agreed indicators for use in monitoring ecosystems need to be developed. | |
| VII) Please provide any other relevant information. | |

Box IV.

| Target 1.2 | Areas of particular importance to biodiversity protected |
|--|---|
| I) National target: Has a national target been established corresponding to the global target above? | |
| a) No | |
| b) Yes, the same as the global target | |
| c) Yes, one or more specific national targets have been established | X |
| Please provide details below. | |
| National targets relating to the global target have been included in the NBSAP. Measures include the prioritization of conservation efforts, development of a comprehensive Protected Areas network, effective management practices and the rehabilitation of degraded ecosystems. | |

| II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es). | | | |
|--|-----|----|---------|
| Programme of work | Yes | No | Details |
| a) Agricultural | | X | |
| b) Inland water | | X | |
| c) Marine and coastal | | | N/A |
| d) Dry and subhumid land | | X | |
| e) Forest | | X | |
| f) Mountain | | | N/A |
| III) Has the global or national target been incorporated into relevant plans, programmes and strategies? | | | |
| a) No | | | |
| b) Yes, into national biodiversity strategy and action plan | | X | |
| c) Yes, into sectoral strategies, plans and programmes | | | |
| Please provide details below. | | | |
| <p>The NBSAP sets out measures for the conservation of areas of particular importance to biodiversity. These measures are set out in Objective 2.1 (conservation efforts priorities particularly at district and local level), Objective 2.2 (establishment of a comprehensive protected area network to conserve ecosystems and species) Objective 2.3 (effective ecosystems management practices including a review of current land management practices and institutional capacity); and Objective 2.7 (rehabilitation and restoration of degraded ecosystems and habitats).</p> | | | |
| IV) Please provide information on current status and trends in relation to this target. | | | |
| <p>The Global 200 project identified two Global priority areas in Botswana, these being the Zambezi Flooded Savannas (including the Okavango Delta which is protected as a Ramsar site) and the Central and Eastern Miombo woodlands. There are also a number of sites that have been described as important to Botswana, some of which have been categorized as National Heritage Sites and are protected by law although information on status and trends is not available. Some of these are the Tsodilo Hills, Baine's Baobabs, Lekhubu Island and Makgadikgadi Pans. Twelve sites have been identified by Birdlife International as Important Bird Areas six of which are covered by the Protected areas system. No Important Plant Areas have been identified yet.</p> | | | |
| V) Please provide information on indicators used in relation to this target. | | | |
| National indicators for this target have not yet been developed. | | | |
| VI) Please provide information on challenges in implementation of this target. | | | |
| Some challenges are a lack of a nationally agreed set of criteria for such areas, research and monitoring and inventory and indicators. Information is dated or insufficient. | | | |
| VII) Please provide any other relevant information. | | | |
| | | | |

Box V.

| Goal 2 | Promote the conservation of species diversity | | |
|--|--|-----------|--|
| Target 2.1 | Restore, maintain, or reduce the decline of populations of species of selected taxonomic groups | | |
| I) National target: Has a national target been established corresponding to the global target above? | | | |
| a) No | | | |
| b) Yes, the same as the global target | | | |
| c) Yes, one or more specific national targets have been established | | | X |
| Please provide details below. | | | |
| This target has been included in the National Biodiversity Strategy and Action Plan under several objectives. | | | |
| II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es). | | | |
| Programme of work | Yes | No | Details |
| a) Agricultural | X | | This target has been catered for under the following objectives in the NBSAP. Objective 2.4.2 development and implementation of management and recovery plans for priority taxa; Objective 2.4.3 support and promote in-situ conservation for rare and threatened species. |
| b) Inland water | X | | This target is articulated in the NBSAP under Objective 5.5.3 monitoring of aquatic species including IAS; Objective 5.6.4 monitoring and control of IAS; Objective 5.6.1 stop government distribution of IAS. |
| c) Marine and coastal | | | N/a |
| d) Dry and subhumid land | X | | This target is included in the NBSAP in the following objectives. Objective 3.6.2 survey IAS and publish updates regularly; Objective 5.6.7 develop information campaigns on IAS. |
| e) Forest | X | | The NBSAP covers this target under the following objectives. Objective 2.7.1 develop easy to use guidelines on rehabilitation and restoration of degraded ecosystems; Objective 2.5.2 develop propagation and harvesting protocols for key traded species. |
| f) Mountain | | | N/A |
| III) Has the global or national target been incorporated into relevant plans, programmes and strategies? | | | |
| a) No | | | |
| b) Yes, into national biodiversity strategy and action plan | | | X |
| c) Yes, into sectoral strategies, plans and programmes | | | |
| Please provide details below. | | | |
| This target has been catered for under the following objectives in the NBSAP. Objective 2.4.2 development and implementation of management and recovery plans for priority taxa; Objective 2.4.3 support and promote in-situ conservation for rare and threatened species; Objective 2.7.1 | | | |

develop easy to use guidelines on rehabilitation and restoration of degraded ecosystems; Objective 2.5.2 develop propagation and harvesting protocols for key traded species; Objective 3.6.2 survey IAS and publish updates regularly; Objective 5.6.7 develop information campaigns on IAS; Objective 5.5.3 monitoring of aquatic species including IAS; Objective 5.6.4 monitoring and control of IAS; Objective 5.6.1 stop government distribution of IAS.

IV) Please provide information on current status and trends in relation to this target.

According to the National Stocktaking Report for the Biodiversity Strategy and Action Plan Botswana has between 2150 and 3000 plant species representing 128 botanical families. There is a low level of endemism with only approximately 15 species. There are 43 Red Data species, 2 endangered species, 10 vulnerable species and 8 near threatened species. The report identified 188 tree species of which 17 are endemic to Southern Africa and 72 are thought to be potentially Invasive alien species. There are limited ex-situ conservation activities.

The report also identified 147 mammal species, 570 bird species of which only one is near endemic, 99 fish species occurring mostly in large permanent waterways, 34 amphibian species, 131 reptile species of which 3 are endemic and only the python is protected. There are three species of endangered fauna: the wild dog, the elephant (although it is not endangered in Botswana) and the black-cheeked lovebird. There are 15 species of vulnerable fauna most of which are protected by law, 21 lower risk conservation dependant (most protected by law), 13 lower risk near threatened and 74 lower risk least concern species most of which again are protected by law. There are limited ex-situ conservation activities in the country with only four private centres holding small collections of living animal species.

Botswana is still rich in Agrobiodiversity predominantly in the subsistence agricultural sector. The commercial sector is characterized by exotic livestock and hybrid/ improved cultivars. Traditional agriculture is threatened by factors such as drought, free seed distribution for drought recovery, which is usually characterized by exotic seed, lack of organized sources of traditional seeds. There are 28 species of crops and Botswana is a secondary centre of diversity for the *Citrillus* spp and a primary center of diversity for the *Vigna* spp. There are several species of livestock in Botswana. Of the 11 species of cattle 50% are thought to be endemic 2 of which are under severe threat because of cross breeding and neglect.

V) Please provide information on indicators used in relation to this target.

Indicators used in the target were the protection level, species richness, endemism, number of red data species and national value.

VI) Please provide information on challenges in implementation of this target.

Challenges in implementing this target include limited data, limited ex-situ collections and facilities, lack of surveys, lack of nationally agreed criteria and indicators, limited spatial data and limited data on micro-organisms, fungi and invertebrates.

VII) Please provide any other relevant information.

Box VI .

| Target 2.2 | Status of threatened species improved |
|--|--|
| I) National target: Has a national target been established corresponding to the global target above? | |
| a) No | |
| b) Yes, the same as the global target | |
| c) Yes, one or more specific national targets have been established | X |
| Please provide details below. | |
| This target is catered for under the NBSAP. | |
| II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been | |

| established, please indicate here, and give further details in the box(es). | | | |
|---|-----|----|--|
| Programme of work | Yes | No | Details |
| a) Agricultural | X | | The NBSAP makes provision for this programme of work under the following objectives. Objective 2.6.2 – development of a database containing the distribution of species, varieties strains and conservation status. Objective 2.6.3 – the design and implementation of collecting programmes for ex-situ preservation of Agrobiodiversity, Objective 2.6.6 – involvement of the community in in-situ conservation. |
| b) Inland water | X | | Objective 2.4 of the NBSAP states that needs of species, in particular threatened and endemic species should be addressed. |
| c) Marine and coastal | | | N/A |
| d) Dry and subhumid land | X | | Objective 2.4 of the NBSAP states that needs of species, in particular threatened and endemic species should be addressed. |
| e) Forest | X | | Objective 2.4 of the NBSAP and Objective 2.5.2, which calls for development of propagation and harvesting protocols for key, traded animal and plant species are addressing this issue. |
| f) Mountain | | | N/A |
| III) Has the global or national target been incorporated into relevant plans, programmes and strategies? | | | |
| a) No | | | |
| b) Yes, into national biodiversity strategy and action plan | | X | |
| c) Yes, into sectoral strategies, plans and programmes | | | |
| Please provide details below. | | | |
| The NBSAP is addressing this target through the following objectives. Objective 2.4 – the needs of species in particular threatened and endemic species should be addressed, Objective 2.5 conservation of agricultural biodiversity, Objective 2.5 - effective management systems for non-domesticated economically important species in place. | | | |
| IV) Please provide information on current status and trends in relation to this target. | | | |
| For plants, there are 43 Red Data species, 2 endangered species, 10 vulnerable species and 8 near threatened species. | | | |
| For fauna, there are three species of endangered fauna: the wild dog, the elephant (although it is not endangered in Botswana) and the black-cheeked lovebird. There are 15 species of vulnerable fauna most of which are protected by law, 21 lower risk conservation dependant (most protected by law), 13 lower risk near threatened and 74 lower risk least concern species most of which again are protected by law. There are limited ex-situ conservation activities in the country with only four private centres holding small collections of living animal species. | | | |
| Crop agricultural biodiversity is threatened by factors such as drought, free seed distribution for drought recovery, which is usually characterized by exotic seed, lack of organized sources of traditional seeds. Of the 11 species of cattle 50% are thought to be endemic 2 of which are under severe threat because of cross breeding and neglect. | | | |
| V) Please provide information on indicators used in relation to this target. | | | |
| Indicators used in the target were the protection level, species richness, endemism, number of red data species and national value. | | | |

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| VI) Please provide information on challenges in implementation of this target. |
| Challenges in implementing this target include limited data, limited ex-situ collections and facilities, lack of surveys, lack of nationally agreed criteria and indicators, limited spatial data and limited data on micro-organisms, fungi and invertebrates. |
| VII) Please provide any other relevant information. |
| |

Box VII.

| Goal 3 | Promote the conservation of genetic diversity | | |
|---|---|----|---|
| Target 3.1 | Genetic diversity of crops, livestock, and of harvested species of trees, fish and wildlife and other valuable species conserved, and associated indigenous and local knowledge maintained | | |
| I) National target: Has a national target been established corresponding to the global target above? | | | |
| a) No | | | |
| b) Yes, the same as the global target | | | |
| c) Yes, one or more specific national targets have been established | | | X |
| Please provide details below. | | | |
| The NBSAP has incorporated this target in objective 5: Coping with Environmental change and threats to biodiversity; objective 3: Better understanding of biodiversity and ecological processes; objective 2: Long term conservation and management of Botswana's biological diversity and genetic resources; objective 1: Efficient and sustainable utilization of all components of biodiversity through appropriate land and resource use practices and management and objective 9: Improved availability and access to biodiversity data and information, and promotion of exchange of information. | | | |
| II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es). | | | |
| Programme of work | Yes | No | Details |
| a) Agricultural | X | | The NBSAP makes provision for this target under several objectives. Objective 2.6.5 establishes the need for models and approaches that promote a living landscape and in-situ preservation of agrobiodiversity at species and genotype level. Objective 2.6.6 calls for the involvement of communities in in-situ conservation of agrobiodiversity and inclusion of indigenous knowledge systems into farming systems. Objective 4.4.1 calls for the development of comprehensive ex-situ genetic resources conservation programmes. |
| b) Inland water | X | | This target is covered by Objectives 2.8.3 and 4.4.1 as mentioned above. |
| c) Marine and coastal | | | N/A |
| d) Dry and subhumid land | X | | As well as Objectives 2.8.3 and 4.4.1, this target is included in the NBSAP under Objective 2.5.2, which calls for the development of propagation and harvesting |

| | | | |
|--|---|--|---|
| | | | protocols for key animal and plant species. |
| e) Forest | X | | This target is covered by the NBSAP under Objectives 2.8.3, 4.4.1 and 2.5.2 as mentioned above. |
| f) Mountain | | | N/A |
| III) Has the global or national target been incorporated into relevant plans, programmes and strategies? | | | |
| a) No | | | |
| b) Yes, into national biodiversity strategy and action plan | | | X |
| c) Yes, into sectoral strategies, plans and programmes | | | |
| Please provide details below. | | | |
| <p>In the NBSAP Objective 2.6.5 establishes a target for the development of models and approaches, which promote living landscapes and in-situ conservation, and the preservation of agrobiodiversity at species and genotype level. Objective 4.4.1 calls for the development of comprehensive ex-situ genetic resources conservation while Objective 2.5.2 calls for the development of propagation and harvesting protocols of key species.</p> | | | |
| IV) Please provide information on current status and trends in relation to this target. | | | |
| <p>There is some collecting in the country mainly for plant breeding purposes. This is being carried out by the Department of Agricultural Research. Some research and collecting is on-going at the University of Botswana. With Protected Areas covering approximately 45% of the country there is quite a lot of in-situ conservation, especially within National Parks, Forest Reserves and botanical monuments. The International Plant Genetic Resources Institute (IPGRI) carried out some collections of wild plant seeds which are stored at RBG Kew, the Consultative Group on International Agricultural Resources (CGIAR) and the National Plant Genetic Resources Centre (NPGRC). The Department of Agricultural Research is collecting seeds from the wild relatives of crops held at the National Gene Bank. The Millenium Seed Bank project has started collecting seeds of endemic, endangered and economical important wild plants. These collections will be stored at the NPGRC and RBG Kew.</p> | | | |
| V) Please provide information on indicators used in relation to this target. | | | |
| Because of the low level of work carried out in this area, no indicators have been set as yet. | | | |
| VI) Please provide information on challenges in implementation of this target. | | | |
| <p>Conservation at the genetic level is poor for all micro-organisms. The genetic diversity for most organisms is not known. In-situ conservation for livestock and crops is being carried out on a small scale. Ex-situ conservation for animals is not well developed. Data collection and research needs to be better coordinated and additional taxonomic research is needed for all organisms with proper curation of collections.</p> | | | |
| VII) Please provide any other relevant information. | | | |
| | | | |

Box VIII .

| Goal 4 | Promote sustainable use and consumption. | | |
|---|---|-----------|--|
| Target 4.1 | Biodiversity-based products derived from sources that are sustainably managed, and production areas managed consistent with the conservation of biodiversity | | |
| I) National target: Has a national target been established corresponding to the global target above? | | | |
| a) No | | | |
| b) Yes, the same as the global target | | | |
| c) Yes, one or more specific national targets have been established | | | X |
| Please provide details below. | | | |
| The NBSAP has covered this target under objective 6: Appropriate valuation/appreciation of biological diversity and raised public awareness on the role of biodiversity in sustainable development and participation in biodiversity related activities and decision making and objective 8: Safe industrial and technological development and other services based on national biodiversity resources for future prosperity. | | | |
| II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es). | | | |
| Programme of work | Yes | No | Details |
| a) Agricultural | X | | This has been incorporated into the following objectives. Objective 2.6.1 determining the availability and distribution of agrobiodiversity in Botswana and identify farming systems which sustain high diversity; Objective 2.6.5 Develop models and approaches which promote a living landscape and in-situ preservation of agrobiodiversity at species and genotype levels. Subsequently actively promote and support the adoption and implementation of biodiversity friendly farming; Objective 3.8.1 Implement programme and strategy for maintenance of agrobiodiversity and identify and promote best practices; Objective 2.6.1 Determine availability and distribution of agrobiodiversity and identify farming systems that sustain high diversity. |
| b) Inland water | | X | There is currently no information on this target. |
| c) Marine and coastal | | | N/A |
| d) Dry and subhumid land | X | | As well as Objectives 2.6.1 and 2.6.5 mentioned above the NBSAP has incorporated this target into the following. Objective 2.3.2 review current national and regional land management systems and land uses in terms of effectiveness in biodiversity conservation. |
| e) Forest | X | | As well as Objective 3.8.1 the following objectives incorporate this target. Objective 3.4.5 Promote and establish a network of fuelwood plantations and community woodlots using indigenous species. |
| f) Mountain | | | N/A |
| III) Has the global or national target been incorporated into relevant plans, programmes and | | | |

| | |
|--|---|
| strategies? | |
| a) No | |
| b) Yes, into national biodiversity strategy and action plan | X |
| c) Yes, into sectoral strategies, plans and programmes | |
| Please provide details below. | |
| <p>This target has been incorporated into the NBSAP under the following Objectives. Objective 2.6.1 determining the availability and distribution of agrobiodiversity in Botswana and identify farming systems which sustain high diversity; Objective 2.6.5 Develop models and approaches which promote a living landscape and in-situ preservation of agrobiodiversity at species and genotype levels. Subsequently actively promote and support the adoption and implementation of biodiversity friendly farming; Objective 3.8.1 Implement programme and strategy for maintenance of agrobiodiversity and identify and promote best practices; Objective 2.6.1 Determine availability and distribution of agrobiodiversity and identify farming systems that sustain high diversity; Objective 2.3.2 review current national and regional land management systems and land uses in terms of effectiveness in biodiversity conservation; Objective 3.4.5 Promote and establish a network of fuelwood plantations and community woodlots using indigenous species.</p> | |
| IV) Please provide information on current status and trends in relation to this target. | |
| <p>The Community Based Natural Resources Management programme being implemented through various government policies aims to encourage the sustainable use of natural resources by combining resources conservation and utilization of such product baskets, clay pots and wildlife.</p> <p>For wildlife based activities, communities are given quotas and in turn have to fulfill several requirements and responsibilities. For fisheries licenses are issued for subsistence, sport and commercial fishing while agricultural resources are controlled through a system of permits.</p> <p>Several plants with commercial potential are controlled using a permit system. Only mopane (<i>Colophospermum</i>) and the grapple plant (<i>Harpagophytum procumbens</i>) are exploited at a significant level and over-harvesting is unlikely.</p> | |
| V) Please provide information on indicators used in relation to this target. | |
| Not much work has been done in this area and so indicators have not been set as yet. | |
| VI) Please provide information on challenges in implementation of this target. | |
| Not much has been done in this area and so there is a shortage of data. Inventory and monitoring is very low and nationally agreed criteria have not been developed yet. | |
| VII) Please provide any other relevant information. | |
| | |

Box IX.

| | |
|--|---|
| Target 4.2 | Unsustainable consumption, of biological resources, or that impacts upon biodiversity, reduced |
| I) National target: Has a national target been established corresponding to the global target above? | |
| a) No | |
| b) Yes, the same as the global target | |
| c) Yes, one or more specific national targets have been established | X |
| Please provide details below. | |
| <p>Some objectives have been included in the NBSAP that relate to this target objective 1: Efficient and sustainable utilization of all components of biodiversity through appropriate land and resource use</p> | |

practices and management.

II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).

| Programme of work | Yes | No | Details |
|--|-----|----|---|
| a) Agricultural | X | | This target is addressed under the following NBSAP objectives. Objective 3.2.2 evaluate the impact of different land management policies; Objective 3.2.2 develop land use best practice guidelines and consider creation of incentives for appropriate land uses; Objective 3.5.2 continue extension work on rangeland management including conservation measures to encourage sustainable use; Objective 3.5.6 provide incentives to reduce overgrazing and to restore degraded rangelands; Objective 3.8.1 implement programme and strategy for maintenance of agrobiodiversity and identify and promote best practices. |
| b) Inland water | X | | The NBSAP has addressed this target in the following objectives. Objective 3.6.2 implement wetland management strategy making provisions for increased community participation; Objective 3.6.3 continue implementation of the Ramsar Convention and wetland management plans; Objective 3.6.4 enhance national capacity for wetlands management, protection, regulation. |
| c) Marine and coastal | | | N/A |
| d) Dry and subhumid land | X | | In relation to this work programme the NBSAP has targeted action through these objectives. Objective 3.5.1 survey rangeland biodiversity and continue rangeland monitoring including bush encroachment, allocation and use or water points and stocking and grazing levels etc; Objective 3.7.1 develop a comprehensive strategy and programme for sustainable use of wildlife resources including setting of quotas, monitoring of resources; Objective 3.8.1 implement programme and strategy for maintenance of agrobiodiversity and identify and promote best practices. |
| e) Forest | X | | In relation to this work programme the NBSAP has targeted action through these objectives. Objective 3.4.3 update the biomass inventory and assess forestry biodiversity trends and patterns; Objective 3.4.6 develop and implement forest reserve management plans; Objective 3.1.1. Institutionalize the guidelines of the ecosystem approach and the BSAP into resource management and sustainable land use strategies; extend the veldproduct monitoring system to include models for quota setting, carrying capacity guidelines and monitoring and enforcement. |
| f) Mountain | | | N/A |
| III) Has the global or national target been incorporated into relevant plans, programmes and strategies? | | | |
| a) No | | | |

| | |
|--|---|
| b) Yes, into national biodiversity strategy and action plan | X |
| c) Yes, into sectoral strategies, plans and programmes | |
| Please provide details below. | |
| IV) Please provide information on current status and trends in relation to this target. | |
| <p>Several plants with commercial potential are controlled using a permit system. Only mopane (<i>Colophospermum</i>) and the grapple plant (<i>Harpagophytum procumbens</i>) are exploited at a significant level and over-harvesting is unlikely.</p> <p>The importance of biodiversity as a source of livelihoods has declined in the past few years. There is limited commercial and subsistence use has declined. It is therefore likely that resources are overexploited at a country scale except for a few specific localized area</p> | |
| V) Please provide information on indicators used in relation to this target. | |
| Indicators have not yet been developed. | |
| VI) Please provide information on challenges in implementation of this target. | |
| There are no sustained inventory and monitoring programmes, there is a low level of information and data and uncoordinated research. | |
| VII) Please provide any other relevant information. | |
| | |

Box X.

| Target 4.3 | No species of wild flora or fauna endangered by international trade | | |
|---|--|----|---------|
| I) National target: Has a national target been established corresponding to the global target above? | | | |
| a) No | | | X |
| b) Yes, the same as the global target | | | |
| c) Yes, one or more specific national targets have been established | | | |
| Please provide details below. | | | |
| A target has not yet been established but in the interim, wild and endangered flora and fauna are protected by various legal instruments. International trade in wild biological resources is controlled by the Wildlife and National Parks Act which includes the CITES regulations. | | | |
| II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es). | | | |
| Programme of work | Yes | No | Details |
| a) Agricultural | | X | |
| b) Inland water | | X | |
| c) Marine and coastal | | | N/A |
| d) Dry and subhumid land | | X | |

| | | | |
|--|--|---|-----|
| e) Forest | | X | |
| f) Mountain | | | N/A |
| III) Has the global or national target been incorporated into relevant plans, programmes and strategies? | | | |
| a) No | | | X |
| b) Yes, into national biodiversity strategy and action plan | | | |
| c) Yes, into sectoral strategies, plans and programmes | | | |
| Please provide details below. | | | |
| | | | |
| IV) Please provide information on current status and trends in relation to this target. | | | |
| | | | |
| V) Please provide information on indicators used in relation to this target. | | | |
| | | | |
| VI) Please provide information on challenges in implementation of this target. | | | |
| | | | |
| VII) Please provide any other relevant information. | | | |
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Box XI .

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| Goal 5 | Pressures from habitat loss, land use change and degradation, and unsustainable water use, reduced. |
| Target 5.1 | Rate of loss and degradation of natural habitats decreased |
| I) National target: Has a national target been established corresponding to the global target above? | |
| a) No | |
| b) Yes, the same as the global target | |
| c) Yes, one or more specific national targets have been established | X |
| Please provide details below. | |
| Several NBSAP objectives relate to this target, e.g. Objective 5: Coping with environmental change and threats to biodiversity and objective 9: Improved availability and access to biodiversity data and information, and promotion of exchange of information. | |

| II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es). | | | |
|--|-----|----|---|
| Programme of work | Yes | No | Details |
| a) Agricultural | X | | The NBSAP covers this target under the following. Objective 3.1.1 Institutionalise the guidelines of the ecosystem approach and the NBSAP into resource management and sustainable use strategies; Objective 3.2.1 Evaluate the impact of different land management policies on biodiversity conservation; Objective 3.2.2 develop land use best bet practices guidelines and consider creation of incentives for appropriate land uses; Objective 5.4.4 critically examine the effects of the Agricultural Policy on biodiversity in the rangelands. |
| b) Inland water | X | | The NBSAP covers this target under the following. Objective 5.5.3 include the monitoring of aquatic species including IAS in water monitoring programmes; Objective 5.6.1 survey levels of IAS at ecosystem level and publish updates regularly; Objective 3.6.4 enhance national capacity for wetlands management. |
| c) Marine and coastal | | | N/A |
| d) Dry and subhumid land | X | | This target is catered for within the NBSAP under Objective 5.4.1 develop national EIA guidelines to cover all sectors and incorporate EIA into sub-district guidelines; Objective 5.4.4 critically examine the effects of the Agricultural Policy on biodiversity in the rangelands; Objective 3.1.1 Institutionalise the guidelines of the ecosystem approach and the NBSAP into resource management and sustainable use strategies. |
| e) Forest | X | | This target is catered for within the NBSAP under Objective 3.1.1 Institutionalise the guidelines of the ecosystem approach and the NBSAP into resource management and sustainable use strategies; Objective 3.4.5 develop and establish a network of fuelwood plantations and community woodlots using indigenous species. |
| f) Mountain | | | N/A |
| III) Has the global or national target been incorporated into relevant plans, programmes and strategies? | | | |
| a) No | | | |
| b) Yes, into national biodiversity strategy and action plan | | | X |
| c) Yes, into sectoral strategies, plans and programmes | | | |
| Please provide details below. | | | |
| The target has been incorporated into several NBSAP targets e.g. Objective 3.1.1 Institutionalize the guidelines of the ecosystem approach and the NBSAP into resource management and sustainable use strategies; Objective 3.2.1 Evaluate the impact of different land management policies on biodiversity conservation; Objective 3.2.2 develop land use best bet practices guidelines and consider creation of incentives for appropriate land uses; Objective 5.4.4 critically examine the effects of the Agricultural Policy on biodiversity in the rangelands; Objective 5.5.3 include the monitoring of aquatic species including IAS in water monitoring programmes; Objective 5.6.1 | | | |

survey levels of IAS at ecosystem level and publish updates regularly; Objective 3.6.4 enhance national capacity for wetlands management.

IV) Please provide information on current status and trends in relation to this target.

Botswana has a low population overall but increasing urbanization has led to increased pressures on biodiversity in surrounding areas. This in turn has led to an increase in the use of fuel wood and water. Increasing tourism has led to increased human population and development of new infrastructure such as roads, hotels and lodges in wilderness areas resulting in habitat destruction and disturbance. The main areas where this is a problem are Chobe and Okavango.

Habitat fragmentation and conversion are mainly caused by an increase in agricultural production, urban development, construction of reservoirs and expansion of road and communications networks. Increasing water extraction is as a problem.

Increasing over utilization of natural resources around settlements and water points is leading to increasing bush encroachment and deforestation especially in the areas of East and South East Botswana.

V) Please provide information on indicators used in relation to this target.

No indicators have been developed yet.

VI) Please provide information on challenges in implementation of this target.

The low level of biodiversity prioritization is a challenge in protecting habitats. The lack of information and data is also a problem. There is also an uncoordinated approach to research, which has led to duplication of efforts and gaps in knowledge. Inventory and monitoring is low and uncoordinated.

VII) Please provide any other relevant information.

Box XII.

| Goal 6 | Control threats from invasive alien species. | | |
|---|---|----|---|
| Target 6.1 | Pathways for major potential alien invasive species controlled | | |
| I) National target: Has a national target been established corresponding to the global target above? | | | |
| a) No | | | |
| b) Yes, the same as the global target | | | |
| c) Yes, one or more specific national targets have been established | | | X |
| Please provide details below. | | | |
| This target is incorporated in the NBSAP through objective 5 already stated earlier. | | | |
| II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es). | | | |
| Programme of work | Yes | No | Details |
| a) Agricultural | X | | The NBSAP has incorporated this target through Objective 5.6.1 stop government of known IAS through government nurseries; Objective 5.6.4 prepare an IAS strategy and policy with the aim to prevent introduction and spread of IAS; Objective 5.6.5 monitor import, export and movement of genetic resources with special emphasis of IAS; Objective 5.6.8 |

| | | | |
|--|---|---|--|
| | | | train customs and excise staff in basic identification of IAS. |
| b) Inland water | X | | This is the same as in a) above. |
| c) Marine and coastal | | | N/A |
| d) Dry and subhumid land | X | | This is the same as in a) above |
| e) Forest | X | | This is the same as in a) above. |
| f) He Mountain | | | N/A |
| III) Has the global or national target been incorporated into relevant plans, programmes and strategies? | | | |
| a) No | | | |
| b) Yes, into national biodiversity strategy and action plan | | X | |
| c) Yes, into sectoral strategies, plans and programmes | | | |
| Please provide details below. | | | |
| In the NBSAP the whole of Objective 5.6 is dedicated to the subject of monitoring and controlling IAS. Several targets have been identified regarding this. | | | |
| IV) Please provide information on current status and trends in relation to this target. | | | |
| Invasive aliens are not yet seen to be a major threat to biodiversity in Botswana although the levels of invasion are not known. There is some legislation to control the introduction of some aquatic and noxious weeds but this is all. In the past the forestry Department distributed seeds that have been proven to be invasive in neighboring countries. There are 72 species of known plant invasive aliens occurring in Botswana. One species of invasive fish, the Nile tilapia (<i>Oreochromis niloticus</i>) has established itself in South Africa and Zimbabwe and might find its way into the waterways of Botswana. | | | |
| V) Please provide information on indicators used in relation to this target. | | | |
| Invasive aliens are not sufficiently studied or monitored so most of the information relating to this target is gathered from neighboring countries. | | | |
| VI) Please provide information on challenges in implementation of this target. | | | |
| The lack of a proper inventory and monitoring system and nationally agreed criteria is a major problem. So too is the lack of a proper IAS strategy and policy as well as trained personnel in this area. | | | |
| VII) Please provide any other relevant information. | | | |
| | | | |

Box XIII.

| Target 6.2 | Management plans in place for major alien species that threaten ecosystems, habitats or species | | |
|--|--|----|---|
| I) National target: Has a national target been established corresponding to the global target above? | | | |
| a) No | | | |
| b) Yes, the same as the global target | | | |
| c) Yes, one or more specific national targets have been established | | | X |
| Please provide details below. | | | |
| This target has been incorporated into the NBSAP. | | | |
| II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es). | | | |
| Programme of work | Yes | No | Details |
| a) Agricultural | X | | The target has been articulated in the NBSAP through objective 5.6.4 prepare an IAS strategy and policy with the aim to prevent introduction and spread of IAS while promoting the use of indigenous species; |
| b) Inland water | X | | The target has been articulated in the NBSAP through objective 5.6.4 prepare an IAS strategy and policy with the aim to prevent introduction and spread of IAS while promoting the use of indigenous species; |
| c) Marine and coastal | | | N/A |
| d) Dry and sub humid land | X | | The target has been articulated in the NBSAP through objective 5.6.4 prepare an IAS strategy and policy with the aim to prevent introduction and spread of IAS while promoting the use of indigenous species; |
| e) Forest | X | | The target has been articulated in the NBSAP through objective 5.6.4 prepare an IAS strategy and policy with the aim to prevent introduction and spread of IAS while promoting the use of indigenous species; |
| f) Mountain | | | N/A |
| III) Has the global or national target been incorporated into relevant plans, programmes and strategies? | | | |
| a) No | | | |
| b) Yes, into national biodiversity strategy and action plan | | | X |
| c) Yes, into sectoral strategies, plans and programmes | | | |
| Please provide details below. | | | |
| The subject of IAS has been dealt with thoroughly in the NBSAP in Objective 5.6 i.e. IAS management strategies and implementation and enforcement capacity put in place. | | | |
| IV) Please provide information on current status and trends in relation to this target. | | | |
| There is currently no legislation on IAS in Botswana. Also there is no mechanism in place to control introduction of IAS into the country. The subject has not been well studied in the country and so occurrence of IAS is not known apart from those species that have been identified as IAS in | | | |

neighboring countries. There is very little action on IAS in the country except in the north of the country where the Aquatic Vegetation Control Unit is managing aquatic weeds such as *Salvinia*.

V) Please provide information on indicators used in relation to this target.

Invasive aliens are not sufficiently studied or monitored so most of the information relating to this target is gathered from neighboring countries.

VIII) Please provide information on challenges in implementation of this target.

The lack of a proper inventory and monitoring system and nationally agreed criteria is a major problem. So too is the lack of a proper IAS strategy and policy as well as trained personnel in this area.

VI) Please provide any other relevant information.

Box XIV.

| Goal 7 | Address challenges to biodiversity from climate change, and pollution. | | |
|--|---|----|---|
| Target 7.1 | Maintain and enhance resilience of the components of biodiversity to adapt to climate change | | |
| I) National target: Has a national target been established corresponding to the global target above? | | | |
| a) No | | | |
| b) Yes, the same as the global target | | | |
| c) Yes, one or more specific national targets have been established | | | X |
| Please provide details below. | | | |
| The NBSAP incorporates this target through objective 5 on climate change and pollution. Strategic target 5.1: early warning mechanisms in preparedness for natural disaster in place together with mitigation plans; 5.3 effects of climate change on vegetation, fauna and livelihoods investigated to allow for appropriate responses and 5,7 water and air pollution levels reduced to control biodiversity loss. | | | |
| II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es). | | | |
| Programme of work | Yes | No | Details |
| a) Agricultural | X | | This target is addressed by the NBSAP through Objective 5.3.2 integrate drought and other climatic concerns into Sectoral planning especially agriculture; Objective 5.3.1 research effects of climate change on biodiversity focusing on vulnerable species and areas; Objective 5.1.5 mainstream environmental disaster management into the national development budget; Objective 5.3.3 establish breeding programmes for drought tolerant agrobiodiversity varieties and breeds and develop appropriate agricultural methods. |
| b) Inland water | X | | This is addressed by Objective 5.3.2 integrate drought and other climatic concerns into Sectoral planning especially agriculture. |
| c) Marine and coastal | | | N/A |

| | | | |
|--|---|---|---|
| d) Dry and subhumid land | X | | This target is covered by the NBSAP in Objective 5.3.1 research effects of climate change on biodiversity focusing on vulnerable species and areas; Objective 5.1.5 mainstream environmental disaster management into the national development budget |
| e) Forest | X | | As in d) above. |
| f) Mountain | | | N/A |
| III) Has the global or national target been incorporated into relevant plans, programmes and strategies? | | | |
| a) No | | | |
| b) Yes, into national biodiversity strategy and action plan | | X | |
| c) Yes, into sectoral strategies, plans and programmes | | | |
| Please provide details below. | | | |
| The target is incorporated into the NBSAP through Objective 5.1 early warning mechanisms and mitigations plans and Objective 5.3 effects of climate change on vegetation, animals and livelihoods investigated. | | | |
| IV) Please provide information on current status and trends in relation to this target. | | | |
| Available information suggests that Botswana is highly vulnerable to climate change. Temperatures are predicted to rise by 1 – 3 degrees while it is believed that rainfall will become more erratic. If this happens it is predicted that crop yields for sorghum and maize will be reduced by about 30%. Thus it is expected that climate change will adversely affect crop and livestock production. More information on climate change, trends and status and trends is not available. | | | |
| V) Please provide information on indicators used in relation to this target. | | | |
| No indicators on the effect of climate change on biodiversity have been developed yet. | | | |
| VI) Please provide information on challenges in implementation of this target. | | | |
| Challenges are limited capacity, lack of indicators, poor information regarding the link between biodiversity and climate change. | | | |
| VII) Please provide any other relevant information. | | | |
| | | | |

Box XV.

| | |
|--|---|
| Target 7.2 | Reduce pollution and its impacts on biodiversity |
| I) National target: Has a national target been established corresponding to the global target above? | |
| a) No | |
| b) Yes, the same as the global target | |
| c) Yes, one or more specific national targets have been established | X |
| Please provide details below. | |
| The NBSAP has incorporated this target in 5.1 and 5.3 mentioned above. | |
| II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been | |

| established, please indicate here, and give further details in the box(es). | | | |
|---|-----|----|--|
| Programme of work | Yes | No | Details |
| a) Agricultural | X | | The NBSAP adequately addresses this target in Objective 5.7, which calls for the reduction of levels of pollution. The objective calls for studies into the effects and costs of pollution on biodiversity; the development and implementation of pollution standards; identification of sources and root causes of pollution and mitigation measures to reduce pollution at source; monitoring of hydrological change and water quality especially around urban and industrial centres; and the reduction of pesticide use. |
| b) Inland water | X | | As above in a). |
| c) Marine and coastal | | | N/A |
| d) Dry and subhumid land | X | | As above in a). |
| e) Forest | X | | As above in a). |
| f) Mountain | | | N/A |
| III) Has the global or national target been incorporated into relevant plans, programmes and strategies? | | | |
| a) No | | | |
| b) Yes, into national biodiversity strategy and action plan | | X | |
| c) Yes, into sectoral strategies, plans and programmes | | | |
| Please provide details below. | | | |
| The NBSAP adequately addresses this target in Objective 5.7, which calls for the reduction of levels of pollution | | | |
| IV) Please provide information on current status and trends in relation to this target. | | | |
| | | | |
| V) Please provide information on indicators used in relation to this target. | | | |
| Indicators used in monitoring pollution are the same as used by the WHO. | | | |
| VI) Please provide information on challenges in implementation of this target. | | | |
| | | | |
| VII) Please provide any other relevant information. | | | |
| | | | |

Box XVI .

| Goal 8 | Maintain capacity of ecosystems to deliver goods and services and support livelihoods. | | |
|---|---|-----------|---|
| Target 8.1 | Capacity of ecosystems to deliver goods and services maintained | | |
| I) National target: Has a national target been established corresponding to the global target above? | | | |
| a) No | | | |
| b) Yes, the same as the global target | | | |
| c) Yes, one or more specific national targets have been established | | | X |
| Please provide details below. | | | |
| The target has been incorporated into the NBSAP. 2.3 Effective ecosystem management practices in place and 4.2 biodiversity and ecosystems concerns effectively integrated into national development plans. | | | |
| II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es). | | | |
| Programme of work | Yes | No | Details |
| a) Agricultural | X | | The NBSAP through objectives 2 and 5 addresses this target. Objective 2 calls for the conservation of ecosystems through a comprehensive network of protected areas, effective management of ecosystems, conservation of agrobiodiversity and restoration and rehabilitation of degraded ecosystems. Objective 5 calls for the ability to cope with environmental change through mitigation plans to minimize effects of natural disasters on biodiversity, understanding of the effects of climate change on biodiversity, reduced levels of habitat destruction, management of IAS and reduction of pollution levels. |
| b) Inland water | X | | As well as the objectives mentioned above, the NBSAP addresses this target through Objective 3.6 Sustainable use of wetland ecosystems biodiversity and ecological processes. This is to be done through implementation of a wetlands policy, implementation of wetland management plans and enhanced wetlands management capacity. |
| c) Marine and coastal | | | N/A |
| d) Dry and subhumid land | X | | Although not specifically mentioned, the objectives mentioned in a) above will enhance the implementation of the programme of work. |
| e) Forest | X | | As in a) above. |
| f) Mountain | | | N/A |
| III) Has the global or national target been incorporated into relevant plans, programmes and strategies? | | | |
| a) No | | | |
| b) Yes, into national biodiversity strategy and action plan | | | X |
| c) Yes, into sectoral strategies, plans and programmes | | | |

| |
|--|
| Please provide details below. |
| This target has been incorporated in Objectives 2, 3 and 5 of the NBSAP. |
| IV) Please provide information on current status and trends in relation to this target. |
| The National Stocktaking Exercise for the NBSAP identified seven ecoregions according to the WWF ecoregions criteria. These are the Zambebian Flooded Grasslands, Zambebian Halophytics, Zambebian and Mopane Woodlands, Kalahari Acacia, Kalahari Xeric Savanna, South Africa Bushveld, Zambezia Baikiaea Woodlands. The Zambebian Flooded Grasslands, Zambebian and Mopane Woodlands and the Kalahari Xeric Savanna ecoregions are in a stable and intact state. The other four ecoregions are in a vulnerable state. The Molapo farming system is threatened by the drying up of rivers. Most of the ecoregions are covered by the protected areas system except for the eastern part of the country. |
| V) Please provide information on indicators used in relation to this target. |
| In determining the conservation status of each of the ecoregions several indicators and criteria were used to develop a priority rank amongst the different ecoregions. These were Protection Level, Species Richness, Endemism, Red Data species and value to the nation. |
| VI) Please provide information on challenges in implementation of this target. |
| While some ecosystems have been well studied, most other ecosystems have not been well studied and thus information on conservation status is lacking. There is a lack of capacity for the management of ecosystems is low. |
| VII) Please provide any other relevant information. |
| |

Box XVII.

| Target 8.2 | Biological resources that support sustainable livelihoods, local food security and health care, especially of poor people maintained | | |
|---|---|----|--|
| I) National target: Has a national target been established corresponding to the global target above? | | | |
| a) No | | | |
| b) Yes, the same as the global target | | | |
| c) Yes, one or more specific national targets have been established | | | X |
| Please provide details below. | | | |
| This target has been incorporated into several NBSAP objectives (1.3, 1.4, 1.9, 3.6, 4.9,) | | | |
| II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es). | | | |
| Programme of work | Yes | No | Details |
| a) Agricultural | X | | This target is catered for in the NBSAP by Objective 3.8.1 implement programme and strategy for maintenance of agrobiodiversity and identify and promote best practices; Objective 3.8.3 improve availability of traditional and improved seed varieties to smallholder and other farmers. |
| b) Inland water | | X | This target is not specifically addressed. |

| | | | |
|--|--|---|--|
| c) Marine and coastal | | | N/A |
| d) Dry and subhumid land | | X | This target is not specifically addressed. |
| e) Forest | | X | This target is not specifically addressed. |
| f) Mountain | | | |
| III) Has the global or national target been incorporated into relevant plans, programmes and strategies? | | | |
| a) No | | | |
| b) Yes, into national biodiversity strategy and action plan | | | X |
| c) Yes, into sectoral strategies, plans and programmes | | | |
| Please provide details below. | | | |
| <p>The NBSAP adequately addresses this target through several objectives. Objective 3.3.1 diversify and strengthen support to Community Based Natural Resources Management programmes; Objective 3.3.2 Re-establish Community Property Regimes including access to communal resources and develop a plan for Community Bases Strategies; Objective 3.3.3 integrate poverty alleviation measures in accordance with the Millenium Poverty Reduction Target and Vision 2016 into biodiversity conservation policies and programmes; Objective 3.7.3 develop community capacity to utilize natural resources in income generating activities and to secure access for sustainable use; Objective 3.8.1 implement programme and strategy for maintenance of agrobiodiversity and identify and promote best practices; Objective 3.8.3 improve availability of traditional and improved seed varieties to smallholder and other farmers; Objective 2.4 needs of species, in particular threatened and endemic species should be addressed; Objective 2.5.2, which calls for development of propagation and harvesting protocols for key, traded animal and plant species are addressing this issue.</p> | | | |
| IV) Please provide information on current status and trends in relation to this target. | | | |
| <p>The Community Based Natural Resources Management programme being implemented through various government policies aims to encourage the sustainable use of natural resources by combining resources conservation and utilization of such product baskets, clay pots and wildlife.</p> <p>For wildlife based activities, communities are given quotas and in turn have to fulfill several requirements and responsibilities. For fisheries licenses are issued for subsistence, sport and commercial fishing while agricultural resources are controlled through a system of permits.</p> <p>Several plants with commercial potential are controlled using a permit system. Only mophane () and the grapple plant (<i>Harpagophytum procumbens</i>) are exploited at a significant level and over-harvesting is unlikely.</p> <p>Crop agricultural biodiversity is threatened by factors such as drought, free seed distribution for drought recovery, which is usually characterized by exotic seed, lack of organized sources of traditional seeds.</p> | | | |
| V) Please provide information on indicators used in relation to this target. | | | |
| Indicators have not yet been set. | | | |
| VI) Please provide information on challenges in implementation of this target. | | | |
| This target has not been implemented yet and so there are no identified challenges. | | | |
| VII) Please provide any other relevant information. | | | |
| | | | |

Box XVIII.

| | | | |
|--|---|-----------|----------------|
| Goal 9 | Maintain socio-cultural diversity of indigenous and local communities. | | |
| Target 9.1 | Protect traditional knowledge, innovations and practices | | |
| I) National target: Has a national target been established corresponding to the global target above? | | | |
| a) No | | | |
| b) Yes, the same as the global target | | | |
| c) Yes, one or more specific national targets have been established | | | X |
| Please provide details below. | | | |
| This target has been incorporated into the NBSAP into objective 1.3 Increased levels of community participation and use of indigenous knowledge systems in biological resource use and sustainable management practices. | | | |
| II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es). | | | |
| Programme of work | Yes | No | Details |
| a) Agricultural | | X | |
| b) Inland water | | X | |
| c) Marine and coastal | | | N/A |
| d) Dry and subhumid land | | X | |
| e) Forest | | X | |
| f) Mountain | | | N/A |
| III) Has the global or national target been incorporated into relevant plans, programmes and strategies? | | | |
| a) No | | | |
| b) Yes, into national biodiversity strategy and action plan | | | X |
| c) Yes, into sectoral strategies, plans and programmes | | | |
| Please provide details below. | | | |
| This target has been incorporated into the NBSAP through Objective 2.8.1 establish an indigenous knowledge policy; Objective 7.3.2 develop a national policy framework on IK with special provision for traditional medicine research and use. | | | |
| IV) Please provide information on current status and trends in relation to this target. | | | |
| There is no policy or law for the protection of indigenous knowledge. Other means of protecting IK are not well known or explored. | | | |
| A multi Sectoral Task Force on Indigenous Knowledge is attempting to rectify the situation. The Task Force is attempting to integrate IK into existing IPR legislation as an interim measure for the protection of IK. | | | |
| V) Please provide information on indicators used in relation to this target. | | | |
| Very little has been done on this target and so there are no indicators yet. | | | |
| VI) Please provide information on challenges in implementation of this target. | | | |

The lack of a policy and law for the protection of indigenous knowledge is a problem. Also, the uncoordinated approach to documentation of indigenous knowledge hampers efforts to protect it. Lack of trained personnel in this area is also a problem.

VII) Please provide any other relevant information.

Box XIX.

| Target 9.2 | Protect the rights of indigenous and local communities over their traditional knowledge, innovations and practices, including their rights to benefit sharing | | |
|---|--|----|--|
| I) National target: Has a national target been established corresponding to the global target above? | | | |
| a) No | | | |
| b) Yes, the same as the global target | | | |
| c) Yes, one or more specific national targets have been established | | | X |
| Please provide details below. | | | |
| The NBSAP covers this in objectives 2 and 3 | | | |
| II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es). | | | |
| Programme of work | Yes | No | Details |
| a) Agricultural | X | | This target is covered under Objective 2.6.7 develop mechanisms for the protection of plant breeders rights including landraces linked with Intellectual Property Rights and Objective 3.8.5 encourage the use of traditional varieties and strains/ breeds of livestock and crops for special uses and Objective 3.8.2 create awareness about the value of genetic diversity and locally adapted breeds and promote indigenous farming systems. |
| b) Inland water | X | | This is covered in Objective 3.6.2 of the NBSAP which calls for implementation of the wetlands strategy and the increased community participation in wetlands management and planning. |
| c) Marine and coastal | | | N/A |
| d) Dry and subhumid land | | X | |
| e) Forest | | X | |
| f) Mountain | | | N/A |
| III) Has the global or national target been incorporated into relevant plans, programmes and strategies? | | | |
| a) No | | | |
| b) Yes, into national biodiversity strategy and action plan | | | |

| |
|--|
| c) Yes, into sectoral strategies, plans and programmes |
| Please provide details below. |
| This target has been incorporated into the NBSAP through the following objectives. Objective 2.6.7 develop mechanisms for the protection of plant breeders rights including landraces linked with Intellectual Property Rights; Objective 3.8.5 encourage the use of traditional varieties and strains/ breeds of livestock and crops for special uses; Objective 3.8.2 create awareness about the value of genetic diversity and locally adapted breeds and promote indigenous farming systems; Objective 2.8.1 establish an indigenous knowledge policy; Objective 6.1.3 Incorporate biodiversity awareness, the importance of maintaining biodiversity and related indigenous knowledge into the national curriculum; Objective 6.1.5 encourage community skill transfer workshops on indigenous knowledge and traditional practices. |
| IV) Please provide information on current status and trends in relation to this target. |
| Protection of indigenous knowledge is quite low in Botswana. Not much work has been done to document indigenous knowledge. |
| V) Please provide information on indicators used in relation to this target. |
| Not much work has been done on this target and so there are no indicators yet. |
| VI) Please provide information on challenges in implementation of this target. |
| The lack of a policy and law for the protection of indigenous knowledge is a problem. Also, the uncoordinated approach to documentation of indigenous knowledge hampers efforts to protect it. |
| VII) Please provide any other relevant information. |
| |

Box XX.

| | | | |
|---|---|-----------|----------------|
| Goal 10 | Ensure the fair and equitable sharing of benefits arising out of the use of genetic resources. | | |
| Target 10.1 | All transfers of genetic resources are in line with the Convention on Biological Diversity, the International Treaty on Plant Genetic Resources for Food and Agriculture and other applicable agreements | | |
| I) National target: Has a national target been established corresponding to the global target above? | | | |
| a) No | | | |
| b) Yes, the same as the global target | | | |
| c) Yes, one or more specific national targets have been established | | | X |
| Please provide details below. | | | |
| This target is articulated in the NBSAP objective 7: Fair access to biological resources and equitable sharing of benefits arising from the use of biological resources. | | | |
| II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es). | | | |
| Programme of work | Yes | No | Details |
| a) Agricultural | | X | |
| b) Inland water | | X | |

| | | | |
|---|--|---|-----|
| c) Marine and coastal | | | N/A |
| d) Dry and subhumid land | | X | |
| e) Forest | | X | |
| f) Mountain | | | N/A |
| III) Has the global or national target been incorporated into relevant plans, programmes and strategies? | | | |
| a) No | | | |
| b) Yes, into national biodiversity strategy and action plan | | | X |
| c) Yes, into sectoral strategies, plans and programmes | | | |
| Please provide details below. | | | |
| This target is articulated in the NBSAP in Objective 7.1.4 which states that all transfers of genetic resources are in line with the Convention on Biological Diversity, the International Treaty on Plant Genetic Resources for Food and Agriculture and other applicable international and regional agreements and standards. | | | |
| IV) Please provide information on current status and trends in relation to this target. | | | |
| | | | |
| V) Please provide information on indicators used in relation to this target. | | | |
| No indicators have been developed yet. | | | |
| VI) Please provide information on challenges in implementation of this target. | | | |
| | | | |
| VII) Please provide any other relevant information. | | | |
| | | | |

Box XXI .

| | | | |
|--|---|--|---|
| Target 10.2 | Benefits arising from the commercial and other utilization of genetic resources shared with the countries providing such resources | | |
| I) National target: Has a national target been established corresponding to the global target above? | | | |
| a) No | | | |
| b) Yes, the same as the global target | | | |
| c) Yes, one or more specific national targets have been established | | | X |
| Please provide details below. | | | |
| This has been incorporated into the NBSAP in objective 7.3 | | | |

| II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es). | | | |
|--|-----|----|---------|
| Programme of work | Yes | No | Details |
| a) Agricultural | | X | |
| b) Inland water | | X | |
| c) Marine and coastal | | | N/A |
| d) Dry and subhumid land | | X | |
| e) Forest | | X | |
| f) Mountain | | | N/A |
| III) Has the global or national target been incorporated into relevant plans, programmes and strategies? | | | |
| a) No | | | |
| b) Yes, into national biodiversity strategy and action plan | | | X |
| c) Yes, into sectoral strategies, plans and programmes | | | |
| Please provide details below. | | | |
| The NBSAP addresses this target through the following objectives. Objective 7.1.1 calls for the development of a ABS strategy and in the mean time that Material Transfer agreements should be used; Objective 7.1.2 calls for the establishment of bioprospecting, access and benefit sharing guidelines; Objective 7.3.3 calls for the availability of guidelines on access and benefit sharing. | | | |
| IV) Please provide information on current status and trends in relation to this target. | | | |
| The law on access to genetic resources is uncoordinated and fragmented. There are various acts that relate to access both in-situ and ex-situ, there are regulatory mechanisms for the collection of biological resources within their natural environments or habitats but it is clear that current legislation on access and benefit sharing is inadequate. Currently local communities do not receive adequate benefits for the genetic resources they harvest. In fact for most veld products the cost for harvesting the resources is higher than the income it generates. There is currently no equity in the sharing of benefits as traders and middlemen sell on the resources for much higher prices. | | | |
| V) Please provide information on indicators used in relation to this target. | | | |
| No indicators have been developed yet. | | | |
| VI) Please provide information on challenges in implementation of this target. | | | |
| The main challenge in implementing this target is the lack of a comprehensive ABS law or policy. | | | |
| VII) Please provide any other relevant information. | | | |
| | | | |

Box XXII.

| Goal 11 | Parties have improved financial, human, scientific, technical and technological capacity to implement the Convention. | | |
|--|---|-----------|----------------|
| Target 11.1 | New and additional financial resources are transferred to developing country Parties, to allow for the effective implementation of their commitments under the Convention, in accordance with Article 20 | | |
| I) National target: Has a national target been established corresponding to the global target above? | | | |
| a) No | | | |
| b) Yes, the same as the global target | | | |
| c) Yes, one or more specific national targets have been established | | | X |
| Please provide details below. | | | |
| This is catered for in the NBSAP objective 11.4 Sustainable financial provisions for implementation of the BSAP. | | | |
| II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es). | | | |
| Programme of work | Yes | No | Details |
| a) Agricultural | | X | |
| b) Inland water | | X | |
| c) Marine and coastal | | | N/A |
| d) Dry and subhumid land | | X | |
| e) Forest | | X | |
| f) Mountain | | | N/A |
| III) Has the global or national target been incorporated into relevant plans, programmes and strategies? | | | |
| a) No | | | |
| b) Yes, into national biodiversity strategy and action plan | | | X |
| c) Yes, into sectoral strategies, plans and programmes | | | |
| Please provide details below. | | | |
| In Objective 11.4.1 the NBSAP calls for a review of existing financing mechanisms and the development of funding strategy for the BSAP and Objective 11.4.2 calls for the strengthening of biodiversity funding mechanisms and communication of funding priorities to external donors. | | | |
| IV) Please provide information on current status and trends in relation to this target. | | | |
| N/a | | | |
| V) Please provide information on indicators used in relation to this target. | | | |
| N/a | | | |
| VI) Please provide information on challenges in implementation of this target. | | | |

N/a

VII) please provide any other relevant information.

Box XXIII.

Target 11.2

Technology is transferred to developing country Parties, to allow for the effective implementation of their commitments under the Convention, in accordance with its Article 20, paragraph 4

I) National target: Has a national target been established corresponding to the global target above?

- | | |
|---|---|
| a) No | X |
| b) Yes, the same as the global target | |
| c) Yes, one or more specific national targets have been established | |

Please provide details below.

II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).

| Programme of work | Yes | No | Details |
|--------------------------|-----|----|---------|
| a) Agricultural | | X | |
| b) Inland water | | X | |
| c) Marine and coastal | | | N/A |
| d) Dry and subhumid land | | X | |
| e) Forest | | X | |
| f) Mountain | | | N/A |

III) Has the global or national target been incorporated into relevant plans, programmes and strategies?

- | | |
|---|---|
| a) No | X |
| b) Yes, into national biodiversity strategy and action plan | |
| c) Yes, into sectoral strategies, plans and programmes | |

Please provide details below.

IV) Please provide information on current status and trends in relation to this target.

| |
|--|
| V) Please provide information on indicators used in relation to this target. |
| VI) Please provide information on challenges in implementation of this target. |
| VII) Please provide any other relevant information. |

Global Strategy for Plant Conservation (GSPC)

The Conference of the Parties, in decision VI/9, annex, adopted the Global Strategy for Plant Conservation. Parties and Governments are invited to develop their own targets with this flexible framework. The Conference of the Parties considered the Strategy as a pilot approach for the use of outcome oriented targets under the Convention. In decision VII/10, the Conference of the Parties decided to integrate the targets into the reporting framework for the Third National Reports. Please provide relevant information by responding to the questions and requests contained in the following tables.

Box XXIV.

| | |
|--|---|
| Target 1. A widely accessible working list of known plant species, as a step towards a complete world flora. | |
| I) Has your country established national target corresponding to the above global target? | |
| a) Yes | x |
| b) No | |
| Please specify | |
| The NBSAP Objective 1.1.1 sets a target for establishing institutional responsibilities for collection and maintenance of biodiversity data including flora. | |
| II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies? | |
| a) Yes | X |
| b) No | |
| Please specify | |
| This is incorporated in the NBSAP as mentioned above. | |
| III) Current status (please indicate current status related to this target) | |

Some programmes are currently ongoing for example through the Southern Africa Botanical Diversity Network, University of Botswana, National Herbarium. SABONET will be producing a national checklist of flowering plants and bryophytes based on existing herbarium specimens and will reflect current knowledge of the flora. The Department of Agriculture is also carrying out some work on wild relatives of crop species while the Millenium Seed Bank Project is collecting wild plants that are either endangered, endemic or threatened.

IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)

The NBSAP has only recently been completed and so no implementation has taken place.

V) Progress made towards target (please specify indicators used to monitor progress towards the target)

The NBSAP has only recently been completed and so no implementation has taken place.

VI) Constraints to achieving progress towards the target

The NBSAP has only recently been completed and so no implementation has taken place.

VII) Any other relevant information

Box XXV.

Target 2. A preliminary assessment of the conservation status of all known plant species, at national, regional and international levels.

I) Has your country established national target corresponding to the above global target?

a) Yes

X

b) No

Please specify

The NBSAP Objective 2.4.1 sets a target to establish the conservation status for all major animal and plant taxa in Botswana.

II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?

a) Yes

X

b) No

Please specify

The target has been incorporated into the NBSAP as mentioned in I) above.

III) Current status (please indicate current status related to this target)

The NBSAP has only recently been completed and so no implementation has taken place.

IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)

The NBSAP has only recently been completed and so no implementation has taken place.

V) Progress made towards target (please specify indicators used to monitor progress towards the target)

| |
|--|
| The NBSAP has only recently been completed and so no implementation has taken place. |
| VI) Constraints to achieving progress towards the target |
| The NBSAP has only recently been completed and so no implementation has taken place. |
| VII) Any other relevant information |
| |

Box XXVI.

| | |
|---|---|
| Target 3. Development of models with protocols for plant conservation and sustainable use, based on research and practical experience. | |
| I) Has your country established national target corresponding to the above global target? | |
| a) Yes | |
| b) No | X |
| Please specify | |
| | |
| II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies? | |
| a) Yes | |
| b) No | X |
| Please specify | |
| Although this specific target has not been incorporated into any national targets the NBSAP includes several related targets for example Objective 2.4.3 support and promote in-situ and ex-situ conservation activities for rare, threatened and endemic species, Objective 2.5.2 Develop propagation and harvesting protocols for key animal and plant species with commercial value. | |
| III) Current status (please indicate current status related to this target) | |
| No work has been done on this target. | |
| IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target) | |
| No work has been done on this target. | |
| V) Progress made towards target (please specify indicators used to monitor progress towards the target) | |
| No work has been done on this target | |
| VI) Constraints to achieving progress towards the target | |
| No work has been done on this target. | |
| VII) Any other relevant information | |
| | |

Box XXVII.

| | |
|--|---|
| Target 4. At least ten percent of each of the world's ecological regions effectively conserved. | |
| I) Has your country established national target corresponding to the above global target? | |
| a) Yes | X |
| b) No | |
| Please specify | |
| The National Biodiversity Strategy and Action Plan (NBSAP) has effectively catered for this objective under several specific targets for example Objective 2.2 establishes the need for a comprehensive protected area network to conserve ecosystems and species. | |
| II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies? | |
| a) Yes | X |
| b) No | |
| Please specify | |
| Objective 2.2 of the NBSAP identifies the need for a comprehensive protected area network to conserve ecosystems and species; this includes taking Important Plant Areas and Important Bird Areas into consideration. Objective 2.3 establishes the need for effective ecosystems management practices including a review of current national and regional land management systems. Under Objective 2.7 the NBSAP calls for the rehabilitation of restoration or degraded ecosystems and habitats. | |
| III) Current status (please indicate current status related to this target) | |
| The National Stocktaking Exercise for the NBSAP identified seven ecoregions according to the WWF ecoregions criteria. These are the Zambebian Flooded Grasslands, Zambebian Halophytics, Zambebian and Mopane Woodlands, Kalahari Acacia, Kalahari Xeric Savanna, South Africa Bushveld, Zambezia Baikiaea Woodlands. The Zambebian Flooded Grasslands, Zambebian and Mopane Woodlands and the Kalahari Xeric Savanna ecoregions are in a stable and intact state. The other four ecoregions are in a vulnerable state i.e. Zambezia Baikiaea Woodlands (cattle and overgrazing and change in vegetation communities), South Africa Bushveld (deforestation, overgrazing, range degradation, fire and poaching), Kalahari Acacia (increased cattle ranching, land transformation and degradation, fire, climate change and poaching); and Zambebian Halophytics (mining, rangeland degradation, fire, wind erosion, water extraction, algae blooms, overgrazing, lack of protection for critical avian breeding sites and poaching). | |
| IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target) | |
| According to the IUCN guidelines on Protected Areas, protected areas in the form of national parks, game reserves, wildlife management areas and controlled hunting areas cover 45% of the country. Most of the ecoregions are adequately covered by the protected areas network except for those in the east of the country. | |
| V) Progress made towards target (please specify indicators used to monitor progress towards the target) | |
| | |
| VI) Constraints to achieving progress towards the target | |
| There is no nationally agreed ecosystem/ ecoregions classification system which makes it difficult to inventory or monitor ecoregions. This is further complicated by the low level of data/ information on ecosystems. The country urgently needs an ecosystem/ ecoregions inventory. Nationally agreed indicators for use in monitoring ecosystems need to be developed. | |

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|-------------------------------------|
| VII) Any other relevant information |
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Box XXVIII.

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|---|---|
| Target 5. Protection of fifty percent of the most important areas for plant diversity assured. | |
| I) Has your country established national target corresponding to the above global target? | |
| a) Yes | X |
| b) No | |
| Please specify | |
| The target is addressed by Objective 2.2.3 in the NBSAP which calls for the establishment of important plant areas and Important Bird Areas and for these to be linked to the protected areas system. | |
| II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies? | |
| a) Yes | X |
| b) No | |
| Please specify | |
| This target is included into the NBSAP as mentioned above. | |
| III) Current status (please indicate current status related to this target) | |
| Botswana has not yet identified Important Plant Areas and this will only be possible after a national flora inventory has been conducted. This is a long term goal for Botswana. | |
| IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target) | |
| This has not yet been done. So far only a target has been set but as soon as the implementation of the NBSAP is underway this target will be attended to. | |
| V) Progress made towards target (please specify indicators used to monitor progress towards the target) | |
| The target will be addressed through the NBSAP which is due to be implemented soon. | |
| VI) Constraints to achieving progress towards the target | |
| Lack of a national inventory, lack of information and low taxonomic capacity are the major constraints in achieving this target. | |
| VII) Any other relevant information | |
| | |

Box XXIX.

| | |
|--|---|
| Target 6. At least thirty percent of production lands managed consistent with the conservation of plant diversity. | |
| I) Has your country established national target corresponding to the above global target? | |
| a) Yes | X |
| b) No | |
| Please specify | |
| The NBSAP identified targets for the management of production lands e.g. Objective 2.6 conservation of agricultural diversity and Objective 3.8 Sustainable use of agrobiodiversity. | |
| II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies? | |
| a) Yes | X |
| b) No | |
| Please specify | |
| This target has been incorporated into the NBSAP under the following objectives. Objective 2.6.5 Develop models and approaches which promote a living landscape and in-situ preservation of agrobiodiversity at species and genotype level. Subsequently, actively promote and support the adoption and implementation of biodiversity friendly farming systems; Objective 3.8.1 Implement a programme and strategy for maintenance of agrobiodiversity and identify and promote best practices. | |
| III) Current status (please indicate current status related to this target) | |
| Although not much work has been done on agricultural landscapes it would seem that most eco - regions are intact. More inventory and monitoring work needs to be done however, to get a clearer picture of the status of agricultural regions. | |
| IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target) | |
| Implementation of this target has not begun yet but it is anticipated that when the NBSAP is implemented then this target will be addressed. | |
| V) Progress made towards target (please specify indicators used to monitor progress towards the target) | |
| This target has not been implemented yet. | |
| VI) Constraints to achieving progress towards the target | |
| | |
| VII) Any other relevant information | |
| | |

Box XXX.

| Target 7. Sixty percent of the world's threatened species conserved <i>In-situ</i>. | |
|---|---|
| I) Has your country established national target corresponding to the above global target? | |
| a) Yes | X |
| b) No | |
| Please specify | |
| This target is catered for in the NBSAP. | |
| II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies? | |
| a) Yes | X |
| b) No | |
| Please specify | |
| The NBSAP is addressing this target through the following objectives. Objective 2.4 – the needs of species in particular threatened and endemic species should be addressed, Objective 2.5 conservation of agricultural biodiversity, Objective 2.5 - effective management systems for non-domesticated economically important species in place. | |
| III) Current status (please indicate current status related to this target) | |
| For plants, there are 43 Red Data species, 2 endangered species, 10 vulnerable species and 8 near threatened species. In-situ conservation of these species is through national parks, game reserves, botanical monuments and private game reserves. Protected areas cover 45% of Botswana's area through a good network. All commercially exploited plants as well as those with commercial potential are protected by law and require harvesting permits. | |
| IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target) | |
| | |
| V) Progress made towards target (please specify indicators used to monitor progress towards the target) | |
| As mentioned before, Botswana has a comprehensive network of protected areas and most areas that are important for plant conservation are covered by this network (except in the eastern parts of the country). | |
| VI) Constraints to achieving progress towards the target | |
| Constraints in achieving this target include limited data, limited ex-situ collections and facilities, lack of surveys, lack of nationally agreed criteria and indicators, limited spatial data and limited data on micro-organisms, fungi and invertebrates. | |
| VII) Any other relevant information | |
| | |

Box XXXI.

| | |
|---|---|
| Target 8. Sixty percent of threatened plant species in accessible <i>Ex-situ</i> collections, preferably in the country of origin, and 10 percent of them included in recovery and restoration programmes. | |
| I) Has your country established national target corresponding to the above global target? | |
| a) Yes | X |
| b) No | |
| Please specify | |
| This target is being addressed by the NBSAP as mentioned below. | |
| II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies? | |
| a) Yes | X |
| b) No | |
| Please specify | |
| The NBSAP is addressing this target through the following objectives. Objective 2.4 – the needs of species in particular threatened and endemic species should be addressed, Objective 2.5 conservation of agricultural biodiversity, Objective 2.5 - effective management systems for non-domesticated economically important species in place. | |
| III) Current status (please indicate current status related to this target) | |
| For plants, there are 43 Red Data species, 2 endangered species, 10 vulnerable species and 8 near threatened species. There are limited ex-situ conservation activities in the country. The National Botanical Gardens maintain an incomplete collection of indigenous plants in its gardens in Gaborone. Seed collections (not complete also) are held by the Department of Agricultural Research and some international centres. There are four herbaria in the country: the National Herbarium, University Herbarium, the Peter Smith Herbarium and the Ministry of Agriculture Herbarium. The actual number of Botswana specimens held outside the country is unknown. | |
| IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target) | |
| Work on this target has not been started yet but will begin once the NBSAP is being implemented. | |
| V) Progress made towards target (please specify indicators used to monitor progress towards the target) | |
| Work on this target has not been started yet but will begin once the NBSAP is being implemented. | |
| VI) Constraints to achieving progress towards the target | |
| Work on this target has not been started yet but will begin once the NBSAP is being implemented. | |
| VII) Any other relevant information | |
| | |

Box XXXII.

| | |
|--|---|
| Target 9. Seventy percent of the genetic diversity of crops and other major socio-economically valuable plant species conserved, and associated indigenous and local knowledge maintained. | |
| I) Has your country established national target corresponding to the above global target? | |
| a) Yes | X |
| b) No | |
| Please specify | |
| This target is incorporated into the NBSAP as mentioned below. | |
| II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies? | |
| a) Yes | X |
| b) No | |
| Please specify | |
| The NBSAP makes provision for this programme of work under the following objectives. Objective 2.6.2 – development of a database containing the distribution of species, varieties strains and conservation status. Objective 2.6.3 – the design and implementation of collecting programmes for ex-situ preservation of Agrobiodiversity, Objective 2.6.6 – involvement of the community in in-situ conservation, Objective 2.4 of the NBSAP and Objective 2.5.2, which calls for development of propagation and harvesting protocols for key, traded animal and plant species are addressing this issue. | |
| III) Current status (please indicate current status related to this target) | |
| Botswana is still rich in Agrobiodiversity predominantly in the subsistence agricultural sector. The commercial sector is characterized by exotic livestock and hybrid/ improved cultivars. Traditional agriculture is threatened by factors such as drought, free seed distribution for drought recovery, which is usually characterized by exotic seed, lack of organized sources of traditional seeds. There are 28 species of crops and Botswana is a secondary centre of diversity for the <i>Citrillus</i> spp and a primary center of diversity for the <i>Vigna</i> spp. There are several species of livestock in Botswana. Of the 11 species of cattle 50% are thought to be endemic 2 of which are under severe threat because of cross breeding and neglect. | |
| IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target) | |
| Work on this target has not been started yet but will begin once the NBSAP is being implemented. | |
| V) Progress made towards target (please specify indicators used to monitor progress towards the target) | |
| Work on this target has not been started yet but will begin once the NBSAP is being implemented. | |
| VI) Constraints to achieving progress towards the target | |
| Constraints in achieving this target include limited data, limited ex-situ collections and facilities, lack of surveys, lack of nationally agreed criteria and indicators, limited spatial data and limited data on micro-organisms, fungi and invertebrates. | |
| VII) Any other relevant information | |
| | |

Box XXXIII.

| Target 10. Management plans in place for at least 100 major alien species that threaten plants, plant communities and associated habitats and ecosystems. | |
|--|---|
| I) Has your country established national target corresponding to the above global target? | |
| a) Yes | X |
| b) No | |
| Please specify | |
| This target is catered for under the NBSAP as mentioned below. | |
| II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies? | |
| a) Yes | X |
| b) No | |
| Please specify | |
| The target has been articulated in the NBSAP through objective 5.6.4 prepare an IAS strategy and policy and related measures with the aim to prevent introduction and spread of IAS while promoting the use of indigenous species; | |
| III) Current status (please indicate current status related to this target) | |
| There is currently no legislation on IAS in Botswana. Also there is no mechanism in place to control introduction of IAS into the country. The subject has not been well studied in the country and so occurrence of IAS is not known apart from those species that have been identified as IAS in neighboring countries. There is very little action on IAS in the country except in the north of the country where the Aquatic Vegetation Control Unit is managing aquatic weeds such as <i>Salvinia</i> . According to the National Stocktaking Report, there are 72 different species of IAS in Botswana. Invasive aliens are not yet seen to be a major threat to biodiversity in Botswana although the levels of invasion are not known. | |
| IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target) | |
| There is some legislation to control the introduction of some aquatic and noxious weeds but this is all. More needs to be done in this areas and this will be addressed with the implementation of the NBSAP which calls for the formulation of a strategy on IAS. | |
| V) Progress made towards target (please specify indicators used to monitor progress towards the target) | |
| Invasive aliens are not sufficiently studied or monitored so most of the information relating to this target is gathered from neighboring countries. | |
| VI) Constraints to achieving progress towards the target | |
| The lack of a proper inventory and monitoring system and nationally agreed criteria is a major problem. So too is the lack of a proper IAS strategy and policy as well as trained personnel in this area. | |
| VII) Any other relevant information | |
| | |

Box XXXIV.

| Target 11. No species of wild flora endangered by international trade. | |
|--|---|
| I) Has your country established national target corresponding to the above global target? | |
| a) Yes | |
| b) No | X |
| Please specify | |
| A target has not yet been established but in the interim, wild and endangered flora, are protected by various legal instruments and regulations. | |
| II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies? | |
| a) Yes | |
| b) No | X |
| Please specify | |
| | |
| III) Current status (please indicate current status related to this target) | |
| | |
| IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target) | |
| | |
| V) Progress made towards target (please specify indicators used to monitor progress towards the target) | |
| | |
| VI) Constraints to achieving progress towards the target | |
| | |
| VII) Any other relevant information | |
| | |

Box XXXV.

| Target 12. Thirty percent of plant-based products derived from sources that are sustainably managed. | |
|---|---|
| I) Has your country established national target corresponding to the above global target? | |
| a) Yes | X |
| b) No | |
| Please specify | |

The target is incorporated into the NBSAP as mentioned below.

II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?

a) Yes

X

b) No

Please specify

This target has been incorporated into the NBSAP under the following Objectives. Objective 2.6.1 determining the availability and distribution of agrobiodiversity in Botswana and identify farming systems which sustain high diversity; Objective 2.6.5 Develop models and approaches which promote a living landscape and in-situ preservation of agrobiodiversity at species and genotype levels. Subsequently actively promote and support the adoption and implementation of biodiversity friendly farming; Objective 3.8.1 Implement programme and strategy for maintenance of agrobiodiversity and identify and promote best practices; Objective 2.6.1 Determine availability and distribution of agrobiodiversity and identify farming systems that sustain high diversity; Objective 2.3.2 review current national and regional land management systems and land uses in terms of effectiveness in biodiversity conservation; Objective 3.4.5 Promote and establish a network of fuelwood plantations and community woodlots using indigenous species.

III) Current status (please indicate current status related to this target)

The Community Based Natural Resources Management programme being implemented through various government policies aims to encourage the sustainable use of natural resources by combining resources conservation and utilization of such product baskets, clay pots and wildlife. Several plants with commercial potential are controlled using a permit system. Only mophane () and the grapple plant (*Harpagophytum procumbens*) are exploited at a significant level and over-harvesting is unlikely.

IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)

Work on this target has not begun.

V) Progress made towards target (please specify indicators used to monitor progress towards the target)

Not much has been done in this area and so there is a shortage of data. Inventory and monitoring is very low and nationally agreed criteria have not been developed yet.

VI) Constraints to achieving progress towards the target

VII) Any other relevant information

Box XXXVI.

| | |
|--|---|
| Target 13. The decline of plant resources, and associated indigenous and local knowledge, innovations and practices that support sustainable livelihoods, local food security and health care, halted. | |
| I) Has your country established national target corresponding to the above global target? | |
| a) Yes | X |
| b) No | |
| Please specify | |
| | |
| II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies? | |
| a) Yes | X |
| b) No | |
| Please specify | |
| <p>The NBSAP adequately addresses this target through several objectives. Objective 3.3.1 diversify and strengthen support to Community Based Natural Resources Management programmes; Objective 3.3.2 Re-establish Community Property Regimes including access to communal resources and develop a plan for Community Bases Strategies; Objective 3.3.3 integrate poverty alleviation measures in accordance with the Millenium Poverty Reduction Target and Vision 2016 into biodiversity conservation policies and programmes; Objective 3.7.3 develop community capacity to utilize natural resources in income generating activities and to secure access for sustainable use; Objective 3.8.1 implement programme and strategy for maintenance of agrobiodiversity and identify and promote best practices; Objective 3.8.3 improve availability of traditional and improved seed varieties to smallholder and other farmers; Objective 2.4 needs of species, in particular threatened and endemic species should be addressed; Objective 2.5.2, which calls for development of propagation and harvesting protocols for key, traded animal and plant species are addressing this issue.</p> | |
| III) Current status (please indicate current status related to this target) | |
| <p>The Community Based Natural Resources Management programme being implemented through various government policies aims to encourage the sustainable use of natural resources by combining resources conservation and utilization of such product baskets, clay pots and wildlife. Several plants with commercial potential are controlled using a permit system. Only mophane () and the grapple plant (<i>Harpagophytum procumbens</i>) are exploited at a significant level and over-harvesting is unlikely.</p> <p>Crop agricultural biodiversity is threatened by factors such as drought, free seed distribution for drought recovery, which is usually characterized by exotic seed, lack of organized sources of traditional seeds.</p> | |
| IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target) | |
| This target has not been implemented yet. | |
| V) Progress made towards target (please specify indicators used to monitor progress towards the target) | |
| This target has not been implemented yet. | |

| | |
|--|--|
| VI) Constraints to achieving progress towards the target | |
| This target has not been implemented yet. | |
| VII) Any other relevant information | |
| | |

Box XXXVII .

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|---|---|
| Target 14. The importance of plant diversity and the need for its conservation incorporated into communication, educational and public-awareness programmes. | |
| I) Has your country established national target corresponding to the above global target? | |
| a) Yes | X |
| b) No | |
| Please specify | |
| This target is catered for in the NBSAP | |
| II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies? | |
| a) Yes | X |
| b) No | |
| Please specify | |
| This target is included in the NBSAP under Objective 6.1.1 develop and implement a national biodiversity awareness and advocacy strategy aimed at all levels of society; Objective 6.1.6 within the botanical gardens establish medicinal plant gardens to encourage further development of knowledge and skills associated with the local use of medicinal plants. | |
| III) Current status (please indicate current status related to this target) | |
| This target has not been implemented yet. | |
| IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target) | |
| This target has not been implemented yet. | |
| V) Progress made towards target (please specify indicators used to monitor progress towards the target) | |
| This target has not been implemented yet. | |
| VI) Constraints to achieving progress towards the target | |
| This target has not been implemented yet. | |
| VII) Any other relevant information | |
| | |

Box XXXVIII.

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|---|---|
| Target 15. The number of trained people working with appropriate facilities in plant conservation increased, according to national needs, to achieve the targets of this Strategy. | |
| I) Has your country established national target corresponding to the above global target? | |
| a) Yes | X |
| b) No | |
| Please specify | |
| This target has been incorporated into the NBSAP. | |
| II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies? | |
| a) Yes | X |
| b) No | |
| Please specify | |
| The target has been included into the NBSAP through the following objectives. Objective 4.3.6 calls for the review of taxonomic and bio-systematics capacity and infrastructure as well as adequate funding; Objective 4.3.8 calls for active training to fill gaps in biodiversity management; Objective 4.4.1 calls for the development of comprehensive ex-situ genetic resources programmes; Objective 4.4.2 sets out measures for the strengthening of human capacity and infrastructure in existing herbaria, museums, national parks and gene banks. | |
| III) Current status (please indicate current status related to this target) | |
| Currently biodiversity expertise especially in the area of taxonomy and bio-systematic is low and is limited to the University, herbaria, museum and Department of Agricultural Research. Facilities are also poor and there are a very few that are well established or well equipped. | |
| IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target) | |
| This target will be implemented when the NBSAP is implemented. | |
| V) Progress made towards target (please specify indicators used to monitor progress towards the target) | |
| This target has not been implemented yet. | |
| VI) Constraints to achieving progress towards the target | |
| This target has not been implemented yet. | |
| VII) Any other relevant information | |
| | |

Box XXXIX.

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| Target 16. Networks for plant conservation activities established or strengthened at national, regional and international levels. | |
| I) Has your country established national target corresponding to the above global target? | |
| a) Yes | X |
| b) No | |
| Please specify | |
| This is catered for in the NBSAP. | |
| II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies? | |
| a) Yes | x |
| b) No | |
| Please specify | |
| The NBSAP calls for the appointment and establishment of national and regional centres of excellence for key biodiversity groups (Objective 4.3.3) and the compilation of a register of national and regional expertise in bio-systematics (Objective 4.3.7). | |
| III) Current status (please indicate current status related to this target) | |
| This is already on-going. Examples of these networks are the Southern African Botanical Diversity Network (SABONET) which is a regional network aimed at increasing knowledge and capacity in botanical diversity. Several publications have arisen out of this network. The SADC Biodiversity Support Programme (SADC-BSP) is also working to establish national centres of excellence and roster of experts in the areas of Invasive Alien Species and Access and Benefit Sharing. | |
| IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target) | |
| As mentioned above activities such as SABONET and the SADC-BSP are underway. | |
| V) Progress made towards target (please specify indicators used to monitor progress towards the target) | |
| Some networks are in place as well as registers/ directories of experts. A lot of work needs to be done though. | |
| VI) Constraints to achieving progress towards the target | |
| Limited capacity in the areas of bio-systematics and taxonomy are a constraint in implementing this target. So too is the lack of proper facilities. | |
| VII) Any other relevant information | |
| | |

Box XL.

Please elaborate below on the implementation of this strategy specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Largely this strategy has not been implemented yet. The priority has been the development of the NBSAP as a framework for biodiversity management. Subsequently the NBSAP will be used to set priorities for action and it is anticipated that once the NBSAP is in place the strategy will be implemented.

Ecosystem Approach

The ecosystem approach is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. Application of the ecosystem approach will help to reach a balance of the three objectives of the Convention. At its second meeting, the Conference of the Parties has affirmed that the ecosystem approach is the primary framework for action under the Convention (decision II/8). The Conference of the Parties, at its fifth meeting, endorsed the description of the ecosystem approach and operational guidance and recommended the application of the principles and other guidance on the ecosystem approach. The seventh meeting of the Conference of the Parties agreed that the priority at this time should be facilitating implementation of the ecosystem approach. Please provide relevant information by responding to the following questions.

3. ?¹ Is your country applying the ecosystem approach, taking into account the principles and guidance contained in the annex to decision V/6? (decision V/6)

| | |
|---|---|
| a) No | |
| b) No, but application is under consideration | X |
| c) Yes, some aspects are being applied | |
| d) Yes, substantially implemented | |

4. ? Is your country developing practical expressions of the ecosystem approach for national policies and legislation and for implementation activities, with adaptation to local, national, and regional conditions? (decision V/6)

| | |
|--|---|
| a) No | |
| b) No, but development is under consideration | X |
| c) Yes, practical expressions have been developed for applying some principles of the ecosystem approach | |
| d) Yes, practical expressions have been developed for applying most principles of the ecosystem approach | |

¹ Please note that all the questions marked with ? have been previously covered in the second national reports and some thematic reports.

| | |
|---|---|
| 5. Is your country strengthening capacities for the application of the ecosystem approach, and providing technical and financial support for capacity-building to apply the ecosystem approach? (decision V/6) | |
| a) No | X |
| b) Yes, within the country | |
| c) Yes, including providing support to other Parties | |

| | |
|--|--|
| 6. ? Has your country promoted regional cooperation in applying the ecosystem approach across national borders? (decision V/6) | |
| a) No | |
| b) Yes, informal cooperation (please provide details below) | |
| c) Yes, formal cooperation (please provide details below) | |
| Further comments on regional cooperation in applying the ecosystem approach across national borders. | |
| Regional cooperation on applying the ecosystem approach across borders has begun in Botswana. The Kalahari Transfrontier Park is the first cross border game reserve in Africa. Botswana and South Africa are cooperating to conserve the Kalahari Transfrontier Park which is an important ecosystem where large populations of wild animals exist. The park protects their migratory routes. A similar project is being developed for the Shashe-Limpopo area between Botswana, Zimbabwe and South Africa. In the Okavango regional cooperation is in the form of the Permanent Okavango River Basin Commission whose mandate is to oversee the safe management of the whole Okavango Basin. This Commission is made up of representatives from the governments of the basin states and has resulted in many conservation programmes for the area. | |

| | |
|--|---|
| 7. Is your country facilitating the exchange of experiences, capacity building, technology transfer and awareness raising to assist with the implementation of the ecosystem approach? (decisions VI/12 and VII/11) | |
| a) No | X |
| b) No, some programmes are under development | |
| c) Yes, some programmes are being implemented (please provide details below) | |
| d) Yes, comprehensive programmes are being implemented (please provide details below) | |
| Further comments on facilitating the exchange of experiences, capacity building, technology transfer and awareness raising to assist with the implementation of the ecosystem approach. | |
| | |

| | |
|---|---|
| 8. Is your country creating an enabling environment for the implementation of the ecosystem approach, including through development of appropriate institutional frameworks? (decision VII/11) | |
| a) No | |
| b) No, but relevant policies and programmes are under development | X |

| | |
|--|--|
| c) Yes, some policies and programmes are in place (please provide details below) | |
| d) Yes, comprehensive policies and programmes are in place (please provide details below) | |
| Further comments on the creation of an enabling environment for the implementation of the ecosystem approach. | |
| The NBSAP clearly calls for the institutionalization of the ecosystem approach in Objective 3.1.1. This will be implemented so with the implementation of the NBSAP. | |

C. ARTICLES OF THE CONVENTION

Article 5 – Cooperation

| | |
|---|----------|
| 9. ? Is your country actively cooperating with other Parties in respect of areas beyond national jurisdiction for the conservation and sustainable use of biological diversity? | |
| a) No | |
| b) Yes, bilateral cooperation (please give details below) | X |
| c) Yes, multilateral cooperation (please give details below) | X |
| d) Yes, regional and/or subregional cooperation (please give details below) | X |
| e) Yes, other forms of cooperation (please give details below) | X |
| Further comments on cooperation with other Parties in respect of areas beyond national jurisdiction for the conservation and sustainable use of biodiversity. | |
| Botswana has a long history of regional and international cooperation in environmental and biodiversity conservation and sustainable use. Botswana is involved in many initiatives aim at promoting regional and international cooperation. These include the SADC Protocol on Shared Water Courses, the Permanent Okavango River Basin Commission, the Kalahari Transfrontier Park (and other transfrontier parks that are still being established), the SADC Biodiversity Support Programme, the Every River Has Its People Project and others. Furthermore, Botswana is actively involved in several Multi-Lateral Environmental Agreements including the Convention on Biological Diversity, the Convention on Wetlands of International Importance (RAMSAR), the Convention on International Trade in Rare and Endangered Species of Flora and Fauna, the United Nations Convention to Combat Desertification, the United Nations Framework Convention on Climate Change and others. | |

| | |
|---|----------|
| 10. Is your country working with other Parties to develop regional, subregional or bioregional mechanisms and networks to support implementation of the Convention? (decision VI/27 A) | |
| a) No | |
| b) No, but consultations are under way | |
| c) Yes, some mechanisms and networks have been established (please provide details below) | X |
| d) Yes, existing mechanisms have been strengthened (please provide details below) | |
| Further comments on development of regional, subregional or bioregional mechanisms and networks to support implementation of the Convention. | |

Through the SADC Biodiversity Support Programme Botswana is developing regional mechanisms to support the implement of the Convention. The country is also involved in the Conservation and Development Opportunities for the Sustainable Utilization of Biodiversity in the Communal Lands of Southern Africa (CODEOSUB) Programme, which is a regional programme, aimed at promoting conservation and sustainable utilization of biodiversity in the SADC region. The Southern African Botanical Diversity Network (SABONET) is a research network on botanical biodiversity.

11. Is your country taking step to harmonize national policies and programmes, with a view to optimizing policy coherence, synergies and efficiency in the implementation of various multilateral environment agreements (MEAs) and relevant regional initiatives at the national level? (decision VI/20)

| | |
|--|----------|
| a) No | |
| b) No, but steps are under consideration | |
| c) Yes, some steps are being taken (please specify below) | X |
| d) Yes, comprehensive steps are being taken (please specify below) | |

Further comments on the harmonization of policies and programmes at the national level.

Botswana has established a Ministry of Environment, Wildlife and Tourism since the last report. The Environmental Management Act that is still under draft at the Attorney General's Chamber will also help in the harmonization of policies and programmes as a way of optimizing policy coherence, synergies and efficiency in the implementation of various MEAs.

Box XLI.

Please elaborate below on the implementation of this strategy specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

The established Ministry of environment bring all environmental issues under one roof for better coordinating of policies, strategies and programs with a goal of developing and implementing these policies, strategies and programs to effectively conserve and manage the country's environment and natural resources for sustainable development and sustainable use.

The establishment of the Ministry of environment, wildlife and tourism, especially targeting the protection and conservation of the environment and promotion of investment opportunities aimed at deriving maximum socio economic benefits from the environment means that the country will ensure the fair and equitable sharing of benefits arising out of the use of genetic resources, promote the sustainable use of biodiversity as well as reducing the rate of loss of the components of biodiversity as a way of contributing towards the 2010 targets.

Article 6 - General measures for conservation and sustainable use

12. Has your country put in place effective national strategies, plans and programmes to provide a national framework for implementing the three objectives of the Convention? (Goal 3.1 of the Strategic Plan)

| | |
|--|----------|
| a) No | |
| b) No, but relevant strategies, plans and programmes are under development | |
| c) Yes, some strategies, plans and programmes are in place (please provide details below) | |
| d) Yes, comprehensive strategies, plans and programmes are in place (please provide details below) | X |

Further comments on the strategies, plans and programmes for implementing the three objectives of the Convention.

The NBSAP is a well effective strategy that will implement the three objectives of the convention, for example, it calls for a comprehensive strategy and program for sustainable use of resources including quotas and monitoring of resources, development of community capacity in utilization of natural resources in income generating activities and to secure access for sustainable use strategies, making access and benefit sharing agreement guidelines easily available. Other programs targeting the three objectives of the convention are the Community Based Natural Resources Management Program (CBNRM) and Community Based Organizations (CBOs). These are community-based programs dealing with the conservation, utilization and deriving revenue from the use, conservation and harvesting of natural resources. The Transfrontier parks and the management plans for the Okavango and the Makgadikgadi all work towards achieving the Objectives of the convention.

13. ? Has your country set measurable targets within its national strategies and action plans? (decisions II/7 and III/9)

| | |
|--|----------|
| a) No | |
| b) No, measurable targets are still in early stages of development | |
| c) No, but measurable targets are in advanced stages of development | |
| d) Yes, relevant targets are in place (please provide details below) | X |
| e) Yes, reports on implementation of relevant targets available (please provide details below) | |

Further comments on targets set within national biodiversity strategies and action plans.

Implementation timeframe of the NBSAP is five (5) years in general. Some activities, however, have a ten- year timeframe.

14. Has your country identified priority actions in its national biodiversity strategy and action plan? (decision VI/27 A)

| | |
|--|----------|
| a) No | |
| b) No, but priority actions are being identified | |
| c) Yes, priority actions identified (please provide details below) | X |

Further comments on priority actions identified in the national biodiversity strategy and action plan.

The NBSAP has identified areas of conservation priority at both national and district levels for the maximization of the conservation benefits to cost ratio.

15. Has your country integrated the conservation and sustainable use of biodiversity as well as benefit sharing into relevant sectoral or cross-sectoral plans, programmes and policies? (decision VI/27 A)

| | |
|---|--|
| a) No | |
| b) Yes, in some sectors (please provide details below) | |
| c) Yes, in major sectors (please provide details below) | |
| d) Yes, in all sectors (please provide details below) | |

Further information on integration of the conservation and sustainable use of biodiversity and benefit-sharing into relevant sectoral or cross-sectoral plans, programmes and policies.

Biodiversity is a major contributor to livelihoods in Botswana through generation of cash and in – kind income from products derived from biological resources, and Botswana has integrated the conservation and sustainable use of biodiversity into its sectoral or cross – sectoral plans. For example, the National vision 2016 (Botswana’s long term vision) emphasizes on the sustainable utilization of resources and economic diversification. It also calls for a fully integrated approach towards conservation and development, with equitable distribution of environmental assets and natural resources and their benefits. The National Development Plan 9 (NDP 9) on the other hand promise that conservation and protection of natural resources will continue to be given attention as well as putting in place specific legislations and provisions that will play a positive role in the overall protection of the environment by, among others, mitigating and ameliorating environmental degradation. The National Conservation Strategy (NCS), founded on the principle of sustainable development, also calls for development that meets the needs of the present without compromising the ability of future generations to meet their needs. The NCS emphasis on conservation of rangeland, wood, veld and wildlife resources with its counterpart goal of conservation of all ecosystems, wildlife and cultural resources, protection of endangered species and the cost – effective restoration of degraded renewable natural resources.

16. Are migratory species and their habitats addressed by your country’s national biodiversity strategy or action plan (NBSAP)? (decision VI/20)

| | |
|--------|----------|
| a) Yes | X |
| b) No | |

l) If **YES**, please briefly describe the extent to which it addresses

| | |
|--|---|
| (a) Conservation, sustainable use and/or restoration of migratory species | Although Botswana has not signed the African Eurasian Water Bird Agreement nor the Convention on migratory species of wild animals, there are programmes in place that ensure the conservation and sustainable use of migratory species, for example, Botswana has an agreement of understanding with neighbouring countries on the movement, conservation and sustainable use of migratory species. Such understanding has led to the formation of the Transfrontier parks with South Africa. With the country the disease controlling cordon fences are erected in such a way that they do not interfere with the movement of migratory species more especially in wildlife designated areas. |
| (b) Conservation, sustainable use and/or restoration of migratory species’ habitats, including protected areas | All wildlife habitats including protected areas have been set aside for wildlife management and that no development should be under taken in the areas. This appropriate land- use management policy has |

| | |
|--|--|
| | contributed to a more efficient biodiversity use and conservation of resources. Botswana being a tourism destination area, a more integrated approach to tourism and biodiversity management has contributed more to the conservation and sustainable use of biodiversity. |
| (c) Minimizing or eliminating barriers or obstacles to migration | National and international boundaries and fences have been erected such that they do not interfere with the movement of migratory species and where they are transboundary movement agreements have been reached to keep the zone open for easy movement. i.e. the Kgalagadi Transfrontier Park and the Shalimpo Transfrontier Park. |
| (d) Research and monitoring for migratory species | Research and monitoring is needed to understand the movement of migratory species, the level of threats and its severity to migratory species. The NBSAP calls for research and continued monitoring of threats and their effects on migratory species and to adapt mitigation activities accordingly. |
| (e) Transboundary movement | The government of Botswana is cooperating with South Africa and Namibia over a Memorandum of Understanding concerning the conservation of sand grouse pterocles under this convention. It also has an agreement with South Africa in the management of a Transfrontier Park to allow for free movement of wildlife to and from. |
| II) If NO , please briefly indicate below | |
| (a) The extent to which your country addresses migratory species at national level | |
| (b) Cooperation with other Range States since 2000 | |

Biodiversity and Climate Change

| | |
|---|----------|
| 17. Has your country implemented projects aimed at mitigating and adapting to climate change that incorporate biodiversity conservation and sustainable use? (decision VII/15) | |
| a) No | |
| b) No, but some projects or programs are under development | |
| c) Yes, some projects have been implemented (please provide details below) | X |
| Further comments on the projects aimed at mitigating and adapting to climate change that incorporate biodiversity conservation and sustainable use. | |
| The NBSAP calls for an improved understanding of the effects of climate change, as these changes have an effect on livelihoods and conservation management activities. | |

18. Has your country facilitated coordination to ensure that climate change mitigation and adaptation projects are in line with commitments made under the United Nations Framework Convention on Climate Change and the United Nations Convention to Combat Desertification? (decision VII/15)

| | |
|---|----------|
| a) No | |
| b) No, but relevant mechanisms are under development | X |
| c) Yes, relevant mechanisms are in place (please provide details below) | |
| Further comments on the coordination to ensure that climate change mitigation and adaptation projects are in line with commitments made under the UNFCCC and the UNCCD. | |
| The development of the NBSAP is calling for the integration of climate change concern into sectorial planning. | |

Box XLII .

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

The implementation of this article will ensure that climate trends are established, plans to counteract the effects of climate threats are in place and action to mitigate the effects of climate change to vulnerable species are taken

Article 7 - Identification and monitoring

19. ? On Article 7(a), does your country have an ongoing programme to identify components of biological diversity at the genetic, species, ecosystem level?

| | |
|--|----------|
| a) No | |
| b) Yes, selected/partial programmes at the genetic, species and/or ecosystem level only (please specify and provide details below) | X |
| c) Yes, complete programmes at ecosystem level and selected/partial inventories at the genetic and/or species level (please specify and provide details below) | |

Further comments on ongoing programmes to identify components of biodiversity at the genetic, species and ecosystem level.

All major ecosystems, comprehensive range of species and for key groups such as endemic/endangered species there are ongoing programmes such as the national seed banks, livestock breeding programmes that target genetic resources. Although Botswana prefer *insitu* conservation mainly for wildlife species, there is also the conservation of species outside their natural habitat. For the greatest impact on long-term biodiversity conservation, Botswana has involved the concept of participatory approach to biodiversity conservation. Red data species, endemic species and other vulnerable species have been given conservation priority to control access and use and legal protection through management plans of both in situ and ex situ conservation measures.

| 20. ? On Article 7(b), which components of biological diversity identified in accordance with Annex I of the Convention, have ongoing, systematic monitoring programmes? | |
|--|---|
| a) at ecosystem level (please provide percentage based on area covered) | Available information is compiled taking account of important habitat areas |
| b) at species level (please provide number of species per taxonomic group and percentage of total known number of species in each group) | |
| c) at genetic level (please indicate number and focus of monitoring programmes) | |
| Further comments on ongoing monitoring programmes at the genetic, species and ecosystem level. | |
| | |

| 21. ? On Article 7(c), does your country have ongoing, systematic monitoring programmes on any of the following key threats to biodiversity? | |
|--|---|
| a) No | |
| b) Yes, invasive alien species (please provide details below) | |
| c) Yes, climate change (please provide details below) | |
| d) Yes, pollution/eutrophication (please provide details below) | X |
| e) Yes, land use change/land degradation (please provide details below) | X |
| f) Yes, overexploitation or unsustainable use (please provide details below) | X |
| Further comments on monitoring programmes on key threats to biodiversity. | |
| Botswana's biodiversity is habitat destruction, reduction and degradation which can be due to a variety of factors ranging from direct destruction through construction of houses, roads and other infrastructure, damage caused by pollution, unsustainable land and resource use including unsustainable rangeland management and excessive water abstraction. To avoid and mitigate loss of biodiversity include the restoration and rehabilitation of degraded lands, improve land use, enhancement of cross-sector collaborations, improve awareness and accountability of citizens, implement and enforce pollution standards to include pollution of air, water and land. Programmes are in place to manage bush encroachment, over-grazing and over stocking on rangelands as well as the implementation of and training to minimize the negative effects of bushfires | |

| 22. ? On Article 7 (d), does your country have a mechanism to maintain and organize data derived from inventories and monitoring programmes and coordinate information collection and management at the national level? | |
|---|---|
| a) No | |
| b) No, but some mechanisms or systems are being considered | |
| c) Yes, some mechanisms or systems are being established | X |
| d) Yes, some mechanisms or systems are in place (please provide details | |

| | |
|--|--|
| below) | |
| e) Yes, a relatively complete system is in place (please provide details below) | |
| Further information on the coordination of data and information collection and management. | |
| Currently mechanisms to maintain and organize are disintegrated/isolated but the NBSAP calls for the establishment of national data collection and meta -data standards that are regionally compatible that comply with international standards. | |

| | |
|--|----------|
| 23. ? Does your country use indicators for national-level monitoring of biodiversity? (decision III/10) | |
| a) No | |
| b) No, but identification of potential indicators is under way (please describe) | |
| c) Yes, some indicators identified and in use (please describe and, if available, provide website address, where data are summarized and presented) | X |
| d) Yes, a relatively complete set of indicators identified and in use (please describe and, if available, provide website address, where data are summarized and presented) | |
| Further comments on the indicators identified and in use. | |
| Currently there is the use of inventories in big mammals, vegetation maps and detailed descriptions of vegetation as a monitored manifestation of ecosystem that constitute a readily measurable indicator of the health and stability of the ecosystem. The use of checklist and some wildlife count for big mammals. | |

Box XLIII.

| | |
|---|--|
| Please elaborate below on the implementation of this article and associated decisions specifically focusing on: | |
| <ul style="list-style-type: none"> a) outcomes and impacts of actions taken; b) contribution to the achievement of the goals of the Strategic Plan of the Convention; c) contribution to progress towards the 2010 target; d) progress in implementing national biodiversity strategies and action plans; e) contribution to the achievement of the Millennium Development Goals; f) constraints encountered in implementation. | |
| The implementation has been done sectorially. The NBSAP has been completed and its implementation will start in the next financial year | |

Decisions on Taxonomy

| | |
|--|----------|
| 24. ? Has your country developed a plan to implement the suggested actions as annexed to decision IV/1? (decision IV/1) | |
| a) No | |
| b) No, but a plan is under development | |
| c) Yes, a plan is in place (please provide details below) | X |

| | |
|--|--|
| d) Yes, reports on implementation available (please provide details below) | |
| Further information on a plan to implement the suggested actions as annexed to decision IV/1. | |
| Botswana has promoted and supported the <i>ex situ</i> conservation with the establishment of the National Plant Genetic Resource Centre (NPGRC) and the National Animal Genetic Resource Centre where collections on crops and animal genetic have been stored. The collections incorporate the so-called minor crops such as watermelon, beans, wild relatives of cultivated crops and indigenous vegetables. Beside the collections held at National level, there are some outside institutions holding Botswana's collections such as ICRISAT, IITA, IRRI, Kew, ILRL and the USDA genetic resources centers. | |

| | |
|---|----------|
| 25.? Is your country investing on a long-term basis in the development of appropriate infrastructure for your national taxonomic collections? (Decision IV/1) | |
| a) No | |
| b) Yes (please provide details below) | X |
| Further information on investment on a long-term basis in the development of appropriate infrastructure for your national taxonomic collections. | |
| An <i>ex situ</i> facility for conservation of farm animals genetic resources is under construction especially that the livestock genes is still underdeveloped in the country save for the keeping of semen for breeding purposes. Botswana is also looking at the world Animal Resources and Breed's Survey to assess its position and needs. | |

| | |
|---|----------|
| 26.? Does your country provide training programmes in taxonomy and work to increase its capacity of taxonomic research? (decision IV/1) | |
| a) No | |
| b) Yes (please provide details below) | X |
| Further information on training programmes in taxonomy and efforts to increase the capacity of taxonomic research. | |
| Training programmes are in place at the National Plant Genetic Resources Centre (NPGRC) to train individuals on crop genetic resources and on animal genetic resources. | |

| | |
|---|----------|
| 27.? Has your country taken steps to ensure that institutions responsible for biological diversity inventories and taxonomic activities are financially and administratively stable? (decision IV/1) | |
| a) No | |
| b) No, but steps are being considered | |
| c) Yes, for some institutions | X |
| d) Yes, for all major institutions | |

| |
|--|
| 28.* ² Is your country collaborating with the existing regional, sub regional and global initiatives, partnerships and institutions in carrying out the programme of work, including assessing regional taxonomic needs and identifying regional-level priorities? (decision VI/8) |
|--|

² The questions marked with * in this section on Taxonomy are similar to some questions contained in the format for a report on the implementation of the programme of work on the Global Taxonomy Initiative. Those countries

| | |
|--|----------|
| a) No | |
| b) No, but collaborative programmes are under development | |
| c) Yes, some collaborative programmes are being implemented (please provide details about collaborative programmes, including results of regional needs assessments) | X |
| d) Yes, comprehensive collaborative programmes are being implemented (please provide details about collaborative programmes, including results of regional needs assessment and priority identification) | |
| Further information on the collaboration your country is carrying out to implement the programme of work for the GTI, including regional needs assessment and priority identification. | |
| Botswana is collaborating with other institutions like the RBG Kew in the UK, Missouri Botanical Gardens in the US and the National Botanical Institute in South Africa to assess regional taxonomic needs and in identifying regional-level priorities. | |

| | |
|--|----------|
| 29. * Has your country made an assessment of taxonomic needs and capacities at the national level for the implementation of the Convention? (annex to decision VI/8) | |
| a) No | |
| b) Yes, basic assessment made (please provide below a list of needs and capacities identified) | X |
| c) Yes, thorough assessment made (please provide below a list of needs and capacities identified) | |
| Further comments on national assessment of taxonomic needs and capacities. | |
| Botswana still needs much taxonomy work, especially for the micro - organisms. Although some taxonomy research has been done in the country a lot has to be done on appropriate reference collections and research in general. | |

| | |
|--|----------|
| 30. * Is your country working on regional or global capacity building to support access to, and generation of, taxonomic information in collaboration with other Parties? (annex to decision VI/8) | |
| a) No | |
| b) Yes, relevant programmes are under development | |
| c) Yes, some activities are being undertaken for this purpose (please provide details below) | X |
| d) Yes, many activities are being undertaken for this purpose (please provide details below) | |
| Further comments on regional or global capacity-building to support access to, and generation of, taxonomic information in collaboration with other Parties. | |
| At regional level the country is collaborating with the SADC Plant Genetic Resources Centre in Zambia which provides backup facilities, the South African National Biodiversity Institution and the National | |

that have submitted such a report do not need to answer these questions unless they have updated information to provide.

31.* Has your country developed taxonomic support for the implementation of the programmes of work under the Convention as called upon in decision VI/8? (Annex to decision VI/8)

| | |
|--|----------|
| a) No | |
| b) Yes, for forest biodiversity (please provide details below) | X |
| c) Yes, for marine and coastal biodiversity (please provide details below) | |
| d) Yes, for dry and sub-humid lands (please provide details below) | X |
| e) Yes, for inland waters biodiversity (please provide details below) | X |
| f) Yes, for mountain biodiversity (please provide details below) | |
| g) Yes, for protected areas (please provide details below) | |
| h) Yes, for agricultural biodiversity (please provide details below) | X |
| i) Yes, for island biodiversity (please provide details below) | |

Further comments on the development of taxonomic support for the implementation of the programmes of work under the Convention.

The Small stock Breeders Association of Botswana, College of Agriculture, Department of Animals Research and Permaculture Trust Botswana are all looking into breed surveys and collection of wild plant relatives, the long-term monitoring of the status of resources through monitoring individuals and preservation of representative sample of ecosystem types, maintaining of individual plants and seeds species all work towards the implementation of the programme of work.

32.* Has your country developed taxonomic support for the implementation of the cross-cutting issues under the Convention as called upon in decision VI/8?

| | |
|---|----------|
| a) No | |
| b) Yes, for access and benefit-sharing (please provide details below) | X |
| c) Yes, for Article 8(j) (please provide details below) | X |
| d) Yes, for the ecosystem approach (please provide details below) | X |
| e) Yes, for impact assessment, monitoring and indicators (please provide details below) | |
| f) Yes, for invasive alien species (please provide details below) | |
| g) Yes, for others (please provide details below) | |

Further comments on the development of taxonomic support for the implementation of the cross-cutting issues under the Convention.

Botswana has a network of in situ conservation facilities for wildlife and plants through its National parks, game reserves, forests, transboundary links and some protected areas. Identification of plants takes place at the herbariums within the country and through outside Botanical institutes and herbariums.

Article 8 - *In-situ* conservation
[excluding paragraphs (a) to (e), (h) and (j)]

| | |
|--|----------|
| 33. ? On Article 8(i), has your country endeavored to provide the conditions needed for compatibility between present uses and the conservation of biological diversity and sustainable use of its components? | |
| a) No | |
| b) No, but potential measures are being identified | |
| c) Yes, some measures undertaken (please provide details below) | |
| d) Yes, comprehensive measures undertaken (please provide details below) | X |
| Further comments on the measures taken to provide the conditions needed for compatibility between present uses and the conservation of biological diversity and sustainable use of its components. | |
| <p>The National conservation Strategy ensures that all natural resources are use in a sustainable way for the benefit of future generations. The conservation of all ecosystems, wildlife and cultural resources, the protection of endangered species and cost-effective restoration of degraded renewable resources ensures the achievement of the conservation of biological diversity and its sustainable use. The National Development 9 calls for a continued attention in conservation and protection of natural resources as well as finding means to address any merging conflicts in order to mitigate the negative impacts to biodiversity.</p> | |

| | |
|---|----------|
| 34. ? On Article 8(k), has your country developed or maintained the necessary legislation and/or other regulatory provisions for the protection of threatened species and populations? | |
| a) No | |
| b) No, but legislation is being developed | |
| c) Yes, legislation or other measures are in place (please provide details below) | X |
| Further information on the legislation and/or regulations for the protection of threatened species and populations. | |
| <p>There are a number of legislative instruments that address the management and protection of threatened species and populations. These instruments regulate issues such as protection of habitat, individual species and communities.</p> | |

| | |
|---|----------|
| 35. ? On Article 8(l), does your country regulate or manage processes and categories of activities identified under Article 7 as having significant adverse effects on biological diversity? | |
| a) No | |
| b) No, but relevant processes and categories of activities being identified | |
| c) Yes, to a limited extent (please provide details below) | X |
| d) Yes, to a significant extent (please provide details below) | |
| Further comments on the regulation or management of the processes and categories of activities identified by Article 7 as having significant adverse effects on biodiversity. | |
| <p>Botswana has taken measures that promote the protection of ecosystems, natural habitats and the maintenance of viable populations of species in the natural surroundings.</p> | |

Box XLIV.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation

Actions taken to conserve biodiversity address the full range of causes of its loss, steps to protect genes, species, habitats and ecosystems, efforts to prevent degradation of key natural ecosystems and the sustainable use of biodiversity. The legislative instruments address the conservation and management of biodiversity and are essential for achieving the three objectives of the convention and in addressing the 2010 target of reducing the rate of loss of the components of biodiversity as well as the attainment of the millennium Development goals.

Programme of Work on Protected Areas (Article 8 (a) to (e))

36. Has your country established suitable time bound and measurable national-level protected areas targets and indicators? (Decision VII/28)

| | |
|---|---|
| a) No (please specify reasons) | |
| b) No, but relevant work is under way | |
| c) Yes, some targets and indicators established (please provide details below) | X |
| d) Yes, comprehensive targets and indicators established (please provide details below) | |

Further comments on targets and indicators for protected areas.

In addition to appropriate management systems of conservation, it is essential to promote and provide incentives for conservation and Botswana has provided for communities around protected areas to engage in community based conservation to derive benefits and take responsibilities in conserving natural resources. Government has strengthened the mandate and efficiency of the Community Based Natural Resource Management (CBNRM), reviewed the current national and regional land management systems and land use in terms of effectiveness in biodiversity conservation, identifying weaknesses, strengths and best practices, and scope for the increased community involvement in conservation activities. Most of these are implemented with the National Development Plan target (NBP) and reviewed during the NDP mid-term review.

37. Has your country taken action to establish or expand protected areas in any large or relatively unfragmented natural area or areas under high threat, including securing threatened species? (decision VII/28)

| | |
|--|---|
| a) No | |
| b) No, but relevant programmes are under development | |
| c) Yes, limited actions taken (please provide details below) | |
| d) Yes, significant actions taken (please provide details below) | X |

Further comments on actions taken to establish or expand protected areas.

18.2% of the total land area of Botswana is protected either by National park, Game reserve or

Forest Reserves. A further 23% falls under Wildlife Management Areas

38. Has your country taken any action to address the under representation of marine and inland water ecosystems in the existing national or regional systems of protected areas? (Decision VII/28)

| | |
|--|----------|
| a) No | |
| b) Not applicable | |
| c) No, but relevant actions are being considered | |
| d) Yes, limited actions taken (please provide details below) | |
| e) Yes, significant actions taken (please provide details below) | X |

Further comments on actions taken to address the under representation of marine and inland water ecosystems in the existing national or regional systems of protected areas.

Water ecosystems are of particular interest to Botswana as they provide hydrological, ecological and climatic functions. Botswana being a dry Country has taken liberty to conserve and manage its waters sustainable as only 4% of the total land area represent water ecosystem. The main water ecosystem, the Okavango delta, is a designated Ramsar site and is protected under the convention.

39. Has your country identified and implemented practical steps for improving the integration of protected areas into broader land and seascapes, including policy, planning and other measures? (decision VII/28)

| | |
|--|----------|
| a) No | |
| b) No, but some programmes are under development | |
| c) Yes, some steps identified and implemented (please provide details below) | |
| d) Yes, many steps identified and implemented (please provide details below) | X |

Further comments on practical steps for improving integration of protected areas into broader land and seascapes, including policy, planning and other measures.

Protected areas are surrounded by Wildlife Management Areas (WMAs) making it easy to expand into broader land. Planning structures recognize WMAs. Expand habitats by allowing free movement of animals within and between countries.

40. Is your country applying environmental impact assessment guideline to projects or plans for evaluating effects on protected areas? (decision VII/28)

| | |
|---|--|
| a) No | |
| b) No, but relevant EIA guidelines are under development | |
| c) Yes, EIA guidelines are applied to some projects or plans (please provide details below) | |
| d) Yes, EIA guidelines are applied to all relevant projects or plans (please provide details below) | |

Further comments on application of environmental impact assessment guidelines to projects or plans for evaluating effects on protected areas.

The Environmental Impact Assessment Bill has been passed by parliament all projects undertaken are requested to go through Impact Assessment before construction can commence.

| | |
|--|----------|
| 41. Has your country identified legislative and institutional gaps and barriers that impede effective establishment and management of protected areas? (Decision VII/28) | |
| a) No | |
| b) No, but relevant work is under way | |
| c) Yes, some gaps and barriers identified (please provide details below) | X |
| d) Yes, many gaps and barriers identified (please provide details below) | |
| Further comments on identification of legislative and institutional gaps and barriers that impede effective establishment and management of protected areas. | |
| There is no single composite legislation or statute on biodiversity, nor a general or omnibus legislation or environmental act aimed at regulating environmental issues including Biodiversity. This, however, does not hinder the conservation in Botswana as there are a number of policy framework that influence activities of various actors in the management, conservation and utilization of biodiversity resources. | |

| | |
|--|----------|
| 42. Has your country undertaken national protected-area capacity needs assessments and established capacity building programmes? (Decision VII/28) | |
| a) No | |
| b) No, but assessments are under way | |
| c) Yes, a basic assessment undertaken and some programmes established (please provide details below) | X |
| d) Yes, a thorough assessment undertaken and comprehensive programmes established (please provide details below) | |
| Further comments on protected-area capacity needs assessment and establishment of capacity building programmes. | |
| There is a need to make sure network of protected areas include important ecosystems, involve farmers in situ conservation and the possibility of privatize or public-private sector partnership for national park and game reserve. | |

| | |
|---|----------|
| 43. Is your country implementing country-level sustainable financing plans that support national systems of protected areas? (decision VII/28) | |
| a) No | |
| b) No, but relevant plan is under development | |
| c) Yes, relevant plan is in place (please provide details below) | X |
| d) Yes, relevant plan is being implemented (please provide details below) | |
| Further comments on implementation of country-level sustainable financing plans that support national systems of protected areas. | |
| Government is funding plans that support national systems of protected areas. In addition several donors also support conservation initiatives. | |

| | |
|--|----------|
| 44. Is your country implementing appropriate methods, standards, criteria and indicators for evaluating the effectiveness of protected areas management and governance? (decision VII/28) | |
| a) No | |
| b) No, but relevant methods, standards, criteria and indicators are under development | |
| c) Yes, some national methods, standards, criteria and indicators developed and in use (please provide details below) | X |
| d) Yes, some national methods, standards, criteria and indicators developed and in use and some international methods, standards, criteria and indicators in use (please provide details below) | |
| Further comments on methods, standards, criteria and indicators for evaluating the effectiveness of protected areas management and governance. | |
| Botswana has adopted and continues to adopt a number of policy frameworks on environment including management and governance of protected areas. These policy framework not only guide direct activities of various stakeholders in favour of conservation and protection but also evaluate the effectiveness of existing methods, criteria and indicators used to manage and govern protected areas for a better and improved methods and indicators. | |

Box XLV.

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| Please elaborate below on the implementation of this article and associated decisions specifically focusing on: | |
| <ul style="list-style-type: none"> a) outcomes and impacts of actions taken; b) contribution to the achievement of the goals of the Strategic Plan of the Convention; c) contribution to progress towards the 2010 target; d) progress in implementing national biodiversity strategies and action plans; e) contribution to the achievement of the Millennium Development Goals; f) constraints encountered in implementation. | |
| There are a number of policy frameworks that have been adopted by Government to regulate environmental issues particularly the issues of protected areas. These policy frameworks are used to influence activities of various actors in the management, conservation and utilization of protected areas therefore help in contribute to the progress towards 2010 target of reducing the rate of the components of biodiversity particularly habitats and ecosystems, and the goal of the strategy plan of the convention | |

Article 8(h) - Alien species

| | |
|---|----------|
| 45. Has your country identified alien species introduced into its territory and established a system for tracking the introduction of alien species? | |
| a) No | |
| b) Yes, some alien species identified but a tracking system not yet established | X |
| c) Yes, some alien species identified and tracking system in place | |
| d) Yes, alien species of major concern identified and tracking system in place | |
| 46. ? Has your country assessed the risks posed to ecosystems, habitats or species by the introduction of these alien species? | |

| | |
|---|----------|
| a) No | |
| b) Yes, but only for some alien species of concern (please provide details below) | X |
| c) Yes, for most alien species (please provide details below) | |

Further information on the assessment of the risks posed to ecosystems, habitats or species by the introduction of these alien species.

Assessment of the risks posed to water by aquatic weeds (*salvinia molesta* and *Pistia stratiotes* Linn in the Okavango, Kwando/Linyanti/chobe rivers) and some agriculture noxious weeds have been done to ascertain the extent of the problem of alien species. Currently an assessment on indigenous and exotic trees in Botswana is on going through the Department of Forestry.

47. ? Has your country undertaken measures to prevent the introduction of, control or eradicate, those alien species which threaten ecosystems, habitats or species?

| | |
|--|----------|
| a) No | |
| b) No, but potential measures are under consideration | |
| c) Yes, some measures are in place (please provide details below) | X |
| d) Yes, comprehensive measures are in place (please provide details below) | |

Further information on the measures to prevent the introduction of, control or eradicate those alien species that threaten ecosystems, habitats or species.

Biological control agents (weevil, scientifically known as *Cyrtobagous salviniae*) are used to clear *salvinia* infections in and around the Okavango delta while *Pistia* weed is biological controlled by an agent known as *Neohydonomus affinis*. A few legal measures are in place to effectively control the introduction and monitoring and control of aliens and exotic, except for Noxious weeds Act and the Aquatic weeds Act.

48. ? In dealing with the issue of invasive species, has your country developed, or involved itself in, mechanisms for international cooperation, including the exchange of best practices? (decision V/8)

| | |
|---|----------|
| a) No | |
| b) Yes, bilateral cooperation | |
| c) Yes, regional and/or subregional cooperation | X |
| d) Yes, multilateral cooperation | |

49. ? Is your country using the ecosystem approach and precautionary and bio-geographical approaches as appropriate in its work on alien invasive species? (decision V/8)

| | |
|---------------------------------------|----------|
| a) No | |
| b) Yes (please provide details below) | X |

Further comments on the use of the ecosystem approach and precautionary and bio-geographical approaches in work on alien invasive species.

To prevent further introduction of alien species there are legislations in place which control the import, and movement of boats in the country, destroying of ornamental plants and fodder regarded as aquatic weeds, and the country is cooperating with neighboring countries to identify problem alien species identified in their countries to prevent the importing into the Country as well as conducting more research and botanical surveys to monitor the extent of alien species.

| 50. Has your country identified national needs and priorities for the implementation of the Guiding Principles? (decision VI/23) | |
|--|---|
| a) No | |
| b) No, but needs and priorities are being identified | X |
| c) Yes, national needs and priorities have been identified (please provide below a list of needs and priorities identified) | |
| Further comments on the identification of national needs and priorities for the implementation of the Guiding Principles. | |
| There is a need for the national legislation and policy to prohibit the introduction, sale or propagation of species listed as problem species. A classification system should be developed allowing the use of certain aliens under controlled conditions, while others would require instant eradication as well as looking at methods of enforcing the legislation. | |
| 51. Has your country created mechanisms to coordinate national programmes for applying the Guiding Principles? (decision VI/23) | |
| a) No | |
| b) No, but mechanisms are under development | X |
| c) Yes, mechanisms are in place (please provide details below) | |
| Further comments on the mechanisms created to coordinate national programmes for implementing the Guiding Principles. | |
| | |

| 52. Has your country reviewed relevant policies, legislation and institutions in the light of the Guiding Principles, and adjusted or developed policies, legislation and institutions? (decision VI/23) | |
|--|---|
| a) No | X |
| b) No, but review under way | |
| c) Yes, review completed and adjustment proposed (please provide details below) | |
| d) Yes, adjustment and development ongoing | |
| e) Yes, some adjustments and development completed (please provide details below) | |
| Further information on the review, adjustment or development of policies, legislation and institutions in light of the Guiding Principles. | |
| | |

| | |
|---|----------|
| 53. Is your country enhancing cooperation between various sectors in order to improve prevention, early detection, eradication and/or control of invasive alien species? (decision VI/23) | |
| a) No | |
| b) No, but potential coordination mechanisms are under consideration | X |
| c) Yes, mechanisms are in place (please provide details below) | |
| Further comments on cooperation between various sectors. | |
| Now that it is clear that alien species exist in Botswana, Concerned sectors are cooperating in the drafting of a legislation to improve the prevention, early detection, eradication and control of alien species. These sectors are sharing on scientific and economical knowledge about long-term effects of AIS and the necessary control measures. | |

| | |
|---|----------|
| 54. Is your country collaborating with trading partners and neighboring countries to address threats of invasive alien species to biodiversity in ecosystems that cross international boundaries? (decision VI/23) | |
| a) No | |
| b) Yes, relevant collaborative programmes are under development | X |
| c) Yes, relevant programmes are in place (please specify below the measures taken for this purpose) | |
| Further comments on collaboration with trading partners and neighboring countries. | |
| With the problem of alien species becoming more of an environmental issue, Botswana is collaborating with neighboring countries to address issues of international boundary crossing of alien species and to share on measures taken by other countries to control alien species. | |

| | |
|---|----------|
| 55. Is your country developing capacity to use risk assessment to address threats of invasive alien species to biodiversity and incorporate such methodologies in environmental impact assessment (EIA) and strategic environmental assessment (SEA)? (decision VI/23) | |
| a) No | |
| b) No, but programmes for this purpose are under development | X |
| c) Yes, some activities for developing capacity in this field are being undertaken (please provide details below) | |
| d) Yes, comprehensive activities are being undertaken (please provide details below) | |
| Further information on capacity development to address threats of invasive alien species. | |
| Capacity building for risk assessment is not being undertaken yet, but with availability of the EIA law it will be necessary. | |

| | |
|--|----------|
| 56. Has your country developed financial measures and other policies and tools to promote activities to reduce the threats of invasive species? (decision VI/23) | |
| a) No | |
| b) No, but relevant measures and policies are under development | X |
| c) Yes, some measures, policies and tools are in place (please provide details below) | |
| d) Yes, comprehensive measures and tools are in place (please provide details below) | |
| Further comments on the development of financial measures and other policies and tools for the promotion of activities to reduce the threats of invasive species. | |
| There has been a shift from chemical control of aquatic weeds to biological. The Agro chemical Act has been developed to put a restriction on the quantities and types of chemicals. | |

Box XLVI.

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| <p>Please elaborate below on the implementation of this article and associated decisions specifically focusing on:</p> <ul style="list-style-type: none"> a) outcomes and impacts of actions taken; b) contribution to the achievement of the goals of the Strategic Plan of the Convention; c) contribution to progress towards the 2010 target; d) progress in implementing national biodiversity strategies and action plans; e) contribution to the achievement of the Millennium Development Goals; f) constraints encountered in implementation. |
| <p>Alien species need to be kept under control as some have the potential to invade local ecosystems and this may lead to environmental, economical and social problems. It is important that alien species identified as problem are not allowed to spread. Development of long-term control measures and guidelines on the eradication of alien species will contribute to the attainment of the 2010 target, strategic goal of the convention and the national biodiversity strategy and action plan.</p> |

Article 8(j) - Traditional knowledge and related provisions

GURTS

| | |
|--|----------|
| 57. Has your country created and developed capacity-building programmes to involve and enable smallholder farmers, indigenous and local communities, and other relevant stakeholders to effectively participate in decision-making processes related to genetic use restriction technologies? | |
| a) No | |
| b) No, but some programmes are under development | X |
| c) Yes, some programmes are in place (please provide details below) | |
| d) Yes, comprehensive programmes are in place (please provide details below) | |
| Further comments on capacity-building programmes to involve and enable smallholder farmers, indigenous and local communities and other relevant stakeholders to effectively participate in decision-making processes related to GURTs. | |
| Government is using Community Based Natural Resource Management programmes (CBNRM), Community Based Organizations (CBOs) and Ecotourism as vehicles of diversifying the economy, | |

bringing economic development to local communities and as a way of involving smallholder farmers and local communities to effectively participate in decision-making processes.

Status and Trends

58. Has your country supported indigenous and local communities in undertaking field studies to determine the status, trends and threats related to the knowledge, innovations and practices of indigenous and local communities? (decision VII/16)

a) No

b) No, but support to relevant studies is being considered

X

c) Yes (please provide information on the studies undertaken)

Further information on the studies undertaken to determine the status, trends and threats related to the knowledge, innovations and practices of indigenous and local communities, and priority actions identified.

Conservation of natural resources and sustainable use in Botswana is a success story because of the use of local/traditional knowledge and practices. Some conservation measures are embedded on cultural taboos and traditional practices which results in the protection of certain species because the common obligation is that people should not touch, kill or eat their totem or taboos controlling other aspects of life, land and beliefs on animals, cattle that are protected by local taboos. Government has involved local communities and supported them to better manage their biological resources in a sustainable way of earning a living. Community Based Organisations and Non Governmental Organisations have assisted communities in undertaking field studies and getting to know the use of given genetic resources. The threats of losing the information however exist.

Akwé:Kon Guidelines

59. Has your country initiated a legal and institutional review of matters related to cultural, environmental and social impact assessment, with a view to incorporating the Akwé:Kon Guidelines into national legislation, policies, and procedures?

a) No

X

b) No, but review is under way

c) Yes, a review undertaken (please provide details on the review)

Further information on the review.

60. Has your country used the Akwé:Kon Guidelines in any project proposed to take place on sacred sites and/or land and waters traditionally occupied by indigenous and local communities? (decision VII/16)

a) No

X

b) No, but a review of the Akwé: Kon guidelines is under way

c) Yes, to some extent (please provide details below)

d) Yes, to a significant extent (please provide details below)

Further information on the projects where the Akwé:Kon Guidelines are applied.

Capacity Building and Participation of Indigenous and Local Communities

61. Has your country undertaken any measures to enhance and strengthen the capacity of indigenous and local communities to be effectively involved in decision-making related to the use of their traditional knowledge, innovations and practices relevant to the conservation and sustainable use of biodiversity? (decision V/16)

| | |
|---|----------|
| a) No | |
| b) No, but some programmes being developed | |
| c) Yes, some measures taken (please provide details below) | X |
| d) Yes, comprehensive measures taken (please provide details below) | |

Further information on the measures to enhance and strengthen the capacity of indigenous and local communities.

Capacity building either through training, awareness or strengthening of extension services through NGOs and Government to local communities has helped locals develop enterprises trading in biodiversity resources, promotion of traditional knowledge and skill base in order to ensure continuity in the conservation and sustainable use and management of natural resources

62. Has your country developed appropriate mechanisms, guidelines, legislation or other initiatives to foster and promote the effective participation of indigenous and local communities in decision making, policy planning and development and implementation of the conservation and sustainable use of biodiversity at international, regional, subregional, national and local levels? (decision V/16)

| | |
|---|----------|
| a) No | |
| b) No, but relevant mechanisms, guidelines and legislation are under development | |
| c) Yes, some mechanisms, guidelines and legislation are in place (please provide details below) | X |

Further information on the mechanisms, guidelines and legislation developed.

The Rural Development Policy provides a platform for holistic approach to promote natural resource based livelihood and sustainable trade in rural areas, and the current policy framework (CBNRM and Tourism policy) provides an enabling environment for biodiversity conservation, management and sustainable utilization at local levels. Commercialisation has affected the regeneration capacity as they are heavily and improperly harvested as an open access resource.

63. Has your country developed mechanisms for promoting the full and effective participation of indigenous and local communities with specific provisions for the full, active and effective participation of women in all elements of the programme of work? (decision V/16, annex)

| | |
|--|----------|
| a) No | |
| b) No, but relevant mechanisms are being developed | |
| c) Yes, mechanisms are in place (please provide details below) | X |

Further comments on the mechanisms for promoting the full and effective participation of women of indigenous and local communities in all elements of the programme of work.

Women are the main users of natural resources, including being active in producing craft and gathering of wild natural resources for commercial purposes, harvesting of reeds, basket weaving harvesting of thatching grass, so they benefit from policy framework targeting local communities.

Support to implementation

| | |
|--|----------|
| 64. Has your country established national, subregional and/or regional indigenous and local community biodiversity advisory committees? | |
| a) No | X |
| b) No, but relevant work is under way | |
| c) Yes | |

| | |
|---|----------|
| 65. Has your country assisted indigenous and local community organizations to hold regional meetings to discuss the outcomes of the decisions of the Conference of the Parties and to prepare for meetings under the Convention? | |
| a) No | |
| b) Yes (please provide details about the outcome of meetings) | X |

Further information on the outcome of regional meetings.

Local communities under Village Development Committees, Village Trust Committees, Resource user committees, wetlands committee and conservation committees hold meetings where some decisions of the convention are discussed as biodiversity is important for livelihoods of local communities making everyone to participate in its conservation.

| | |
|---|----------|
| 66. Has your country supported, financially and otherwise, indigenous and local communities in formulating their own community development and biodiversity conservation plans that will enable such communities to adopt a culturally appropriate strategic, integrated and phased approach to their development needs in line with community goals and objectives? | |
| a) No | |
| b) Yes, to some extent (please provide details below) | |
| c) Yes, to a significant extent (please provide details below) | X |

Further information on the support provided.

All CBNRM projects are funded by government and provided with technical assistant.
Other donors are few.

Box XLVII.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

| |
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Article 9 - *Ex-situ* conservation

| | |
|---|----------|
| 67. ? On Article 9(a) and (b), has your country adopted measures for the <i>ex-situ</i> conservation of components of biological diversity native to your country and originating outside your country? | |
| a) No | |
| b) No, but potential measures are under review | |
| c) Yes, some measures are in place (please provide details below) | X |
| d) Yes, comprehensive measures are in place (please provide details below) | |
| Further information on the measures adopted for the <i>ex-situ</i> conservation of components of biodiversity native to your country and originating outside your country. | |
| Plants from all over the country are collected, transplanted and conserved into different sections showing different vegetation types of the country providing <i>ex situ</i> conservation of indigenous plant. The Millennium Seed Bank also assist with targeting and participation in plant and seed collecting expeditions and gene banking. Herbaria are also used for reference collections on preserved plants and plant specimens, provide botanical expertise on all aspects of plants including taxonomy. | |

| | |
|--|----------|
| 68. ? On Article 9(c), has your country adopted measures for the reintroduction of threatened species into their natural habitats under appropriate conditions? | |
| a) No | |
| b) No, but potential measures are under review | |
| c) Yes, some measures are in place (please provide details below) | X |
| d) Yes, comprehensive measures are in place (please provide details below) | |
| Further comments on the measures for the reintroduction of threatened species into their natural habitats under appropriate conditions. | |
| The National Tree Seed Centre, the Forest Reserve and Tree plantation reintroduce threatened species into their natural habitat under the National tree planting exercise. | |

| | |
|--|--|
| 69. ? On Article 9(d), has your country taken measures to regulate and manage the collection of biological resources from natural habitats for <i>ex-situ</i> conservation purposes so as not to threaten ecosystems and <i>in-situ</i> populations of species? | |
| a) No | |
| b) No, but potential measures are under review | |
| c) Yes, some measures are in place (please provide details below) | |
| d) Yes, comprehensive measures are in place (please provide details below) | |
| Further information on the measures to regulate and manage the collection of biological resources from natural habitats for <i>ex-situ</i> conservation purposes so as not to threaten ecosystems and <i>in-situ</i> populations of species. | |
| The Botanical Garden, Gene banks, herbaria take plant and seeds to serve as focal points for botanical information, propagation of indigenous species, information centre and education centre so there little chance of threatening ecosystems considering the size of these centers. | |

Box XLVIII .

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

There is a need to coordinate biodiversity in Botswana, to collect available information on plant genetic resources, specimens, seed banks and tissue culture and make it easily available. National botanical data should be collected and pressed plant specimens channeled through herbariums for information search.

Article 10 - Sustainable use of components of biological diversity

70. ? On Article 10(a), has your country integrated consideration of the conservation and sustainable use of biological resources into national decision-making?

| | |
|---|----------|
| a) No | |
| b) No, but steps are being taken | |
| c) Yes, in some relevant sectors (please provide details below) | |
| d) Yes, in most relevant sectors (please provide details below) | X |

Further information on integrating consideration of conservation and sustainable use of biological resources into national decision-making.

The various legislative frame work on biodiversity taken at national level provide for institutional bodies for the protection, conservation and management of biological resources in Botswana. An environment chapter was included in the National Development Plan 9 and it will be subject to an audit during mid term review to evaluate how the ministries and councils have performed.

71. ? On Article 10(b), has your country adopted measures relating to the use of biological resources that avoid or minimize adverse impacts on biological diversity?

| | |
|--|----------|
| a) No | |
| b) No, but potential measures are under review | |
| c) Yes, some measures are in place (please provide details below) | X |
| d) Yes, comprehensive measures are in place (please provide details below) | |

Further information on the measures adopted relating to the use of biological resources that avoid or minimize adverse impacts on biological diversity.

Botswana has developed various legislations for the protection, conservation and sustainable use of biological resources. These legislations regulate the use, protection and management of biological resources. Outside legislative framework, institutional machinery exists for the management, conservation and protection of biological resources. Examples are harvesting of grass and mopane worm.

| | |
|--|----------|
| 72. ? On Article 10(c), has your country put in place measures that protect and encourage customary use of biological resources that is compatible with conservation or sustainable use requirements? | |
| a) No | |
| b) No, but potential measures are under review | |
| c) Yes, some measures are in place (please provide details below) | X |
| d) Yes, comprehensive measures are in place (please provide details below) | |
| Further information on the measures that protect and encourage customary use of biological resources that is compatible with conservation or sustainable use requirements. | |
| There are policy frameworks such as the Rural Development Policy and CBNRM draft policy that encourage customary use of biological resources and are compatible with conservation or sustainable use requirements. | |

| | |
|---|----------|
| 73. ? On Article 10(d), has your country put in place measures that help local populations develop and implement remedial action in degraded areas where biological diversity has been reduced? | |
| a) No | |
| b) No, but potential measures are under review | |
| c) Yes, some measures are in place (please provide details below) | X |
| d) Yes, comprehensive measures are in place (please provide details below) | |
| Further information on the measures that help local populations develop and implement remedial action in degraded areas where biodiversity has been reduced. | |
| Community participation in biodiversity conservation and the use of local/traditional knowledge and practices has help locals to be directly involved in managing natural resources and taking on more responsibility which includes making management decisions. | |
| 74. ? Has your country identified indicators and incentive measures for sectors relevant to the conservation and sustainable use of biodiversity? (decision V/24) | |
| a) No | |
| b) No, but assessment of potential indicators and incentive measures is under way | |
| c) Yes, indicators and incentive measures identified (please describe below) | X |
| Further comments on the identification of indicators and incentive measures for sectors relevant to the conservation and sustainable use of biodiversity. | |
| Incentives measures identified include Resources use charges, granting of resource user rights to communities, land privatization and resource tendering for tourism. | |

| | |
|---|--|
| 75. ? Has your country implemented sustainable use practices, programmes and policies for the sustainable use of biological diversity, especially in pursuit of poverty alleviation? (decision V/24) | |
| a) No | |
| b) No, but potential practices, programmes and policies are under review | |

| | |
|--|----------|
| c) Yes, some policies and programmes are in place (please provide details below) | X |
| d) Yes, comprehensive policies and programmes are in place (please provide details below) | |
| Further information on sustainable use programmes and policies. | |
| <p>Natural resources are an important source of livelihood for most individuals. Biodiversity utilization therefore contributes to rural livelihoods. Government has provided through the process of economic diversification, opportunities for local communities to benefit from the sustainable conservation and utilization of resources in their localities. The commercial utilization of biodiversity resources such as thatch grass, reeds, baskets, devils claws and mophane worms has alleviated poverty in rural communities and at the same time given communities the responsibilities of conserving their natural resources.</p> | |

| | |
|--|----------|
| 76. ? Has your country developed or explored mechanisms to involve the private sector in initiatives on the sustainable use of biodiversity? (decision V/24) | |
| a) No | |
| b) No, but mechanisms are under development | |
| c) Yes, mechanisms are in place (please describe below) | X |
| Further comments on the development of mechanisms to involve the private sector in initiatives on the sustainable use of biodiversity. | |
| <p>The tourism policy calls for the development of ecotourism projects and this has given the private sector an opportunity to be involved in the sustainable use of biodiversity. Some nature reserve and a few sanctuaries are run by the private sector giving them the opportunity to conserve and manage natural resources.</p> | |
| 77. Has your country initiated a process to apply the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity? (decision VII/12) | |
| a) No | X |
| b) No, but the principles and guidelines are under review | |
| c) Yes, a process is being planned | |
| d) Yes, a process has been initiated (please provide detailed information) | |
| Further information on the process to apply the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity. | |
| We are not up to date with the principles | |

| | |
|--|----------|
| 78. Has your country taken any initiative or action to develop and transfer technologies and provide financial resources to assist in the application of the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity? (decision VII/12) | |
| a) No | X |
| b) No, but relevant programmes are under development | |
| c) Yes, some technologies developed and transferred and limited financial resources provided (please provide details below) | |
| d) Yes, many technologies developed and transferred and significant financial resources provided (please provide details below) | |

Further comments on the development and transfer of technologies and provision of financial resources to assist in the application of the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity.

Biodiversity and Tourism

79. ? Has your country established mechanisms to assess, monitor and measure the impact of tourism on biodiversity?

a) No

b) No, but mechanisms are under development

c) Yes, mechanisms are in place (please specify below)

X

d) Yes, existing mechanisms are under review

Further comments on the establishment of mechanisms to assess, monitor and measure the impact of tourism on biodiversity.

Mechanisms are in place to reduce pressure exerted on biodiversity by tourism through the policy of 'high cost' tourism. This reduces the number of tourist in tourism destination areas and the number of activities conducted in such areas but maximizes economic returns from tourism.

80. ? Has your country provided educational and training programmes to the tourism operators so as to increase their awareness of the impacts of tourism on biodiversity and upgrade the technical capacity at the local level to minimize the impacts? (decision V/25)

a) No

b) No, but programmes are under development

c) Yes, programmes are in place (please describe below)

X

Further comments on educational and training programmes provided to tourism operators.

The tourism master plan has identified a set of priority areas of consideration including community/citizen involvement in the tourism industry, awareness, education and training as well as upgrading of technical capacity at local level. Tour operators are trained in tourist guiding.

81. Does your country provide indigenous and local communities with capacity-building and financial resources to support their participation in tourism policy-making, development planning, product development and management? (decision VII/14)

a) No

b) No, but relevant programmes are being considered

c) Yes, some programmes are in place (please provide details below)

X

d) Yes, comprehensive programmes are in place (please provide details below)

Further comments in the capacity-building and financial resources provided to indigenous and local communities to support their participation in tourism policy-making, development planning, product development and management.

The Eco-tourism unit in the department of tourism enables the development of closer and effective working relationships with individuals and communities to intensify tourism awareness and skill development programmes, thereby empowering individuals and communities with much needed tourism knowledge and the capacity to undertake their own tourism projects.

| | |
|---|----------|
| 82. Has your country integrated the Guidelines on Biodiversity and Tourism Development in the development or review of national strategies and plans for tourism development, national biodiversity strategies and actions plans, and other related sectoral strategies? (decision VII/14) | |
| a) No, but the guidelines are under review | |
| b) No, but a plan is under consideration to integrate some principles of the guidelines into relevant strategies | |
| c) Yes, a few principles of the guidelines are integrated into some sectoral plans and NBSAPs (please specify which principle and sector) | |
| d) Yes, many principles of the guidelines are integrated into some sectoral plans and NBSAPs (please specify which principle and sector) | X |
| Further information on the sectors where the principles of the Guidelines on Biodiversity and Tourism Development are integrated. | |
| Tourism development is integrated into the National Development Plan (NDP), District Development plans (DDP), the tourism and eco-tourism strategy and the National Biodiversity Strategy and Action Plan | |

Box XLIX.

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| Please elaborate below on the implementation of this article and associated decisions specifically focusing on: |
| <ul style="list-style-type: none"> a) outcomes and impacts of actions taken; b) contribution to the achievement of the goals of the Strategic Plan of the Convention; c) contribution to progress towards the 2010 target; d) progress in implementing national biodiversity strategies and action plans; e) contribution to the achievement of the Millennium Development Goals; f) constraints encountered in implementation. |
| The vision 2016 states that “the challenge of preserving the environment and making prudent use of the natural resource base of Botswana is crucial to its survival and future prosperity. To achieve this goal, the Department of Tourism shifted the tourism industry away from a total dependence on wildlife and wilderness elements of the tourism products, to eco-tourism to empower individuals and communities through effectively involving them in all aspect of the industry, providing tourism awareness and skills, knowledge and capacity to undertake the management, conservation and the sustainable use of the tourism resources. |

Article 11 - Incentive measures

| | |
|--|----------|
| 83. ? Has your country established programmes to identify and adopt economically and socially sound measures that act as incentives for the conservation and sustainable use of components of biological diversity? | |
| a) No | |
| b) No, but relevant programmes are under development | |
| c) Yes, some programmes are in place (please provide details below) | X |
| d) Yes, comprehensive programmes are in place (please provide details below) | |
| Further comments on the programmes to identify and adopt incentives for the conservation and sustainable use of biodiversity. | |
| The CBNRM and the Ecotourism Strategy seeks to establish an effective resources management system and support economic growth and diversification measures. Biodiversity management, | |

particularly resource conservation and utilization has economic benefits for rural communities and most communities have depended on resources utilization for livelihoods.

84. ? Has your country developed the mechanisms or approaches to ensure adequate incorporation of both market and non-market values of biological diversity into relevant plans, policies and programmes and other relevant areas? (decisions III/18 and IV/10)

| | |
|---|----------|
| a) No | |
| b) No, but relevant mechanisms are under development | |
| c) Yes, mechanisms are in place (please provide details below) | X |
| d) Yes, review of impact of mechanisms available (please provide details below) | |

Further comments on the mechanism or approaches to incorporate market and non-market values of biodiversity into relevant plans, policies and programmes.

Direct and indirect methods are used to assess sustainable resources use in Botswana, e.g. valuing of the main parks using contingent valuation and the valuing of direct use of rangeland using market based alternative valuation methods and the travel-cost method to value the ecosystem or resources use.

85. ? Has your country developed training and capacity-building programmes to implement incentive measures and promote private-sector initiatives? (decision III/18)

| | |
|--|----------|
| a) No | |
| b) No, but relevant programmes are under development | |
| c) Yes, some programmes are in place | X |
| d) Yes, many programmes are in place | |

86. Does your country take into consideration the proposals for the design and implementation of incentive measures as contained in Annex I to decision VI/15 when designing and implementing incentive measures for the conservation and sustainable use of biodiversity? (decision VI/15)

| | |
|---------------------------------------|----------|
| a) No | |
| b) Yes (please provide details below) | X |

Further information on the proposals considered when designing and implementing the incentive measures for the conservation and sustainable use of biodiversity.

The policy framework in place covers non-domesticated biological resources, has specific policy components for wildlife in communal areas, parks and communities, forestry, fisheries and agriculture resources. The policy combines resources conservation and utilization and covers equitable distribution of biodiversity benefits, provides financial and technical support, and capacity for implementation.

87. Has your country made any progress in removing or mitigating policies or practices that generate perverse incentives for the conservation and sustainable use of biological diversity? (decision VII/18)

| | |
|---|----------|
| a) No | |
| b) No, but identification of such policies and practices is under way | X |
| c) Yes, relevant policies and practices identified but not entirely removed or mitigated (please provide details below) | |
| d) Yes, relevant policies and practices identified and removed or mitigated (please provide details below) | |

Further information on perverse incentives identified and/or removed or mitigated.

A review is looking into agricultural subsidy policy, which acts as a biodiversity disincentive.

Box L.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Article 12 - Research and training

88. ? On Article 12(a), has your country established programmes for scientific and technical education and training in measures for the identification, conservation and sustainable use of biological diversity and its components?

a) No

b) No, but programmes are under development

c) Yes, programmes are in place (please provide details below)

X

Further information on the programmes for scientific and technical education and training in the measures for identification, conservation and sustainable use of biodiversity.

Programmes have been implemented by different biodiversity expertise in the country such as tertiary institutions, government institutions involved with environmental and biodiversity issues, environmental NGOs and selected companies in the private sector.

89. ? On Article 12(b), does your country promote and encourage research, which contributes to the conservation and sustainable use of biological diversity?

a) No

b) Yes (please provide details below)

X

Further information on the research, which contributes to the conservation and sustainable use of biodiversity.

For a sound conservation and sustainable use of biodiversity, there is need for proper research and availability of information. All sectors involved in biodiversity carry out researches in their fields of expert.

90. ? On Article 12(c), does your country promote and cooperate in the use of scientific advances in biological diversity research in developing methods for conservation and sustainable use of biological resources?

a) No

| | |
|--|----------|
| b) Yes (please provide details below) | X |
| Further information on the use of scientific advances in biodiversity research in developing methods for conservation and sustainable use of biodiversity. | |
| Botswana is promoting and cooperating in the scientific advances in biodiversity researches to have easily accessible and user friendly information on biodiversity, have computerized records to avoid duplication of efforts and to protect sensitive information like information on rare and endangered species. | |

Box LI.

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| Please elaborate below on the implementation of this article specifically focusing on: | |
| <ul style="list-style-type: none"> a) outcomes and impacts of actions taken; b) contribution to the achievement of the goals of the Strategic Plan of the Convention; c) contribution to progress towards the 2010 target; d) progress in implementing national biodiversity strategies and action plans; e) contribution to the achievement of the Millennium Development Goals; f) constraints encountered in implementation. | |
| Research and training are crucial for the understanding of biodiversity, maintaining, conservation and understanding of the habitat and treats. These are important tools in decision making because decisions are taken based on the information available. Training provides understanding for long-term sustainability of natural resources and at implementing national policies, strategies and for the support at community levels. | |

Article 13 - Public education and awareness

| | |
|--|----------|
| 91. Is your country implementing a communication, education and public awareness strategy and promoting public participation in support of the Convention? (Goal 4.1 of the Strategic Plan) | |
| a) No | |
| b) No, but a CEPA strategy is under development | |
| c) Yes, a CEPA strategy developed and public participation promoted to a limited extent (please provide details below) | |
| d) Yes, a CEPA strategy developed and public participation promoted to a significant extent (please provide details below) | X |
| Further comments on the implementation of a CEPA strategy and the promotion of public participation in support of the Convention. | |
| CEPA and promotion of public participation is implemented in every policy dealing with conservation, maintenance and management of ecosystem such as the Tourism Act, Agriculture, Eco-tourism, CBNRM, NBSAP and all National Development Plans. This is in view of the critical importance of biodiversity to our livelihoods, diversification of our economy and the benefits that are derived for the use of natural resources. | |

| | |
|--|----------|
| 92. Is your country undertaking any activities to facilitate the implementation of the programme of work on Communication, Education and Public Awareness as contained in the annex to decision VI/19? (decision VI/19) | |
| a) No | |
| b) No, but some programmes are under development | |
| c) Yes, some activities are being undertaken (please provide details) | X |

| | |
|--|--|
| below) | |
| d) Yes, many activities are being undertaken (please provide details below) | |
| Further comments on the activities to facilitate the implementation of the programme of work on CEPA. | |
| A CEPA programme in place has accomplished several initiatives including integration of environmental education into the school curricula and enhancement of community involvement in natural resources management through district conservation seminars and other initiatives. | |

| | |
|---|----------|
| 93. Is your country strongly and effectively promoting biodiversity-related issues through the press, the various media and public relations and communications networks at national level? (decision VI/19) | |
| a) No | |
| b) No, but some programmes are under development | |
| c) Yes, to a limited extent (please provide details below) | |
| d) Yes, to a significant extent (please provide details below) | X |
| Further comments on the promotion of biodiversity-related issues through the press, the various media and public relations and communications networks at national level. | |
| Issues of biodiversity related are covered through all sources of media (radios, Newspapers and television), in the school curricula, at other events like State of the nation address, at environmental fairs, exhibitions and trade fairs and districts seminars. | |

| | |
|--|----------|
| 94. Does your country promote the communication, education and public awareness of biodiversity at the local level? (decision VI/19) | |
| a) No | |
| b) Yes (please provide details below) | X |
| Further information on the efforts to promote the communication, education and public awareness of biodiversity at the local level. | |
| At districts exhibitions and trade fairs and districts seminars and kgotla (Community meetings) meetings. | |
| 95. Is your country supporting national, regional and international activities prioritized by the Global Initiative on Education and Public Awareness? (decision VI/19) | |
| a) No | X |
| b) No, but some programmes are under development | |
| c) Yes, some activities supported (please provide details below) | |
| d) Yes, many activities supported (please provide details below) | |
| Further comments on the support of national, regional and international activities prioritized by the Global Initiative on Education and Public Awareness. | |

| 96. Has your country developed adequate capacity to deliver initiatives on communication, education and public awareness? | |
|---|----------|
| a) No | |
| b) No, but some programmes are under development | |
| c) Yes, some programmes are being implemented (please provide details below) | X |
| d) Yes, comprehensive programmes are being implemented (please provide details below) | |
| Further comments on the development of adequate capacity to deliver initiatives on communication, education and public awareness. | |
| Integration of communication, education and public awareness into national policies and plans has resulted in growing societal concern and interest in the environment. NGOs also play an important role in creating public awareness, which is a precursor of involvement. This has also helped with capacity to deliver on communication, education and public awareness. | |

| 97. Does your country promote cooperation and exchange programmes for biodiversity education and awareness at the national, regional and international levels? (decisions IV /10 and VI/19) | |
|--|----------|
| a) No | |
| b) Yes (please provide details below) | X |
| Further comments on the promotion of cooperation and exchange programmes for biodiversity education and awareness, at the national, regional and international levels. | |
| The Country is cooperating with private organizations, NGOs and international agencies on programmes of biodiversity education and awareness. | |

| 98. Is your country undertaking some CEPA activities for implementation of crosscutting issues and thematic programmes of work adopted under the Convention? | |
|---|----------|
| a) No (please specify reasons below) | |
| b) Yes, some activities undertaken for some issues and thematic areas (please provide details below) | X |
| c) Yes, many activities undertaken for most issues and thematic areas (please provide details below) | |
| d) Yes, comprehensive activities undertaken for all issues and thematic areas (please provide details below) | |
| Further comments on the CEPA activities for implementation of cross-cutting issues and thematic programmes of work adopted under the Convention. | |
| With biodiversity expertise and information divide between many different institutions, the implementation of cross-cutting issues has been addressed by bringing the sectors together for the purpose of achieving the CEPA goals. | |

| | |
|--|----------|
| 99. ? Does your country support initiatives by major groups, key actors and stakeholders that integrate biological diversity conservation matters in their practice and education programmes as well as into their relevant sectoral and cross-sectoral plans, programmes and policies? (decision IV/10 and Goal 4.4 of the Strategic Plan) | |
| a) No | |
| b) Yes (please provide details below) | X |
| Further comments on the initiatives by major groups, key actors and stakeholders that integrate biodiversity conservation in their practice and education programmes as well as their relevant sectoral and cross-sectoral plans, programmes and policies. | |
| Different sectors, private sectors, NGOs and institutions that have integrated biodiversity conservation into their practice and education programmes have always been supported. | |

| | |
|--|----------|
| 100. Is your country communicating the various elements of the 2010 biodiversity target and establishing appropriate linkages to the Decade on Education for Sustainable Development in the implementation of your national CEPA programmes and activities? (decision VII/24) | |
| a) No | |
| b) No, but some programmes are under development | X |
| c) Yes, some programmes developed and activities undertaken for this purpose (please provide details below) | |
| d) Yes, comprehensive programmes developed and many activities undertaken for this purpose (please provide details below) | |
| Further comments on the communication of the various elements of the 2010 biodiversity target and the establishment of linkages to the Decade on Education for Sustainable Development. | |
| The NBSAP is communicating the elements of 2010 biodiversity target. | |

Box LII .

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| <p>Please elaborate below on the implementation of this article and associated decisions specifically focusing on:</p> <ul style="list-style-type: none"> a) outcomes and impacts of actions taken; b) contribution to the achievement of the goals of the Strategic Plan of the Convention; c) contribution to progress towards the 2010 target; d) progress in implementing national biodiversity strategies and action plans; e) contribution to the achievement of the Millennium Development Goals; f) constraints encountered in implementation. |
| |

Article 14 - Impact assessment and minimizing adverse impacts

101. ? On Article 14.1(a), has your country developed legislation requiring an environmental impact assessment of proposed projects likely to have adverse effects on biological diversity?

- | | |
|---|----------|
| a) No | |
| b) No, legislation is still in early stages of development | |
| c) No, but legislation is in advanced stages of development | |
| d) Yes, legislation is in place (please provide details below) | X |
| e) Yes, review of implementation available (please provide details below) | |

Further information on the legislation requiring EIA of proposed projects likely to have adverse effects on biodiversity.

EIA has always been carried out for all projects even though the legislation is still in draft form. The law has been passed by parliament and will be passed in the near future.

102. ? On Article 14.1(b), has your country developed mechanisms to ensure that due consideration is given to the environmental consequences of national programmes and policies that are likely to have significant adverse impacts on biological diversity?

- | | |
|--|----------|
| a) No | |
| b) No, mechanisms are still in early stages of development | |
| c) No, but mechanisms are in advanced stages of development | X |
| d) Yes, mechanisms are in place (please provide details below) | |

Further comments on the mechanisms developed to ensure that due consideration is given to the environmental consequences of national programmes and policies that are likely to have significant adverse impacts on biodiversity.

All project and plans will continue to be assessed to determine their impact on the environment before they are carried out and mitigation measures adopted to avoid negative impacts.

103. ? On Article 14.1(c), is your country implementing bilateral, regional and/or multilateral agreements on activities likely to significantly affect biological diversity outside your country's jurisdiction?

- | | |
|---|----------|
| a) No | |
| b) No, but assessment of options is in progress | |
| c) Yes, some completed, others in progress (please provide details below) | |
| d) Yes (please provide details below) | X |

Further information on the bilateral, regional and/or multilateral agreements on activities likely to significantly affect biodiversity outside your country's jurisdiction.

Bilateral and regional agreements on activities that may adversely affect biological resources have been signed, e.g. the shared river basin treaties and regional protocols.

104. ? On Article 14.1(d), has your country put mechanisms in place to prevent or minimize danger or damage originating in your territory to biological diversity in the territory of other Parties or in areas beyond the limits of national jurisdiction?

| | |
|---|----------|
| a) No | |
| b) No, mechanisms are still in early stages of development | |
| c) No, but mechanisms are in advanced stages of development | |
| d) Yes, mechanisms are in place based on current scientific knowledge | X |

105. ? On Article 14.1(e), has your country established national mechanisms for emergency response to activities or events which present a grave and imminent danger to biological diversity?

| | |
|--|----------|
| a) No | |
| b) No, mechanisms are still in early stages of development | X |
| c) No, but mechanisms are in advanced stages of development | |
| d) Yes, mechanisms are in place (please provide details below) | |

Further information on national mechanisms for emergency response to the activities or events which present a grave and imminent danger to biodiversity.

National Disaster Management Office is responsible for assisting victims and developing contingent plans.

106. Is your country applying the Guidelines for Incorporating Biodiversity-related Issues into Environment-Impact-Assessment Legislation or Processes and in Strategic Impact Assessment as contained in the annex to decision VI/7 in the context of the implementation of paragraph 1 of Article 14? (decision VI/7)

| | |
|--|----------|
| a) No | |
| b) No, but application of the guidelines under consideration | |
| c) Yes, some aspects being applied (please specify below) | |
| d) Yes, major aspects being applied (please specify below) | X |

Further comments on application of the guidelines.

Projects that affect environment negatively affect the biodiversity in that area, so guidelines for incorporating biodiversity-related issues into Environmental-Impact-Assessment Legislation have been taken into consideration when drafting the EIA legislation.

| | |
|---|----------|
| 107. On Article 14 (2), has your country put in place national legislative, administrative or policy measures regarding liability and redress for damage to biological diversity? (Decision VI/11) | |
| a) No | |
| b) Yes (please specify the measures) | X |
| Further comments on national legislative, administrative or policy measures regarding liability and redress for damage to biological diversity. | |
| Measures are in place regarding liability and redress for damage to biodiversity, the natural resources act and other legislation provides such measures. | |

| | |
|--|----------|
| 108. Has your country put in place any measures to prevent damage to biological diversity? | |
| a) No | |
| b) No, but some measures are being developed | |
| c) Yes, some measures are in place (please provide details below) | X |
| d) Yes, comprehensive measures are in place (please provide details below) | |
| Further information on the measures in place to prevent damage to biological diversity. | |
| The Herbage Preservation act, Natural Resources Conservation and Development and Agriculture Resources Conservation Act, EIA Act, Forestry Act in addition to Tourism Act and Wildlife and National Park Act prevent damage to biological diversity. | |

| | |
|---|----------|
| 109. Is your country cooperating with other Parties to strengthen capacities at the national level for the prevention of damage to biodiversity, establishment and implementation of national legislative regimes, policy and administrative measures on liability and redress? (decision VI/11) | |
| a) No | |
| b) No, but cooperation is under consideration | |
| c) No, but cooperative programmes are under development | |
| d) Yes, some cooperative activities being undertaken (please provide details below) | X |
| e) Yes, comprehensive cooperative activities being undertaken (please provide details below) | |
| Further comments on cooperation with other Parties to strengthen capacities for the prevention of damage to biodiversity. | |
| Botswana has some cooperative understanding with its neighboring countries. | |

Box LIII.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

The undertaking of Environmental Impact Assessment (EIA) is encouraged for all large-scale projects the legislation is in place to support the efforts. Efforts are done to cooperate with other countries to strengthen capacities for the prevention of damage to biodiversity.

Article 15 - Access to genetic resources

110. ? Has your country endeavored to facilitate access to genetic resources for environmentally sound uses by other Parties, on the basis of prior informed consent and mutually agreed terms, in accordance with paragraphs 2, 4 and 5 of Article 15?

| | |
|---------------------------------------|----------|
| a) No | |
| b) Yes (please provide details below) | X |

Further information on the efforts taken by your country to facilitate access to genetic resources for environmentally sound uses by other Parties, on the basis of prior informed consent and mutually agreed terms.

Access to genetic resource use by other parties has always been run according to the objectives of the convention especially the sustainable use of biological diversity components and free and easy access to genetic resources by all, as long as consent is granted and mutual agreement reached.

111. ? Has your country taken measures to ensure that any scientific research based on genetic resources provided by other Parties is developed and carried out with the full participation of such Parties, in accordance with Article 15(6)?

| | |
|--|----------|
| a) No | |
| b) No, but potential measures are under review | |
| c) Yes, some measures are in place (please provide details below) | X |
| d) Yes, comprehensive measures are in place (please provide details below) | |

Further information on the measures to ensure that any scientific research based on genetic resources provided by other Contracting Parties is developed and carried out with the full participation of such Contracting Parties.

An authority has been designated to foresee that researches based on genetic resources are carried out with the full participation of scientific researchers permitted to do the research.

| | |
|--|----------|
| 112. ? Has your country taken measures to ensure the fair and equitable sharing of the results of research and development and of the benefits arising from the commercial and other use of genetic resources with any Contracting Party providing such resources, in accordance with Article 15(7)? | |
| a) No | |
| b) No, but potential measures are under review | |
| c) Yes, some measures are in place (please provide details below) | X |
| d) Yes, comprehensive legislation is in place (please provide details below) | |
| e) Yes, comprehensive statutory policy or subsidiary legislation are in place (please provide details below) | |
| f) Yes, comprehensive policy and administrative measures are in place (please provide details below) | |
| Further information on the type of measures taken. | |
| Mutual agreement is always reached to ensure the fair and equitable sharing of benefits arising from the commercial use of genetic resources. | |
| 113. ? In developing national measures to address access to genetic resources and benefit-sharing, has your country taken into account the multilateral system of access and benefit-sharing set out in the International Treaty on Plant Genetic Resources for Food and Agriculture? | |
| a) No | |
| b) Yes (please provide details below) | X |
| Further information on national measures taken which consider the multilateral system of access and benefit-sharing as set out in the International Treaty on Plant Genetic Resources for Food and Agriculture. | |
| The National Genetic Resources Committee prepared the Plant and Animal Genetic Resources Policy to allow for the realization of the farmer's rights, access on mutual agreed terms to plant genetic resources, include access to <i>ex situ</i> collection of plant genetic resources and to harmonize the undertaking of the CBD. | |
| 114. Is your country using the Bonn Guidelines when developing and drafting legislative, administrative or policy measures on access and benefit-sharing and/or when negotiating contracts and other arrangements under mutually agreed terms for access and benefit-sharing? (decision VII/19A) | |
| a) No | X |
| b) No, but steps being taken to do so (please provide details below) | |
| c) Yes (please provide details below) | |
| Please provide details and specify successes and constraints in the implementation of the Bonn Guidelines. | |
| Although Botswana has not adopted the guidelines, the conservation of terrestrial and migratory species is taken into consideration. | |

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| 115. Has your country adopted national policies or measures, including legislation, which address the role of intellectual property rights in access and benefit-sharing arrangements (i.e. the issue of disclosure of origin/source/legal provenance of genetic resources in applications for intellectual property rights where the subject matter of the application concerns, or makes use of, genetic resources in its development)? |
|--|

| | |
|--|----------|
| a) No | |
| b) No, but potential policies or measures have been identified (please specify below) | |
| c) No, but relevant policies or measures are under development (please specify below) | X |
| d) Yes, some policies or measures are in place (please specify below) | |
| e) Yes, comprehensive policies or measures adopted (please specify below) | |
| Further information on policies or measures that address the role of IPR in access and benefit-sharing arrangements. | |
| Negotiations are taking place on technology ownership and control over patented goods. The use of traditional knowledge is high in Botswana and holders of such knowledge are entitled to share equitably and fairly in the benefits derived from the use of such knowledge by others. | |
| 116. Has your country been involved in capacity-building activities related to access and benefit-sharing? | |
| a) Yes (please provide details below) | X |
| b) No | |
| Please provide further information on capacity-building activities (your involvement as donor or recipient, key actors involved, target audience, time period, goals and objectives of the capacity-building activities, main capacity-building areas covered, nature of activities). Please also specify whether these activities took into account the Action Plan on capacity-building for access and benefit-sharing adopted at COP VII and available in annex to decision VII/19F. | |
| Capacity building is carried out either through training of local communities, group of people on the sustainable utilization of genetic resources, capacity of communities to participate in the managing of biodiversity resources and opportunities that biodiversity provides for them, i.e. the benefits they can derive from the use of resources. Such capacity building courses can either be seminars and workshops last a week or a month depending on the content of the course. Capacity building can also be done to strengthen extension services through NGOs and or Government to rural communities. | |

Box LIV.

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| <p>Please elaborate below on the implementation of this article and associated decisions specifically focusing on:</p> <ul style="list-style-type: none"> a) outcomes and impacts of actions taken; b) contribution to the achievement of the goals of the Strategic Plan of the Convention; c) contribution to progress towards the 2010 target; d) progress in implementing national biodiversity strategies and action plans; e) contribution to the achievement of the Millennium Development Goals; f) constraints encountered in implementation. |
| <p>Genetic resources and benefit sharing can be important, as a source of sustainable economic development, providing stakeholders and individuals with benefits such as improve capacity for conservation, new products, income to meet basic needs, food security as well as support for value-added scientific research. For these opportunities to be achieved, it is important to conserve our resources.</p> |

Article 16 - Access to and transfer of technology

| | |
|--|----------|
| 117. ? On Article 16(1), has your country taken measures to provide or facilitate access for and transfer to other Parties of technologies that are relevant to the conservation and sustainable use of biological diversity or make use of genetic resources and do not cause significant damage to the environment? | |
| a) No | X |
| b) No, but potential measures are under review | |
| c) Yes, some measures are in place (please provide details below) | |
| d) Yes, comprehensive measures are in place (please provide details below) | |
| Further information on the measures to provide or facilitate access for and transfer to other Parties of technologies that are relevant to the conservation and sustainable use of biodiversity or make use of genetic resources and do not cause significant damage to the environment. | |
| Different sectors such as Rural Industries Innovation Centre, Botswana Technology Centre, Agricultural Research and National Food Technology Research Centre that have responsibilities in the genetic resources are equally responsible for the access and transfer of technology relevant to their mandates. | |
| 118. On Article 16(3), has your country taken measures so that Parties which provide genetic resources are provided access to and transfer of technology which make use of those resources, on mutually agreed terms? | |
| a) No | |
| b) No, but potential measures are under review | |
| c) Yes, some measures are in place | |
| d) Yes, comprehensive legislation is in place | |
| e) Yes, comprehensive statutory policy or subsidiary legislation are in place | |
| f) Yes, comprehensive policy and administrative arrangements are in place | |
| g) Not applicable | X |
| 119. ? On Article 16(4), has your country taken measures so that the private sector facilitates access to joint development and transfer of relevant technology for the benefit of Government institutions and the private sector of developing countries? | |
| a) No | |
| b) No, but potential measures are under review | |
| c) Yes, some policies and measures are in place (please provide details below) | X |
| d) Yes, comprehensive policies and measures are in place (please provide details below) | |
| e) Not applicable | |
| Further information on the measures taken. | |
| Private sector facilitates access to joint development and transfer of relevant technology for the benefit of Government institutions, i.e. in the field of taxonomy where joint development and sharing of information is yielding better results. | |

Box LV.

Please elaborate below on the implementation of this article specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

N/A

Programme of Work on transfer of technology and technology cooperation

120. Has your country provided financial and technical support and training to assist in the implementation of the programme of work on transfer of technology and technology cooperation? (decision VII/29)

| | |
|---|----------|
| a) No | |
| b) No, but relevant programmes are under development | |
| c) Yes, some programmes being implemented (please provide details below) | X |
| d) Yes, comprehensive programmes being implemented (please provide details below) | |

Further comments on the provision of financial and technical support and training to assist in the implementation of the programme of work on transfer of technology and technology cooperation.

Each sector responsible for access and transfer of technology has been supported financially and technically by the Government.

121. Is your country taking any measures to remove unnecessary impediments to funding of multi-country initiatives for technology transfer and for scientific and technical cooperation? (decision VII/29)

| | |
|--|----------|
| a) No | X |
| b) No, but some measures being considered | |
| c) Yes, some measures are in place (please provide details below) | |
| d) Yes, comprehensive measures are in place (please provide details below) | |

Further comments on the measures to remove unnecessary impediments to funding of multi-country initiatives for technology transfer and for scientific and technical cooperation.

| | |
|--|--|
| 122. Has your country made any technology assessments addressing technology needs, opportunities and barriers in relevant sectors as well as related needs in capacity building? (annex to decision VII/29) | |
| a) No | |
| b) No, but assessments are under way | |
| c) Yes, basic assessments undertaken (please provide details below) | |
| d) Yes, thorough assessments undertaken (please provide details below) | |
| Further comments on technology assessments addressing technology needs, opportunities and barriers in relevant sectors as well as related needs in capacity building. | |
| N/A | |

| | |
|--|----------|
| 123. Has your country made any assessments and risk analysis of the potential benefits, risks and associated costs with the introduction of new technologies? (annex to decision VII/29) | |
| a) No | X |
| b) No, but assessments are under way | |
| c) Yes, some assessments undertaken (please provide details below) | |
| d) Yes, comprehensive assessments undertaken (please provide details below) | |
| Further comments on the assessments and risk analysis of the potential benefits, risks and associated costs with the introduction of new technologies. | |
| N/A | |
| 124. Has your country identified and implemented any measures to develop or strengthen appropriate information systems for technology transfer and cooperation, including assessing capacity building needs? (annex to decision VII/29) | |
| a) No | X |
| b) No, but some programmes are under development | |
| c) Yes, some programmes are in place and being implemented (please provide details below) | |
| d) Yes, comprehensive programmes are being implemented (please provide details below) | |
| Further comments on measures to develop or strengthen appropriate information systems for technology transfer and cooperation. | |
| N/A | |


| | |
|---|--|
| 125. Has your country taken any of the measures specified under Target 3.2 of the programme of work as a preparatory phase to the development and implementation of national institutional, administrative, legislative and policy frameworks to facilitate cooperation as well as access to and adaptation of technologies of relevance to the Convention? (annex to decision VII/29) | |
| a) No | |

| | |
|--|----------|
| b) No, but a few measures being considered | X |
| c) Yes, some measures taken (please specify below) | |
| d) Yes, many measures taken (please specify below) | |
| Further comments on the measures taken as a preparatory phase to the development and implementation of national institutional, administrative, legislative and policy frameworks to facilitate cooperation as well as access to and adaptation of technologies of relevance to the Convention. | |
| | |

Box LVI.

| |
|--|
| <p>Please elaborate below on the implementation of this article and associated decisions specifically focusing on:</p> <ul style="list-style-type: none"> a) outcomes and impacts of actions taken; b) contribution to the achievement of the goals of the Strategic Plan of the Convention; c) contribution to progress towards the 2010 target; d) progress in implementing national biodiversity strategies and action plans; e) contribution to the achievement of the Millennium Development Goals; f) constraints encountered in implementation. |
| |

Article 17 - Exchange of information

| | |
|---|----------|
| 126.  On Article 17(1), has your country taken measures to facilitate the exchange of information from publicly available sources with a view to assist with the implementation of the Convention and promote technical and scientific cooperation? | |
| a) No | |
| b) No, but potential measures are under review | |
| c) Yes, some measures are in place | X |
| d) Yes, comprehensive measures are in place | |

The following question (127) is for DEVELOPED COUNTRIES

| | |
|--|--|
| 127. ? On Article 17(1), do these measures take into account the special needs of developing countries and include the categories of information listed in Article 17(2), such as technical, scientific and socio-economic research, training and surveying programmes, specialized knowledge, repatriation of information and so on? | |
| a) No | |
| b) Yes, but they do not include the categories of information listed in Article 17(2), such as technical, scientific and socio-economic research, training and surveying programmes, specialized knowledge, repatriation of information and so on | |
| c) Yes, and they include categories of information listed in Article 17 (2), such as technical, scientific and socio-economic research, training and surveying programmes, specialized knowledge, repatriation of information and so on | |

Box LVII .

| |
|--|
| <p>Please elaborate below on the implementation of this article and associated decisions specifically focusing on:</p> <ul style="list-style-type: none"> a) outcomes and impacts of actions taken; b) contribution to the achievement of the goals of the Strategic Plan of the Convention; c) contribution to progress towards the 2010 target; d) progress in implementing national biodiversity strategies and action plans; e) contribution to the achievement of the Millennium Development Goals; f) constraints encountered in implementation. |
| <p>Information exchange will encourage the use of and contribute in planning and decision-making process. Information or research data and results emanating from some research activities if shared for data sharing and or record keeping helps to keep the nation informed, provides an up-to-date information for decision making purpose and helps avoid duplication of efforts. Information made available or records of past and present research activities also help to guide future plans.</p> |

Article 18 - Technical and scientific cooperation

| | |
|---|----------|
| 128. ? On Article 18(1), has your country taken measures to promote international technical and scientific cooperation in the field of conservation and sustainable use of biological diversity? | |
| a) No | X |
| b) No, but potential measures are under review | |
| c) Yes, some measures are in place (please provide details below) | |
| d) Yes, comprehensive measures are in place (please provide details below) | |
| <p>Further information on the measures to promote international technical and scientific cooperation.</p> <p>Many of Botswana's ecosystems and biodiversity resources such as wildlife span and cross national borders, therefore, warranting regional collaboration, scientific cooperation and agreements in the field of conservation and sustainable use of biodiversity. This has been recognized and addressed through various Transfrontier park initiatives. Taxonomy is another field where regional collaboration and sharing of resources has been explored.</p> | |
| 129. ? On Article 18(4), has your country encouraged and developed methods of cooperation for the development and use of technologies, including indigenous and traditional technologies, in | |

| | |
|---|----------|
| pursuance of the objectives of this Convention? | |
| a) No | X |
| b) No, but relevant methods are under development | |
| c) Yes, methods are in place | |
| 130. ? On Article 18(5), has your country promoted the establishment of joint research programmes and joint ventures for the development of technologies relevant to the objectives of the Convention? | |
| a) No | X |
| b) Yes (please provide some examples below) | |
| Examples for the establishment of joint research programmes and joint ventures for the development of technologies relevant to the objectives of the Convention. | |
| Research activities in the field of microbiology and biochemistry require sophisticated and expensive equipments and trained expertise, so regional joint ventures for development and programmes have been established to cut the costs. | |

| | |
|--|----------|
| 131. Has your country established links to non-governmental organizations, private sector and other institutions holding important databases or undertaking significant work on biological diversity through the CHM? (decision V/14) | |
| a) No | x |
| b) No, but coordination with relevant NGOs, private sector and other institutions under way | |
| c) Yes, links established with relevant NGOs, private sector and institutions | |

The following question (132) is for DEVELOPED COUNTRIES

| | |
|--|--|
| 132. Has your country further developed the CHM to assist developing countries and countries with economies in transition to gain access to information in the field of scientific and technical cooperation? (decision V/14) | |
| a) No | |
| b) Yes, by using funding opportunities | |
| c) Yes, by means of access to, and transfer of technology | |
| d) Yes, by using research cooperation facilities | |
| e) Yes, by using repatriation of information | |
| f) Yes, by using training opportunities | |
| g) Yes, by using promotion of contacts with relevant institutions, organizations and the private sector | |
| h) Yes, by using other means (please specify below) | |
| Further comments on CHM developments to assist developing countries and countries with economies in transition to gain access to information in the field of scientific and technical cooperation. | |
| | |

| | |
|---|----------|
| 133. Has your country used CHM to make information available more useful for researchers and decision-makers? (decision V/14) | |
| a) No | |
| b) No, but relevant initiatives under consideration | X |
| c) Yes (please provide details below) | |
| Further comments on development of relevant initiatives. | |
| The exchange and dissemination of information is a key in the achievement of the objectives of the CBD. | |
| 134. Has your country developed, provided and shared services and tools to enhance and facilitate the implementation of the CHM and further improve synergies among biodiversity-related Conventions? (decision V/14) | |
| a) No | |
| b) Yes (please specify services and tools below) | X |
| Further comments on services and tools to enhance and facilitate the implementation of CHM and further improve synergies among biodiversity-related Conventions. | |
| A CHM is not a stand-alone product, data providers and data users are partners. All sectors dealing with biodiversity related issues are part of the implementation team and this will improve synergy among all biodiversity related conventions through the sharing of information. A CHM will be developed in the second phase of the NBSAP Add on activities. | |

Box LVIII.

| |
|--|
| <p>Please elaborate below on the implementation of this article and associated decisions specifically focusing on:</p> <ul style="list-style-type: none"> a) outcomes and impacts of actions taken; b) contribution to the achievement of the goals of the Strategic Plan of the Convention; c) contribution to progress towards the 2010 target; d) progress in implementing national biodiversity strategies and action plans; e) contribution to the achievement of the Millennium Development Goals; f) constraints encountered in implementation. |
| <p>Regional and international collaboration, cooperation and consistency are important in the conservation, management and utilization of biodiversity and in the development of legal policy obligations, to increase markets and for sharing resources and reduce cost.</p> |

Article 19 - Handling of biotechnology and distribution of its benefits

| | |
|--|----------|
| 135. ? On Article 19(1), has your country taken measures to provide for the effective participation in biotechnological research activities by those Contracting Parties which provide the genetic resources for such research? | |
| a) No | X |
| b) No, but potential measures are under review | |
| c) Yes, some measures are in place | |
| d) Yes, comprehensive legislation are in place | |
| e) Yes, comprehensive statutory policy and subsidiary legislation are in place | |
| f) Yes, comprehensive policy and administrative measures are in place | |
| 136. ? On Article 19(2), has your country taken all practicable measures to promote and advance priority access by Parties, on a fair and equitable basis, to the results and benefits arising from biotechnologies based upon genetic resources provided by those Parties? | |
| a) No | |
| b) No, but potential measures are under review | |
| c) Yes, some measures are in place | X |
| d) Yes, comprehensive measures are in place | |

Box LIX.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Botswana has applied the precautionary principle in dealing with biotechnology, as there is still lack of reliable scientific data on biotechnology issues such as long-term effects.

Article 20 – Financial resources

Box LX.

Please describe for each of the following items the quantity of financial resources, both internal and external, that have been utilized, received or provided, as applicable, to implement the Convention on Biological Diversity, on an annual basis, since your country became a Party to the Convention.

| | |
|---|---|
| a) Budgetary allocations by national and local Governments as well as different sectoral ministries | N/A |
| b) Extra-budgetary resources (identified by donor agencies) | N/A |
| c) Bilateral channels (identified by donor agencies) | N/A |
| d) Regional channels (identified by donor agencies) | US\$ (54,000 * 3 + 34,000 * 2) SABSP |
| e) Multilateral channels (identified by donor agencies) | US\$ (359,000 + 91,000) BSAP and ADD-ON |
| f) Private sources (identified by donor agencies) | N/A |
| g) Resources generated through financial instruments, such as charges for use of biodiversity | N/A |

Box LXI.

Please describe in detail below any major financing programmes, such as biodiversity trust funds or specific programmes that have been established in your country.

There is no funding mechanism yet, but government will initiate activities

137. ? On Article 20(1), has your country provided financial support and incentives to those national activities that are intended to achieve the objectives of the Convention?

| | |
|--|----------|
| a) No | |
| b) Yes, incentives only (please provide a list of such incentives below) | |
| c) Yes, financial support only | |
| d) Yes, financial support and incentives (please provide details below) | X |

Further comments on financial support and incentives provided.

The country recognize the need for incentives for biodiversity and the need to mobilize financial resources to use on the conservation of resources and as such policy that are in place facilitate government's support both financial and technical to national activities that focus on the three critical

CBD areas.

The next question (138) is for DEVELOPED COUNTRIES

| | |
|--|--|
| 138. ? On Article 20(2), has your country provided new and additional financial resources to enable developing country Parties to meet the agreed incremental costs to them of implementing measures which fulfill the obligations of the Convention? | |
| a) No | |
| b) Yes (please indicate the amount, on an annual basis, of new and additional financial resources your country has provided) | |
| Further comments on new and additional financial resources provided. | |
| | |

The next question (139) is for DEVELOPING COUNTRIES OR COUNTRIES WITH ECONOMIES IN TRANSITION

| | |
|---|----------|
| 139. ? On Article 20(2), has your country received new and additional financial resources to enable it to meet the agreed full incremental costs of implementing measures which fulfill the obligations of the Convention? | |
| a) No | X |
| b) Yes | |
| 140. ? Has your country established a process to monitor financial support to biodiversity, including support provided by the private sector? (decision V/11) | |
| a) No | |
| b) No, but procedures being established | |
| c) Yes (please provide details below) | X |
| Further comments on processes to monitor financial support to biodiversity, including support provided by the private sector. | |
| All economic activities associated with biodiversity have been integrated into sectoral policies for monitoring in the NBSAP. | |
| 141. ? Has your country considered any measures like tax exemptions in national taxation systems to encourage financial support to biodiversity? (decision V/11) | |
| a) No | X |
| b) No, but exemptions are under development (please provide details below) | |
| c) Yes, exemptions are in place (please provide details below) | |
| Further comments on tax exemptions for biodiversity-related donations. | |
| | |

| | |
|---|----------|
| 142. Has your country reviewed national budgets and monetary policies, including the effectiveness of official development assistance allocated to biodiversity, with particular attention paid to positive incentives and their performance as well as perverse incentives and ways and means for their removal or mitigation? (decision VI/16) | |
| a) No | X |
| b) No, but review is under way | |
| c) Yes (please provide results of review below) | |
| Further comments on review of national budgets and monetary policies, including the effectiveness of official development assistance. | |
| | |

| | |
|--|----------|
| 143. Is your country taking concrete actions to review and further integrate biodiversity considerations in the development and implementation of major international development initiatives, as well as in national sustainable development plans and relevant sectoral policies and plans? (decisions VI/16 and VII/21) | |
| a) No | |
| b) No, but review is under way | |
| c) Yes, in some initiatives and plans (please provide details below) | X |
| d) Yes, in major initiatives and plans (please provide details below) | |
| Further comments on review and integration of biodiversity considerations in relevant initiatives, policies and plans. | |
| The country has reviewed its sectoral policies and plans to determine whether or not there is adequate provision or protection of biological resources, habitat areas and individual species, resources ownership, access to genetic resources, benefit sharing, research data and indigenous knowledge as well as examining international instruments that relate directly or indirectly to biodiversity so as to integrate biodiversity in development initiatives and national sustainable development plans. | |

| | |
|--|----------|
| 144. Is your country enhancing the integration of biological diversity into the sectoral development and assistance programmes? (decision VII/21) | |
| a) No | |
| b) No, but relevant programmes are under development | |
| c) Yes, into some sectoral development and assistance programmes (please provide details below) | X |
| d) Yes, into major sectoral development and assistance programmes (please provide details below) | |
| Further comments on the integration of biodiversity into sectoral development and assistance programmes | |
| Reviews are done to find out whether or not national policies that relate to conservation, management and protection of biodiversity adequately address the issues and whether they have been effectively utilized to protect biodiversity. This has helped the country to enhance the integration of biodiversity into sectoral development for better conservation, management and | |

protection.

The next question (145) is for DEVELOPED COUNTRIES

145. Please indicate with an "X" in the table below in which area your country has provided financial support to developing countries and/or countries with economies in transition. Please elaborate in the space below if necessary.

| A r e a s | Support provided |
|---|------------------|
| a) Undertaking national or regional assessments within the framework of MEA (decision VI/8) | |
| b) <i>In-situ</i> conservation (decision V/16) | |
| c) Enhance national capacity to establish and maintain the mechanisms to protect traditional knowledge (decision VI/10) | |
| d) <i>Ex-situ</i> conservation (decision V/26) | |
| e) Implementation of the Global Strategy for Plant Conservation (decision VI/9) | |
| f) Implementation of the Bonn Guidelines (decision VI/24) | |
| g) Implementation of programme of work on agricultural biodiversity (decision V/5) | |
| h) Preparation of first report on the State of World's Animal Genetic Resources (decision VI/17) | |
| i) Support to work of existing regional coordination mechanisms and development of regional and sub regional networks or processes (decision VI/27) | |
| j) Development of partnerships and other means to provide the necessary support for the implementation of the programme of work on dry and subhumid lands biological diversity (decision VII/2) | |
| k) Financial support for the operations of the Coordination Mechanism of the Global Taxonomy Initiative (decision VII/9) | |
| l) Support to the implementation of the Action Plan on Capacity Building as contained in the annex to decision VII/19 (decision VII/19) | |
| m) Support to the implementation of the programme of work on mountain biological diversity (decision VII/27) | |
| n) Support to the implementation of the programme of work on protected areas (decision VII/28) | |
| o) Support to the development of national indicators (decision VII/30) | |
| p) Others (please specify) | |

Further information on financial support provided to developing countries and countries with economies in transition.

The next question (146) is for DEVELOPING COUNTRIES OR COUNTRIES WITH ECONOMIES IN TRANSITION

146. Please indicate with an "X" in the table below in which areas your country has applied for funds from the Global Environment Facility (GEF), from developed countries and/or from other sources. The same area may have more than one source of financial support. Please elaborate in the space below if necessary.

| Areas | Applied for funds from | | |
|---|------------------------|-----------|-------|
| | GEF | Bilateral | Other |
| a) Preparation of national biodiversity strategies or action plans | X | | |
| b) National capacity self-assessment for implementation of Convention (decision VI/27) | X | | |
| c) Priority actions to implement the Global Taxonomy Initiative (decision V/9) | | | |
| d) <i>In-situ</i> conservation (decision V/16) | | X | |
| e) Development of national strategies or action plans to deal with alien species (decision VI/23) | | | |
| f) <i>Ex-situ</i> conservation, establishment and maintenance of <i>Ex-situ</i> conservation facilities (decision V/26) | | X | |
| g) Projects that promote measures for implementing Article 13 (Education and Public Awareness) (decision VI/19) | | | |
| h) Preparation of national reports (decisions III/9, V/19 and VI/25) | X | | |
| i) Projects for conservation and sustainable use of inland water biological diversity (decision IV/4) | | | X |
| j) Activities for conservation and sustainable use of agricultural biological diversity (decision V/5) | X | X | X |
| k) Implementation of the Cartagena Protocol on Biosafety (decision VI/26) | X | | |
| l) Implementation of the Global Taxonomy Initiative | - | | |
| m) Implementation of the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity | - | | |
| n) Others (please specify) | - | | |

Further information on application for financial support.

The Global Environmental Facility (GEF) small grants has been extended to a number of programmes on the relevance to biodiversity issues, while government through the Ministry of finance has been funding stakeholder projects through the annual budgetary process for whatever CBD related activities to be undertaken by respective institution within the government system.

Box LXII .

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

The implementation of this article depends on the goodwill of various international funding agencies such as GEF. Government funds projects for respective institutions within the Government system through the budgetary process for each CBD related activity to be undertaken by such institution provided it's in the annual plan. Only after the incorporation of the NBSAP into the National Development Planning process will the funding allocated to CBD implementation will then become clearer.

D. THEMATIC AREAS

147. Please use the scale indicated below to reflect the level of challenges faced by your country in implementing the thematic programmes of work of the Convention (marine and coastal biodiversity, agricultural biodiversity, forest biodiversity, inland waters biodiversity, dry and sub-humid lands and mountain biodiversity).

| | |
|----------------------|--|
| 3 = High Challenge | 1 = Low Challenge |
| 2 = Medium Challenge | 0 = Challenge has been successfully overcome |
| N/A = Not applicable | |

| Challenges | Programme of Work | | | | | |
|---|-------------------|--------|--------------------|------------------------|------------------------|----------|
| | Agricultural | Forest | Marine and coastal | Inland water ecosystem | Dry and subhumid lands | Mountain |
| a) Lack of political will and support | 0 | 1 | | 0 | 1 | |
| b) Limited public participation and stakeholder involvement | 1 | 1 | | 0 | 1 | |
| c) Lack of main-streaming and integration of biodiversity issues into other sectors | 1 | 2 | | 1 | 1 | |
| d) Lack of precautionary and proactive measures | 2 | 2 | | 3 | 2 | |

| | | | | | | |
|---|---|---|--|---|---|--|
| e) Inadequate capacity to act, caused by institutional weakness | 2 | 3 | | 3 | 2 | |
| f) Lack of transfer of technology and expertise | 2 | 2 | | 2 | 3 | |
| g) Loss of traditional knowledge | 3 | 3 | | 3 | 3 | |
| h) Lack of adequate scientific research capacities to support all the objectives | 2 | 3 | | 2 | 3 | |
| i) Lack of accessible knowledge and information | 2 | 3 | | 2 | 3 | |
| j) Lack of public education and awareness at all levels | 1 | 1 | | 1 | 1 | |
| k) Existing scientific and traditional knowledge not fully utilized | 2 | 2 | | 2 | 2 | |
| l) Loss of biodiversity and the corresponding goods and services it provides not properly understood and documented | 2 | 2 | | 2 | 2 | |
| m) Lack of financial, human, technical resources | 2 | 2 | | 2 | 2 | |
| n) Lack of economic incentive measures | 2 | 3 | | 2 | 3 | |
| o) Lack of benefit-sharing | 2 | 2 | | 2 | 3 | |
| p) Lack of synergies at national and international levels | 3 | 3 | | 3 | 3 | |
| q) Lack of horizontal cooperation among stakeholders | 2 | 2 | | 2 | 2 | |
| r) Lack of effective partnerships | 3 | 3 | | 3 | 3 | |
| s) Lack of engagement of scientific community | 2 | 2 | | 2 | 2 | |
| t) Lack of appropriate policies and laws | 2 | 3 | | 2 | 3 | |
| u) Poverty | 3 | 2 | | 3 | 3 | |
| v) Population pressure | 2 | 2 | | 2 | 1 | |
| w) Unsustainable consumption and production patterns | 2 | 2 | | 1 | 2 | |
| x) Lack of capacities for local communities | 2 | 2 | | 2 | 2 | |
| y) Lack of knowledge and practice of ecosystem-based approaches to management | 3 | 3 | | 3 | 3 | |

| | | | | | | |
|--|---|---|--|---|---|--|
| z) Weak law enforcement capacity | 3 | 3 | | 3 | 3 | |
| aa) Natural disasters and environmental change | 3 | 2 | | 2 | 2 | |
| bb) Others (please specify) | | | | | | |

Inland water ecosystems

| 148. Has your country incorporated the objectives and relevant activities of the programme of work into the following and implemented them? (decision VII/4) | | | | |
|--|----|--|---------------------------------------|-----|
| Strategies, policies, plans and activities | No | Yes, partially, integrated but not implemented | Yes, fully integrated and implemented | N/A |
| a) Your biodiversity strategies and action plans | X | | | |
| b) Wetland policies and strategies | X | | | |
| c) Integrated water resources management and water efficiency plans being developed in line with paragraph 25 of the Plan of Implementation of the World Summit on Sustainable Development | | X | | |
| d) Enhanced coordination and cooperation between national actors responsible for inland water ecosystems and biological diversity | | X | | |
| Further comments on incorporation of the objectives and activities of the programme of work | | | | |
| Some activities and objectives in the NBSAP are in line with the programme of work e.g. Objective 3 Sustainable Use of wetlands ecosystems and Objective 5.6 Effective management invasive species. National Water Master Plan is being revised elements of water efficiency will be incorporated. | | | | |

| 149. Has your country identified priorities for each activity in the programme of work, including timescales, in relation to outcome oriented targets? (decision VII/4) | |
|--|---|
| a) No | X |
| b) Outcome oriented targets developed but priority activities not developed | |
| c) Priority activities developed but not outcome oriented targets | |
| d) Yes, comprehensive outcome oriented targets and priority activities developed | |
| Further comments on the adoption of outcome oriented targets and priorities for activities, including providing a list of targets (if developed). | |
| The NBSAP has just been developed and so integration is still on-going. The development of the NBSAP has been a priority to assist Botswana to develop a biodiversity framework which in turn has helped to set priorities in biodiversity conservation. With this framework in place it will be possible to | |

integrate the different programmes of work.

150. Is your country promoting synergies between this programme of work and related activities under the Ramsar Convention as well as the implementation of the Joint Work Plan (CBD-Ramsar) at the national level? (decision VII/4)

| | |
|--|---|
| a) Not applicable (not Party to Ramsar Convention) | |
| b) No | X |
| c) No, but potential measures were identified for synergy and joint implementation | |
| d) Yes, some measures taken for joint implementation (please specify below) | |
| e) Yes, comprehensive measures taken for joint implementation (please specify below) | |

Further comments on the promotion of synergies between the programme of work and related activities under the Ramsar Convention as well as the implementation of the Joint Work Plan (CBD-Ramsar) at the national level.

This has not been done yet but it will be relatively simple to achieve as the National Focal Point for the Ramsar Convention and the CBD Focal Point are the same. This will make promoting synergies easier.

151. Has your country taken steps to improve national data on: (decision VII/4)

| Issues | Yes | No | No, but development is under way |
|---|-----|----|----------------------------------|
| a) Goods and services provided by inland water ecosystems? | | | X |
| b) The uses and related socioeconomic variables of such goods and services? | | | X |
| c) Basic hydrological aspects of water supply as they relate to maintaining ecosystem function? | | | X |
| d) Species and all taxonomic levels? | | | X |
| e) On threats to which inland water ecosystems are subjected? | | | X |

Further comments on the development of data sets, in particular a list of data sets developed in case you have replied "YES" above.

Okavango Delta Management Plan's goal is to integrate resource management of the delta.

152. Has your country promoted the application of the guidelines on the rapid assessment of the biological diversity of inland water ecosystems? (decision VII/4)

| | |
|--|---|
| a) No, the guidelines have not been reviewed | X |
| b) No, the guidelines have been reviewed and found inappropriate | |
| c) Yes, the guidelines have been reviewed and application/promotion is | |

| | |
|---|--|
| pending | |
| d) Yes, the guidelines promoted and applied | |
| Further comments on the promotion and application of the guidelines on the rapid assessment of the biological diversity of inland water ecosystems. | |
| | |

Box LXIII.

Please elaborate below on the implementation of this programme of work and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Botswana has been developing the NBSAP which is to be used as a framework for biodiversity conservation and sustainable use and so has not had the capacity to undertake the programme of work. Now however, it is expected that the programme of work will be carried out.

Marine and coastal biological diversity
General

| | |
|--|--|
| 153. Do your country's strategies and action plans include the following? Please use an "X" to indicate your response. (decisions II/10 and IV/15) | |
| a) Developing new marine and coastal protected areas | |
| b) Improving the management of existing marine and coastal protected areas | |
| c) Building capacity within the country for management of marine and coastal resources, including through educational programmes and targeted research initiatives (if yes, please elaborate on types of initiatives in the box below) | |
| d) Instituting improved integrated marine and coastal area management (including catchments management) in order to reduce sediment and nutrient loads into the marine environment | |
| e) Protection of areas important for reproduction, such as spawning and nursery areas | |
| f) Improving sewage and other waste treatment | |
| g) Controlling excessive fishing and destructive fishing practices | |
| h) Developing a comprehensive oceans policy (if yes, please indicate current stage of development in the box below) | |
| i) Incorporation of local and traditional knowledge into management of marine and coastal resources (if yes, please elaborate on types of management arrangements in the box below) | |
| j) Others (please specify below) | |

| | |
|---|--|
| k) Not applicable | |
| Please elaborate on the above activities and list any other priority actions relating to conservation and sustainable use of marine and coastal biodiversity. | |
| | |

Implementation of Integrated Marine and Coastal Area Management

| | |
|--|--|
| 154. Has your country established and/or strengthened institutional, administrative and legislative arrangements for the development of integrated management of marine and coastal ecosystems? | |
| a) No | |
| b) Early stages of development | |
| c) Advanced stages of development | |
| d) Arrangements in place (please provide details below) | |
| e) Not applicable | |
| Further comments on the current status of implementation of integrated marine and coastal area management. | |
| | |

| | |
|--|--|
| 155. Has your country implemented ecosystem-based management of marine and coastal resources, for example through integration of coastal management and watershed management, or through integrated multidisciplinary coastal and ocean management? | |
| a) No | |
| b) Early stages of development | |
| c) Advanced stages of development | |
| d) Arrangements in place (please provide details below) | |
| e) Not applicable | |
| Further comments on the current status of application of the ecosystem to management of marine and coastal resources. | |
| | |

Marine and Coastal Living Resources

| | |
|---|--|
| 156. Has your country identified components of your marine and coastal ecosystems, which are critical for their functioning, as well as key threats to those ecosystems? | |
| a) No | |
| b) Plans for a comprehensive assessment of marine and coastal ecosystems are in place (please provide details below) | |
| c) A comprehensive assessment is currently in progress | |
| d) Critical ecosystem components have been identified, and management plans for them are being developed (please provide details below) | |

| | |
|---|--|
| e) Management plans for important components of marine and coastal ecosystems are in place (please provide details below) | |
| f) Not applicable | |
| Further comments on the current status of assessment, monitoring and research relating to marine and coastal ecosystems, as well as key threats to them | |
| | |

| 157. Is your country undertaking the following activities to implement the Convention's work plan on coral reefs? Please use an "X" to indicate your response. | | | | |
|---|---------------------------------------|---------------------------------------|------------------------------|-----------------------|
| Activities | Not implemented nor a priority | Not implemented but a priority | Currently implemented | Not applicable |
| a) Ecological assessment and monitoring of reefs | | | | |
| b) Socio-economic assessment and monitoring of communities and stakeholders | | | | |
| c) Management, particularly through application of integrated coastal management and marine and coastal protected areas in coral reef environments | | | | |
| d) Identification and implementation of additional and alternative measures for securing livelihoods of people who directly depend on coral reef services | | | | |
| e) Stakeholder partnerships, community participation programmes and public education campaigns | | | | |
| f) Provision of training and career opportunities for marine taxonomists and ecologists | | | | |
| g) Development of early warning systems of coral bleaching | | | | |
| h) Development of a rapid response capability to document coral bleaching and mortality | | | | |
| i) Restoration and rehabilitation of degraded coral reef habitats | | | | |
| j) Others (please specify below) | | | | |

Please elaborate on ongoing activities.

Marine and Coastal Protected Areas

158. Which of the following statements can best describe the current status of marine and coastal protected areas in your country? Please use an "X" to indicate your response.

- | | |
|---|--|
| a) Marine and coastal protected areas have been declared and gazetted (please indicate below how many) | |
| b) Management plans for these marine and coastal protected areas have been developed with involvement of all stakeholders | |
| c) Effective management with enforcement and monitoring has been put in place | |
| d) A national system or network of marine and coastal protected areas is under development | |
| e) A national system or network of marine and coastal protected areas has been put in place | |
| f) The national system of marine and coastal protected areas includes areas managed for purpose of sustainable use, which may allow extractive activities | |
| g) The national system of marine and coastal protected areas includes areas which exclude extractive uses | |
| h) The national system of marine and coastal protected areas is surrounded by sustainable management practices over the wider marine and coastal environment. | |
| i) Other (please describe below) | |
| j) Not applicable | |

Further comments on the current status of marine and coastal protected areas.

Mariculture

159. Is your country applying the following techniques aimed at minimizing adverse impacts of mariculture on marine and coastal biodiversity? Please check all that apply.

- | | |
|--|--|
| a) Application of environmental impact assessments for mariculture developments | |
| b) Development and application of effective site selection methods in the framework of integrated marine and coastal area management | |
| c) Development of effective methods for effluent and waste control | |
| d) Development of appropriate genetic resource management plans at the hatchery level | |
| e) Development of controlled hatchery and genetically sound reproduction methods in order to avoid seed collection from nature. | |

| | | |
|--|--|--|
| f) | If seed collection from nature cannot be avoided, development of environmentally sound practices for spat collecting operations, including use of selective fishing gear to avoid by-catch | |
| g) | Use of native species and subspecies in mariculture | |
| h) | Implementation of effective measures to prevent the inadvertent release of mariculture species and fertile polypoids. | |
| i) | Use of proper methods of breeding and proper places of releasing in order to protect genetic diversity | |
| j) | Minimizing the use of antibiotics through better husbandry techniques | |
| k) | Use of selective methods in commercial fishing to avoid or minimize by-catch | |
| l) | Considering traditional knowledge, where applicable, as a source to develop sustainable mariculture techniques | |
| m) | Not applicable | |
| Further comments on techniques that aim at minimizing adverse impacts of mariculture on marine and coastal biodiversity. | | |
| | | |

Alien Species and Genotypes

| | | |
|---|--|--|
| 160. Has your country put in place mechanisms to control pathways of introduction of alien species in the marine and coastal environment? Please check all that apply and elaborate on types of measures in the space below. | | |
| a) | No | |
| b) | Mechanisms to control potential invasions from ballast water have been put in place (please provide details below) | |
| c) | Mechanisms to control potential invasions from hull fouling have been put in place (please provide details below) | |
| d) | Mechanisms to control potential invasions from aquaculture have been put in place (please provide details below) | |
| e) | Mechanisms to control potential invasions from accidental releases, such as aquarium releases, have been put in place (please provide details below) | |
| f) | Not applicable | |
| Further comments on the current status of activities relating to prevention of introductions of alien species in the marine and coastal environment, as well as any eradication activities. | | |
| | | |

Box LXIV.

Please elaborate below on the implementation of this programme of work and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

| |
|--|
| |
|--|

Agricultural biological diversity

161. Has your country developed national strategies, programmes and plans that ensure the development and successful implementation of policies and actions that lead to the conservation and sustainable use of agrobiodiversity components? (decisions III/11 and IV/6)

| | |
|--|---|
| a) No | |
| b) No, but strategies, programmes and plans are under development | X |
| c) Yes, some strategies, programmes and plans are in place (please provide details below) | |
| d) Yes, comprehensive strategies, programmes and plans are in place (please provide details below) | |

Further comments on agrobiodiversity components in national strategies, programmes and plans.

The NBSAP Objective 2.6 and Objective 3.8 deal with the conservation and sustainable use of agrobiodiversity. This is good because previously there has been no coordinated approach to agrobiodiversity.

162. Has your country identified ways and means to address the potential impacts of genetic use restriction technologies on the *In-situ* and *Ex-situ* conservation and sustainable use, including food security, of agricultural biological diversity? (decision V/5)

| | |
|--|---|
| a) No | X |
| b) No, but potential measures are under review | |
| c) Yes, some measures identified (please provide details below) | |
| d) Yes, comprehensive measures identified (please provide details below) | |

Further information on ways and means to address the potential impacts of genetic use restriction technologies on the *In-situ* and *Ex-situ* conservation and sustainable use of agricultural biodiversity.

| |
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Annex to decision V/5 - Programme of work on agricultural biodiversity

| Programme element 1 – Assessment | |
|--|---|
| 163. Has your country undertaken specific assessments of components of agricultural biodiversity such as on plant genetic resources, animal genetic resources, pollinators, pest management and nutrient cycling? | |
| a) No | |
| b) Yes, assessments are in progress (please specify components below) | X |
| c) Yes, assessments completed (please specify components and results of assessments below) | |
| Further comments on specific assessments of components of agricultural biodiversity. | |
| <p>Under the auspices of IPGRI some assessments of plant genetic resources were undertaken. Also Farm Animal Genetic Resources were assessed as part of the State of the Worlds Farm Animal Genetic Resources. Currently the Millenium Seed Bank project is carrying out collections and assessments of wild plants that are endemic, endangered and threatened. The Department of Agriculture has a programme where they collect, assess and store the seeds of wild crop relatives. A community seed bank project at the NGO Permaculture Trust of Botswana is encouraging the collection, distribution and use of traditional varieties of crops. They collected the following: sorghum 25, maize 6, pearl millet 6, sweet reed 8, water melon 12, melon 11, mixed cowpeas 11, bambara nuts 8, groundnuts 8. A total of 98 collections is found in the seed banl.</p> | |

| | |
|--|---|
| 164. Is your country undertaking assessments of the interactions between agricultural practices and the conservation and sustainable use of the components of biodiversity referred to in Annex I of the Convention (e.g. ecosystems and habitats; species and communities; genomes and genes of social, scientific or economic importance)? | |
| a) No | |
| b) Yes, assessments are under way | X |
| c) Yes, some assessments completed (please provide details below) | |
| d) Yes, comprehensive assessments completed (please provide details below) | |
| Further comments on assessment of biodiversity components (e.g. ecosystems and habitats; species and communities; genomes and genes of social, scientific or economic importance). | |
| <p>Assessments of wild relatives of crops have been undertaken by the Department of Agricultural Research while NGOs such as Veld Products Research and Development and Thusano Lefatsheng have undertaken assessments of some species of medicinal and economic value. Assessments of agricultural ecosystems have been done to some extent. Agricultural practices and ecosystem interactions have not been addressed.</p> | |

| | |
|--|---|
| 165. Has your country carried out an assessment of the knowledge, innovations and practices of farmers and indigenous and local communities in sustaining agricultural biodiversity and agro -ecosystem services for food production and food security? | |
| a) No | |
| b) Yes, assessment is under way | X |
| c) Yes, assessment completed (please specify where information can be retrieved below) | |
| Further comments on assessment of the knowledge, innovations and practices of farmers and | |

indigenous and local communities.

Permaculture Trust Botswana, a small NGO has been working with farmers' groups for information exchange and seed collection. The NGO is encouraging the use of traditional varieties of crops. More work needs to be done in this area though. Innovations and practices will be the next level to be done by the NGO.

166. Has your country been monitoring an overall degradation, status quo or restoration/rehabilitation of agricultural biodiversity since 1993 when the Convention entered into force?

| | |
|---|---|
| a) No | X |
| b) Yes, no change found (status quo) | |
| c) Yes, overall degradation found (please provide details below) | |
| d) Yes, overall restoration or rehabilitation observed (please provide details below) | |

Further comments on observations.

Until recently with the NBSAP overall biodiversity management has been uncoordinated but this is expected to change with the NBSAP implementation.

Programme element 2 - Adaptive management

167. Has your country identified management practices, technologies and policies that promote the positive, and mitigate the negative, impacts of agriculture on biodiversity, and enhance productivity and the capacity to sustain livelihoods?

| | |
|--|---|
| a) No | X |
| b) No, but potential practices, technologies and policies being identified | |
| c) Yes, some practices, technologies and policies identified (please provide details below) | |
| d) Yes, comprehensive practices, technologies and policies identified (please provide details below) | |

Further comments on identified management practices, technologies and policies.

Objective 2.6.5 of the NBSAP identifies this as an important aspect to be attended to.

Programme element 3 - Capacity-building

168. Has your country increased the capacities of farmers, indigenous and local communities, and their organizations and other stakeholders, to manage sustainable agricultural biodiversity and to develop strategies and methodologies for *In-situ* conservation, sustainable use and management of agricultural biological diversity?

| | |
|--|---|
| a) No | |
| b) Yes (please specify area/component and target groups with increased capacity) | X |

Further comments on increased capacities of farmers, indigenous and local communities, and their organizations and other stakeholders.

The Small Stock Breeders Association is attempting to conserve the traditional breeds of goats and sheep in Botswana. Also, Permaculture Trust Botswana is involved in a small scale project that aims at involving the farmer in farm scale conservation of agrobiodiversity. Enormous interest was

generated by this project with different varieties of crops being grown and exchanged.

169. Has your country put in place operational mechanisms for participation by a wide range of stakeholder groups to develop genuine partnerships contributing to the implementation of the programme of work on agricultural biodiversity?

| | |
|--|---|
| a) No | |
| b) No, but potential mechanisms being identified | X |
| c) No, but mechanisms are under development | |
| d) Yes, mechanisms are in place | |

170. Has your country improved the policy environment, including benefit-sharing arrangements and incentive measures, to support local-level management of agricultural biodiversity?

| | |
|--|---|
| a) No | |
| b) No, but some measures and arrangements being identified | X |
| c) No, but measures and arrangements are under development | |
| d) Yes, measures and arrangements are being implemented (please specify below) | |

Further comments on the measures taken to improve the policy environment.

National Master Plan For Arable Agriculture and Dairy Development is a plan intended to streamline arable agriculture and dairy development programmes to address these policy objectives: improvement in food security at both household and national level; diversification of the agricultural production base; increased agricultural output and productivity; increase employment opportunities for fast growing labour force; provision of a secure and productive environment for agricultural producers and conservation of scarce agricultural and land resources for future generations. This plan targets both traditional and commercial farmers.

Programme element 4 – Mainstreaming

171. Is your country mainstreaming or integrating national plans or strategies for the conservation and sustainable use of agricultural biodiversity in sectoral and cross-sectoral plans and programmes?

| | |
|--|---|
| a) No | |
| b) No, but review is under way | |
| c) No, but potential frameworks and mechanisms are being identified | X |
| d) Yes, some national plans or strategies mainstreamed and integrated into some sectoral plans and programmes (please provide details below) | |
| e) Yes, some national plans or strategies mainstreamed into major sectoral plans and programmes (please provide details below) | |

Further comments on mainstreaming and integrating national plans or strategies for the conservation and sustainable use of agricultural biodiversity in sectoral and cross-sectoral plans and programmes.

The NBSAP in several objectives identifies this as important e.g. Objective 2.6 Conservation of Agricultural Biodiversity and Objective 3.8 Sustainable use of agrobiodiversity.

| | |
|--|---|
| 172. Is your country supporting the institutional framework and policy and planning mechanisms for the mainstreaming of agricultural biodiversity in agricultural strategies and action plans, and its integration into wider strategies and action plans for biodiversity? | |
| a) No | X |
| b) Yes, by supporting institutions in undertaking relevant assessments | |
| c) Yes, by developing policy and planning guidelines | |
| d) Yes, by developing training material | |
| e) Yes, by supporting capacity-building at policy, technical and local levels | |
| f) Yes, by promoting synergy in the implementation of agreed plans of action and between ongoing assessment and intergovernmental processes. | |
| Further comments on support for institutional framework and policy and planning mechanisms. | |
| | |

| | |
|--|---|
| 173. In the case of centers of origin in your country, is your country promoting activities for the conservation, on farm, <i>In-situ</i> , and <i>Ex-situ</i> , of the variability of genetic resources for food and agriculture, including their wild relatives? | |
| a) No | |
| b) Yes (please provide details below) | X |
| Further comments on of the conservation of the variability of genetic resources for food and agriculture in their center of origin. | |
| Botswana is a centre of diversity for the <i>Vigna</i> species and a secondary centre of diversity for the <i>Citrillus</i> species and work is being done to preserve these species ex-situ. The institutions involved are Agricultural Research; Botanical gardens and Millenium seedbank Project. | |

Box LXV.

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|---|
| Please provide information concerning the actions taken by your country to implement the Plan of Action for the International Initiative for the Conservation and Sustainable Use of Pollinators. |
| No action |

Box LXVI.

| |
|---|
| Please elaborate below on the implementation of this programme of work and associated decisions specifically focusing on: |
| <ul style="list-style-type: none"> a) outcomes and impacts of actions taken; b) contribution to the achievement of the goals of the Strategic Plan of the Convention; c) contribution to progress towards the 2010 target; d) progress in implementing national biodiversity strategies and action plans; e) contribution to the achievement of the Millennium Development Goals; f) constraints encountered in implementation. |
| a) There has been great enthusiasm for the Permaculture's project; more information has been generated by the different projects undertaken to assess different components of agricultural biodiversity. |
| b) Cooperation amongst stakeholders has been encouraged in most of the projects and programmes |

undertaken. With the NBSAP in place and contributing to most of the thematic areas the contribution to the Strategic Plan will soon be increasing.

c) Because the NBSAP was completed after most of the contemporary issues in the CBD were agreed, it takes into account the 2010 Target and hence most of the targets will be undertaken within the framework of the NBSAP.

d) The NBSAP has just been completed and so implementation will soon begin.

e) Lack of information and capacity are constraints. Also uncoordinated approach to biodiversity conservation and sustainable use and the low priority that other sectors place on environmental and biodiversity issues.

Forest Biological Diversity

General

| | |
|--|---|
| 174. Has your country incorporated relevant parts of the work programme into your national biodiversity strategies and action plans and national forest programmes? | |
| a) No | X |
| b) Yes, please describe the process used | |
| c) Yes, please describe constraints/obstacles encountered in the process | |
| d) Yes, please describe lessons learned | |
| e) Yes, please describe targets for priority actions in the programme of work | |
| Further comments on the incorporation of relevant parts of the work programme into your NBSAP and forest programmes | |
| Some objectives in the NBSAP are relevant to the programme and address some of the issues in the programme of work e.g. Objective 2.2 a comprehensive protected area network and Objective 3.4 Sustainable use of fuelwood and forest resources. | |

Box LXVII.

| |
|--|
| Please indicate what recently applied tools (policy, planning, management, assessment and measurement) and measures, if any, your country is using to implement and assess the programme of work. Please indicate what tools and measures would assist the implementation. |
| The programme of work has not been implemented yet so there has been no assessment. |

Box LXVIII.

| |
|---|
| Please indicate to what extent and how your country has involved indigenous and local communities, and respected their rights and interests, in implementing the programme of work. |
| The programme of work has not been implemented yet so little has been done on this. |

Box LXIX.

| |
|--|
| Please indicate what efforts your country has made towards capacity building in human and capital resources for the implementation of the programme of work. |
| Little has been done as the programme of work has not been implemented. |

Box LXX.

Please indicate how your country has collaborated and cooperated (e.g., south-south, north-south, south-north, north-north) with other governments, regional or international organizations in implementing the programme of work. Please also indicate what are the constraints and/or needs identified.

No collaboration.

Expanded programme of work on forest biological diversity

| Programme element 1 – Conservation, sustainable use and benefit-sharing | | |
|---|---|---|
| 175. Is your country applying the ecosystem approach to the management of all types of forests? | | |
| a) No (please provide reasons below) | X | |
| b) No, but potential measures being identified (please provide details below) | | |
| c) Yes (please provide details below) | | |
| Comments on application of the ecosystem approach to management of forests (including effectiveness of actions taken, lessons learned, impact on forest management, constraints, needs, tools, and targets). | | |
| There is no ecosystem map, the vegetation map which could be used is outdated. Until the map is produced it will not be possible to apply the ecosystem approach. | | |
| 176. Has your country undertaken measures to reduce the threats to, and mitigate its impacts on forest biodiversity? | | |
| Options | X | Details |
| a) Yes | X | Please specify below the major threats identified in relation to each objective of goal 2 and the measures undertaken to address priority actions |
| b) No | | Please provide reasons below |
| | | Focus has been on implementation of the NBSAP. |
| Further comments on measures to reduce threats to, and mitigate the impacts of threatening processes on forest biodiversity (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets). | | |
| Fire breaks have been constructed, there is a forestry vegetation inventory, management plans and monitoring has been carried out. | | |

| 177. Is your country undertaking any measures to protect, recover and restore forest biological diversity? | | |
|--|---|---|
| Options | X | Details |
| a) Yes | X | Please identify priority actions in relation to each objective of goal 3 and describe measures undertaken to address these priorities Maintenance of fire breaks, public education |
| b) No | | Please provide reasons below |
| Further comments on measures to protect, recover and restore forest biological diversity (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets). | | |
| Undertaking afforestation activities. | | |

| 178. Is your country undertaking any measures to promote the sustainable use of forest biological diversity? | | |
|---|---|--|
| Options | X | Details |
| a) Yes | X | Please specify priority actions in relation to each objective of goal 4 and describe measures undertaken to address these priorities Public education and legislative instruments to curb the harvesting of fuel wood |
| b) No | | Please provide reasons below |
| Further comments on the promotion of the sustainable use of forest biological diversity (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets). | | |
| Non consumptive uses e.g. ecotourism are encouraged to promote sustainable use. | | |

| 179. Is your country undertaking any measures to promote access and benefit-sharing of forest genetic resources? | | |
|--|---|---|
| Options | X | Details |
| a) Yes | X | Please specify priority actions in relation to each objective of goal 5 and describe measures undertaken Tree seeds are exchanged between Southern African Development Community (SADC) countries. Some genetic materials are exported in a way that there is exchange of information. |

| | | |
|---|--|------------------------------|
| b) No | | Please provide reasons below |
| Further comments on the promotion of access and benefit-sharing of forest genetic resources. (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets) | | |
| | | |

| Programme element 2 – Institutional and socio-economic enabling environment | | |
|---|---|---|
| 180. Is your country undertaking any measures to enhance the institutional enabling environment for the conservation and sustainable use of forest biological diversity, including access and benefit-sharing? | | |
| Options | X | Details |
| a) Yes | X | <p>Please identify priority actions in relation to each objective of Goal 1 and describe measures undertaken to address these priorities</p> <p>Review of policies to address sustainable use, training programmes on forestry management. Community Based Natural Resources Management draft policy addresses issues on sustainable use.</p> |
| b) No | | Please provide reasons below |
| Further comments on the enhancement of the institutional enabling environment for the conservation and sustainable use of forest biological diversity, including access and benefit-sharing (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets). | | |
| | | |

| 181. Is your country undertaking any measures to address socio-economic failures and distortions that lead to decisions that result in loss of forest biological diversity? | | |
|--|---|---|
| Options | X | Details |
| a) Yes | X | <p>Please identify priority actions in relation to each objective of Goal 2 and describe measures undertaken to address these priorities</p> <p>Imposing a moratorium on the harvesting of forest biological resources in 1991. Community Development Trusts used to monitor use of given vegetative resources.</p> |
| b) No | | Please provide reasons below |
| | | |

Further comments on review of socio-economic failures and distortions that lead to decisions that result in loss of forest biological diversity (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).

182. Is your country undertaking any measures to increase public education, participation and awareness in relation to forest biological diversity?

| Options | X | Details |
|---------|---|--|
| a) Yes | X | Please identify priority actions in relation to each objective of goal 3 and describe measures undertaken to address these priorities Public education is done on environment though it does not address forest biodiversity in particular. |
| b) No | | Please provide reasons below |

Further comments on measures to increase public education, participation and awareness in relation to forest biological diversity (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).

Programme element 3 – Knowledge, assessment and monitoring

183. Is your country undertaking any measures to characterize forest ecosystems at various scales in order to improve the assessment of the status and trends of forest biological diversity?

| Options | X | Details |
|---------|---|--|
| a) Yes | X | Please identify priority actions in relation to each objective of Goal 1 and describe measures undertaken to address these priorities Inventories can be classified into ecosystems and monitoring programmes are in place. |
| b) No | | Please provide reasons below |

Further comments on characterization of forest ecosystems at various scales (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).

| 184. Is your country undertaking any measures to improve knowledge on, and methods for, the assessment of the status and trends of forest biological diversity? | | |
|--|---|---|
| Options | X | Details |
| a) Yes | X | <p>Please identify priority actions in relation to each objective of goal 2 and describe measures undertaken to address these priorities</p> <p>In state land resource stock and flows are monitored but it is difficult to monitor outside state land.</p> |
| b) No | | <p>Please provide reasons below</p> |
| <p>Further comments on improvement of knowledge on and methods for the assessment of the status and trends (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).</p> | | |

| 185. Is your country undertaking any measures to improve the understanding of the role of forest biodiversity and ecosystem functioning? | | |
|--|---|---|
| Options | X | Details |
| a) Yes | X | <p>Please identify priority actions in relation to each objective of goal 3 and describe measures undertaken to address these priorities</p> <p>By providing publicity measures and out reach programmes.</p> |
| b) No | | <p>Please provide reasons below</p> |
| <p>Further comments on the improvement of the understanding of the role of forest biodiversity and ecosystem functioning (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).</p> | | |

| 186. Is your country undertaking any measures at national level to improve the infrastructure for data and information management for accurate assessment and monitoring of global forest biodiversity? | | |
|---|---|---|
| Options | X | Details |
| a) Yes | | Please identify priority actions in relation to each objective of goal 4 and describe measures undertaken to address these priorities |
| b) No | X | Please provide reasons below National Forestry Inventory Plan is being developed. |
| Further comments on the improvement of the infrastructure for data and information management (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets). | | |
| | | |

Box LXXI.

| | |
|---|--|
| Please elaborate below on the implementation of this programme of work and associated decisions specifically focusing on: | |
| <ul style="list-style-type: none"> a) outcomes and impacts of actions taken; b) contribution to the achievement of the goals of the Strategic Plan of the Convention; c) contribution to progress towards the 2010 target; d) progress in implementing national biodiversity strategies and action plans; e) contribution to the achievement of the Millennium Development Goals; f) constraints encountered in implementation. | |
| NBSAP has just been completed it is not yet implemented. | |

Biological diversity of dry and sub-humid lands

| | |
|---|---|
| 187. Is your country supporting scientifically, technically and financially, at the national and regional levels, the activities identified in the programme of work? (decisions V/23 and VII/2) | |
| a) No | X |
| b) Yes (please provide details below) | |
| Further comments on scientific, technical and financial support, at the national and regional levels, to the activities identified in the programme of work. | |
| | |
| 188. Has your country integrated actions under the programme of work of dry and sub-humid lands into its national biodiversity strategies and action plans or the National Action Programme (NAP) of the UNCCD? (decisions V/23, VI/4 and VII/2) | |
| a) No | |

| | |
|---|---|
| b) Yes (please provide details below) | X |
| Further comments on actions under the programme of work of dry and sub-humid lands integrated into national biodiversity strategies and action plans or the National Action Programme (NAP) of the UNCCD. | |
| Several targets have been included in the NBSAP such as Objective 3.5 Rangeland/ dryland biodiversity maintained through sustainable use of rangelands. | |

| | |
|--|---|
| 189. Has your country undertaken measures to ensure synergistic/collaborative implementation of the programme of work between the national UNCCD process and other processes under related environmental conventions? (decisions V/23, VI/4 and VII/2) | |
| a) No | |
| b) Yes, some linkages established (please provide details below) | X |
| c) Yes, extensive linkages established (please provide details below) | |
| Further comments on the measures to ensure the synergistic/collaborative implementation of the programme of work between the national UNCCD processes and other processes under related environmental conventions. | |
| The National Action Plan (NAP) of the UNCCD was used in developing in the NBSAP and so duplication of efforts has been minimised. Many synergies were identified in the process. The NBSAP also includes many elements from the National Climate Change Communication for the UNFCC. | |

| Programme Part A: Assessment | |
|---|---|
| 190. Has your country assessed and analyzed information on the state of dryland biological diversity and the pressures on it, disseminated existing knowledge and best practices, and filled knowledge gaps in order to determine adequate activities? (Decision V/23, Part A: Assessment, Operational objective, activities 1 to 6) | |
| a) No | X |
| b) No, but assessment is ongoing | |
| c) Yes, some assessments undertaken (please provide details below) | |
| d) Yes, comprehensive assessment undertaken (please provide details below) | |
| Further comments on the relevant information on assessments of the status and trends and dissemination of existing knowledge and best practices. | |
| Assessments specific to this programme have not been carried out. | |

| Programme Part B: Targeted Actions | |
|---|---|
| 191. Has your country taken measures to promote the conservation and sustainable use of the biological diversity of dry and sub-humid lands and the fair and equitable sharing of the benefits arising out of the utilization of its genetic resources, and to combat the loss of biological diversity in dry and sub-humid lands and its socio-economic consequences? (part B of annex I of decision V/23, activities 7 to 9) | |
| a) No | |
| b) Yes, some measures taken (please provide details below) | X |
| c) Yes, many measures taken (please provide details below) | |

Further comments on the measures taken to promote the conservation and sustainable use of the biological diversity of dry and sub-humid lands and the fair and equitable sharing of the benefits arising out of the utilization of its genetic resources, and to combat the loss of biological diversity in dry and sub-humid lands and its socio-economic consequences.

The NBSAP has identified some measure that need to be undertaken for example Objective 3.5 Rangeland/ dryland biodiversity maintained, Objective 3.3 Increased levels of community participation and use of indigenous knowledge systems in land use and sustainable management practices, Objective 2.7 Rehabilitation and restoration of degraded ecosystems and habitats.

192. Has your country taken measures to strengthen national capacities, including local capacities, to enhance the implementation of the programme of work?

| | |
|--|---|
| a) No | |
| b) Yes, some measures taken (please provide details below) | X |
| c) Yes, comprehensive measures taken (please provide details below) | |
| d) Yes, all identified capacity needs met (please provide details below) | |

Further comments on measures taken to strengthen national capacities, including local capacities, to enhance the implementation of the programme of work.

National Tree Planting Day, extension services, community tourism and ecological monitoring.

Box LXXII.

Please elaborate below on the implementation of this programme of work and associated decisions specifically focusing on:

- outcomes and impacts of actions taken;
- contribution to the achievement of the goals of the Strategic Plan of the Convention;
- contribution to progress towards the 2010 target;
- progress in implementing national biodiversity strategies and action plans;
- contribution to the achievement of the Millennium Development Goals;
- constraints encountered in implementation.

The programme of work has not been implemented and so it is difficult to measure how it will affect the above. The priority has been the development of the NBSAP as a framework for biodiversity conservation and sustainable use. With the NBSAP in place, the focus will now turn to implementing the Programmes of work.

Mountain Biodiversity

Programme Element 1. Direct actions for conservation, sustainable use ad benefit sharing

193. Has your country taken any measures to prevent and mitigate the negative impacts of key threats to mountain biodiversity?

| | |
|--|--|
| a) No | |
| b) No, but relevant measures are being considered | |
| c) Yes, some measures taken (please provide details below) | |
| d) Yes, many measures taken (please provide details below) | |

Further comments on the measures taken to prevent and mitigate the negative impacts of key threats to mountain biodiversity

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|--|--|
| 194. Has your country taken any measures to protect, recover and restore mountain biodiversity? | |
| a) No | |
| b) No, but some measures are being considered | |
| c) Yes, some measures taken (please provide details below) | |
| d) Yes, many measures taken (please provide details below) | |
| Further comments on the measures taken to protect, recover and restore mountain biodiversity | |
| | |

| | |
|---|--|
| 195. Has your country taken any measures to promote the sustainable use of mountain biological resources and to maintain genetic diversity in mountain ecosystems? | |
| a) No | |
| b) No, but some measures are being considered | |
| c) Yes, some measures taken (please provide details below) | |
| d) Yes, many measures taken (please provide details below) | |
| Further comments on the measures to promote the sustainable use of mountain biological resources and to maintain genetic diversity in mountain ecosystems | |
| | |

| | |
|---|--|
| 196. Has your country taken any measures for sharing the benefits arising from the utilization of mountain genetic resources, including preservation and maintenance of traditional knowledge? | |
| a) No | |
| b) No, but some measures are being considered | |
| c) Yes, some measures taken (please provide details below) | |
| d) Yes, many measures taken (please provide details below) | |
| Further comments on the measures for sharing the benefits arising from the utilization of mountain genetic resources | |
| | |

**Programme Element 2. Means of implementation for conservation,
sustainable use and benefit sharing**

197. Has your country developed any legal, policy and institutional framework for conservation and sustainable use of mountain biodiversity and for implementing this programme of work?

- | | |
|--|--|
| a) No | |
| b) No, but relevant frameworks are being developed | |
| c) Yes, some frameworks are in place (please provide details below) | |
| d) Yes, comprehensive frameworks are in place (please provide details below) | |

Further comments on the legal, policy and institutional frameworks for conservation and sustainable use of mountain biodiversity and for implementing the programme of work on mountain biodiversity.

198. Has your country been involved in regional and/or transboundary cooperative agreements on mountain ecosystems for conservation and sustainable use of mountain biodiversity?

- | | |
|---|--|
| a) No | |
| b) No, but some cooperation frameworks are being considered | |
| c) Yes (please provide details below) | |

Further information on the regional and/or transboundary cooperative agreements on mountain ecosystems for conservation and sustainable use of mountain biodiversity

**Programme Element 3. Supporting actions for conservation,
sustainable use and benefit sharing**

199. Has your country taken any measures for identification, monitoring and assessment of mountain biological diversity?

- | | |
|--|--|
| a) No | |
| b) No, but relevant programmes are under development | |
| c) Yes, some measures are in place (please provide details below) | |
| d) Yes, comprehensive measures are in place (please provide details below) | |

Further comments on the measures for identification, monitoring and assessment of mountain biodiversity

| | |
|---|--|
| 200. Has your country taken any measures for improving research, technical and scientific cooperation and capacity building for conservation and sustainable use of mountain biodiversity? | |
| a) No | |
| b) No, but relevant programmes are under development | |
| c) Yes, some measures are in place (please provide details below) | |
| d) Yes, comprehensive measures are in place (please provide details below) | |
| Further comments on the measures for improving research, technical and scientific cooperation and capacity building for conservation and sustainable use of mountain biodiversity | |
| | |

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|--|--|
| 201. Has your country taken any measures to develop, promote, validate and transfer appropriate technologies for the conservation of mountain ecosystems? | |
| a) No | |
| b) No, but relevant programmes are under development | |
| c) Yes, some measures are in place (please provide details below) | |
| d) Yes, comprehensive measures are in place (please provide details below) | |
| Further comments on the measures to develop, promote, validate and transfer appropriate technologies for the conservation of mountain ecosystems | |
| | |

Box LXXIII .

| |
|--|
| <p>Please elaborate below on the implementation of this programme of work and associated decisions specifically focusing on:</p> <ul style="list-style-type: none"> a) outcomes and impacts of actions taken; b) contribution to the achievement of the goals of the Strategic Plan of the Convention; c) contribution to progress towards the 2010 target; d) progress in implementing national biodiversity strategies and action plans; e) contribution to the achievement of the Millennium Development Goals; f) constraints encountered in implementation. |
| |

E. OPERATIONS OF THE CONVENTION

| | |
|---|----------|
| 202. Has your country actively participated in subregional and regional activities in order to prepare for Convention meetings and enhance implementation of the Convention? (decision V/20) | |
| a) No | |
| b) Yes (please provide details below) | X |
| Further comments on the regional and subregional activities in which your country has been involved. | |
| Botswana has participated in both the Southern Africa Biodiversity Forum and the African Regional Preparatory meetings | |

| | |
|--|----------|
| 203. Is your country strengthening regional and subregional cooperation, enhancing integration and promoting synergies with relevant regional and subregional processes? (decision VI/27 B) | |
| a) No | |
| b) Yes (please provide details below) | X |
| Further comments on regional and subregional cooperation and processes. | |
| Botswana strongly supports efforts enhancing the integration and promoting synergies at regional and sub regional processes. | |

The following question (204) is for DEVELOPED COUNTRIES

| | |
|--|--|
| 204. Is your country supporting the work of existing regional coordination mechanisms and the development of regional and subregional networks or processes? (decision VI/27 B) | |
| a) No | |
| b) No, but programmes are under development | |
| c) Yes, included in existing cooperation frameworks (please provide details below) | |
| d) Yes, some cooperative activities ongoing (please provide details below) | |
| Further comments on support for the work of existing regional coordination mechanisms and the development of regional and subregional networks or processes. | |
| | |

| | |
|---|----------|
| 205. Is your country working with other Parties to strengthen the existing regional and subregional mechanisms and initiatives for capacity-building? (decision VI/27 B) | |
| a) No | |
| b) Yes | X |
| 206. Has your country contributed to the assessment of the regional and subregional mechanisms for implementation of the Convention? (decision VI/27 B) | |
| a) No | |
| b) Yes (please provide details below) | X |
| Further comments on contribution to the assessment of the regional and subregional mechanisms. | |
| The Southern Africa Biodiversity Forum and SADC Protocol on Wildlife Conservation and Law | |

Enforcement are some of the country's contribution to the assessment for the implementation of the convention.

Box LXXIV.

Please elaborate below on the implementation of the above decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

There are a number of instruments that have been concluded and adopted with the region for the protection and conservation of biodiversity. Botswana is part to some of these instruments and generally supports the principles embodied in them.

F. COMMENTS ON THE FORMAT

Box LXXV.

Please provide below recommendations on how to improve this reporting format.

On challenges and Obstacles to Implementation the following are referred to:

1. Use of the word lack restricts the answer, if inadequate can be used instead.

2. Phrasing of the question should not combine 2 issues, e.g inadequate capacity to act, caused by institutional weakness. Inadequate capacity is not always caused by institutional weakness (e)

3. Natural disasters should be separated from environmental change as they are not mutually exclusive (aa).

Generally from the way the questions are asked the answers do not give a concise picture or status of the implementation of the convention.

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