Convention on Biological Diversity

UNDP

Aichi Biodiversity Target 11 Country Dossier: BOTSWANA

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GLOSSARY

AZEs	Alliance for Zero Extinction sites
CEPF	Critical Ecosystem Partnership Fund
EEZ	Exclusive Economic Zone
GCF	Green Climate Fund
GD-PAME	Global Database on Protected Area Management Effectiveness
GEF	Global Environment Facility
IBA	Important Bird and Biodiversity Area
ICCAs	Indigenous and Community Conserved Area Area (may also be referred to as territories and areas conserved by Indigenous peoples and local communities or "territories of life")
IPLC	Indigenous Peoples and Local Communities
KBA	Key Biodiversity Area
NBSAP	National Biodiversity Strategy and Action Plan
OECM	Other Effective Area-Based Conservation Measures
PA	Protected Area
PAME	Protected Area Management Effectiveness
PPA	Privately Protected Area
ProtConn	Protected Connected land indicator
SOC	Soil Organic Carbon
TEOW	Terrestrial Ecosystems of the World
WDPA	World Database on Protected Areas
WD-OECM	World Database on Other Effective Area-Based Conservation Measures

Disclaimer

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This country dossier is compiled by the UNDP and SCBD from publicly available information. It is prepared, within the overall work of the Global Partnership on Aichi Biodiversity Target 11, for the purpose of attracting the attention of the Party concerned and other national stakeholders to facilitate the verification, correcting, and updating of country data. The statistics might differ from those reported officially by the country due to differences in methodologies and datasets used to assess protected area coverage and differences in the base maps used to measure terrestrial and marine area of a country or territory. Furthermore, the suggestions from the UNDP and SCBD are based on analyses of global datasets, which may not necessarily be representative of national policy or criteria used at the national level. The analyses are also subject to the limits inherent in global indicators (precision, reliability, underlying assumptions, etc.). Therefore, they provide useful information but cannot replace analyses at a national level nor constitute a future benchmark for national policy or decision-making.

The preparation of this dossier was generously supported by: the Government of the Federal Republic of Germany, *Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GMbH*; the European Commission; the Government of the United Kingdom of Great Britain and Northern Ireland; and the Government of Japan (Japan Biodiversity Fund). The dossier does not necessarily reflect their views.

EXECUTIVE SUMMARY

This document provides information on the coverage of protected areas (PAs) and other effective area-based conservation measures (OECMs), as currently reported in global databases (the World Database on Protected Areas (WDPA) and World Database on Other Effective Area-Based Conservation Measures (WD-OECM)). It also includes details on the status of the other qualifying elements of Aichi Biodiversity Target 11 based on this data. These statistics might differ from those reported officially by countries due to difference in methodologies and datasets used to assess protected area coverage, differences in the base maps used to measure terrestrial and marine area of a country or territory, or if global datasets differ from the criteria and indicators used at the national level. This dossier also provides a summary of commitments made under Aichi Biodiversity Target 11, and a summary of opportunities regarding elements of the target for future planning.

The dossier has been developed in consultation with the UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC), which manages the WDPA, WD-OECM and Global Database on Protected Area Management Effectiveness (GD-PAME). Parties to the CBD are requested to contact protectedareas@unep-wcmc.org with any updates to the information in these databases.

Aichi Biodiversity Target 11 Elements: Current status and opportunities for action

Coverage

- **Status:** as of May 2021, terrestrial coverage in Botswana is 169,369.8 km^2 (29.1%).
- **Opportunities for action:** opportunities for the near-term include updating the WDPA with any unreported PAs, and the recognizing and reporting OECMs to the WD-OECM. In the future, focus on relatively intact areas, while addressing the elements in the following sections, could be considered if planning new PAs or OECMs.

Ecological Representativeness

- **Status:** Botswana contains 8 terrestrial ecoregions: the mean protected coverage by reported PAs and OECMs is 32.4% and 1 terrestrial ecoregion has no coverage by reported PAs and OECMs (1 other ecoregion has <0.1% coverage).
- **Opportunities for action:** there is opportunity for Botswana to increase protection in terrestrial ecoregions that have lower levels of coverage by PAs or OECMs, focus on effective management for those that already have higher coverage. Ecoregions which currently have no coverage by PAs or OECMs are key areas for action.

Areas Important for Biodiversity

- **Status:** Botswana has 12 Key Biodiversity Areas (KBAs): the mean protected coverage of KBAs by reported PAs and OECMs is 51.2%, while 5 KBAs have no coverage by reported PAs and OECMs.

- **Opportunities for action:** there is opportunity for Botswana to increase protection of KBAs that have lower levels of coverage by PAs and OECMs; priority could be given to those with no current coverage.

Areas Important for Ecosystem Services

- **Status:** coverage of areas important for ecosystem services: In Botswana, 28.6% of aboveground biomass carbon, 27.4% of belowground biomass carbon and 29.2% of soil organic carbon is covered by PAs and OECMs.

- **Opportunities for action:** for carbon, there is opportunity for Botswana to increase PA and OECM coverage in terrestrial areas with high carbon stocks. Protecting areas with high carbon stocks secures the benefits of carbon sequestration in the area.

- For water, there is opportunity to increase the area of the water catchment under protection by PAs and OECMs, or in cases where there is high levels of protection, focus on effective management for these areas. Protecting the current area of forested land and potentially reforesting would have benefits for improving water security.

Connectivity and Integration

- **Status:** coverage of protected-connected lands is 18.1%.

- **Opportunities for action:** there is opportunity to focus on PA and OECM management for enhancing and maintaining connectivity. Increasing connectivity increases the effectiveness of PAs and OECMs and reduces the impacts of fragmentation.

- As well, a range of suggested steps for enhancing and supporting integration are included in the voluntary guidance on the integration of PAs and OECMs into the wider land- and seascapes and mainstreaming across sectors to contribute, inter alia, to the SDGs (Annex I of COP Decision 14/8).

Governance Diversity

- **Status:** the most common governance type(s) for reported PAs in Botswana is: 81.8% under Government (Federal or national ministry or agency).

- **Opportunities for action:** explore opportunities for governance types that have lower representation, for Botswana could relate to shared governance, governance by Indigenous Peoples and/or local communities (IPLC), etc.

- There is also opportunity for Botswana to complete governance and equity assessments, to establish baselines and identify relevant actions for improvement. As well, a range of suggested actions are included in the voluntary guidance on effective governance models for management of protected areas, including equity (Annex II of COP Decision 14/8).

Protected Area Management Effectiveness

- **Status:** 66.1% of terrestrial PAs have completed Protected Area Management Effectiveness (PAME) assessments reported.
- **Opportunities for action:** the 60% target for completed management effectiveness assessments (per COP Decision X/31) **has** already been met for terrestrial PAs. Further increasing this percentage would be beneficial overall for understanding how well protected areas are being managed.
- There is also opportunity to implement the results of completed PAME evaluations, to improve the quality of management for existing PAs and OECMs (e.g. through adaptive management and information sharing, increasing the number of sites reporting 'sound management') and to increase reporting of biodiversity outcomes in PAs and OECMs.

INTRODUCTION

The Strategic Plan for Biodiversity 2011-2020 was adopted at the tenth meeting of the Conference of the Parties (COP) to the Convention on Biological Diversity (CBD) held in Nagoya, Aichi Prefecture, Japan from 18-29 October 2010. The vision of the Strategic Plan is one of "Living in harmony with nature" where *"By 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people"* (CBD, 2010). In addition to this vision, the Strategic Plan is composed of 20 targets, under five strategic goals. Aichi Biodiversity Target 11 states that *"By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes."*

With the conclusion of the Aichi Biodiversity Targets in 2020, Target 11 on area-based conservation has seen success in the expansion of the global network of protected areas (PA) and other effective area-based conservation measures (OECMs). The negotiation of the post-2020 Global Biodiversity Framework (GBF) and its future targets provide an essential opportunity to further improve the coverage of PAs and OECMs, to improve other aspects of area-based conservation, to accelerate progress on biodiversity conservation more broadly, while also addressing climate change, and the Sustainable Development Goals. This next set of global biodiversity targets are to be adopted at the fifteenth meeting of the Conference of the Parties to the Convention on Biological Diversity. These new targets must aim to build upon lessons learned from the last decade of progress to deliver transformative change for the benefit of nature and people, to realize the 2050 Vision for biodiversity.

The United Nations Development Programme (UNDP) and the Secretariat of the Convention on Biological Diversity have developed the Aichi Biodiversity Target 11 Country Dossiers, which provide countries with an overview of the status of Target 11 elements, opportunities for action, and a summary of commitments made by Parties over the last decade. Each dossier can support countries in assessing their progress on key elements of Aichi Biodiversity Target 11 and identifying opportunities to prioritize new protected areas and OECMs.

This dossier provides an overview of area-based conservation in Botswana. Section I of the dossier presents data on the current status of Botswana's PAs and OECMs. The data presented in Section I relates to each element of Target 11. Section I also presents the PA and OECM coverage for two critical ecosystem services: water security and carbon stocks. In addition, the dossier presents potential opportunities for action for Botswana, in relation to each Target 11 element. The analyses present options for improving Botswana's area-based conservation network to achieve enhanced protection and benefits for livelihoods and climate change. Section II presents details on Botswana's existing PA and OECM commitments as a summary of existing efforts towards achieving Target 11. This gives focus not only to national policy and actions but also voluntary commitments to the UN.

Furthermore, where data is available, this dossier provides information on potential OECMs, Indigenous and Community Conserved Areas (ICCAs; also often referred to as territories and areas conserved by Indigenous peoples and local communities or "territories of life") and Privately Protected Areas (PPAs) and the potential contribution they will have in achieving the post-2020 targets.

The information on PAs and OECMs presented here is derived from the World Database on Protected Areas (WDPA) and World Database on Other Effective Area-Based Conservation Measures (WD-OECM). These databases are joint products of UNEP and IUCN, managed by UNEP-WCMC, and can be viewed and downloaded at www.protectedplanet.net. Parties are encouraged to provide data on their PAs and OECMs to UNEP-WCMC for incorporation into the databases (see e.g. Decisions 10/31 and 14/8). The significant efforts of Parties in updating their data in the build up to the publication of the Protected Planet Report 2020 (UNEP-WCMC and IUCN, 2021) were greatly appreciated. UNEP-WCMC welcomes further updates, following the data standards described here, and these should be directed to protectedareas@unep-wcmc.org. The statistics presented in this dossier are derived from the May 2021 WDPA and WD-OECM releases, unless stated otherwise. Readers should consult www.protectedplanet.net for the latest coverage statistics (updated monthly).

Some data from the WDPA and WD-OECM are not made publicly available at the request of the data-provider. This affects some statistics, maps, and figures presented in this dossier. Statistics provided by UNEP-WCMC (terrestrial and marine coverage) are based upon the full dataset, including restricted data. All other statistics, maps, and figures are based upon the subset of the data that is publicly available.

Where data is less readily available, such as for potential OECMs, ICCAs and PPAs, data has also been compiled from published reports and scientific literature to provide greater awareness of these less commonly recorded aspects. These data are provided to highlight the need for comprehensive reporting on these areas to the WDPA and/or WD-OECM. Parties are invited to work with indigenous peoples, local communities and private actors to submit data under the governance of these actors, with their consent, to the WDPA and/or WD-OECM.

Overall, PAs and OECMs are essential instruments for biodiversity conservation and to sustain essential ecosystem services that support human well-being and sustainable development, including food, medicine, and water security, as well as climate change mitigation and adaptation and disaster risk reduction. The data in this dossier, therefore, aims to celebrate the current contributions of PAs and OECMs, whilst the gaps presented hope to encourage greater progress, not just for the benefit of biodiversity and the post-2020 GBF, but also to recognize the essential role of PAs and OECMs to the Sustainable Development Goals and for addressing the climate crisis.

SECTION I: CURRENT STATUS

Aichi Biodiversity Target 11 refers to both protected areas (PAs) and other effective area-based conservation measures (OECMs). This section provides the current status for all elements of Aichi Biodiversity Target 11 where indicators with global data are available. Statistics for all elements are presented using data on both PAs and OECMs (where this data is available and reported in global databases like the WDPA and WD-OECM).

It is recognized that statistics reported in the WPDA and WD-OECM might differ from those reported officially by countries due to differences in methodologies and datasets used to assess protected area coverage and differences in the base maps used to measure terrestrial and marine area of a country or territory. Details on UNEP-WCMC's methods for calculating PA and OECM coverage area available here. The global indicators adopted here for presenting the status of other elements of Target 11 may also differ from those in use nationally.

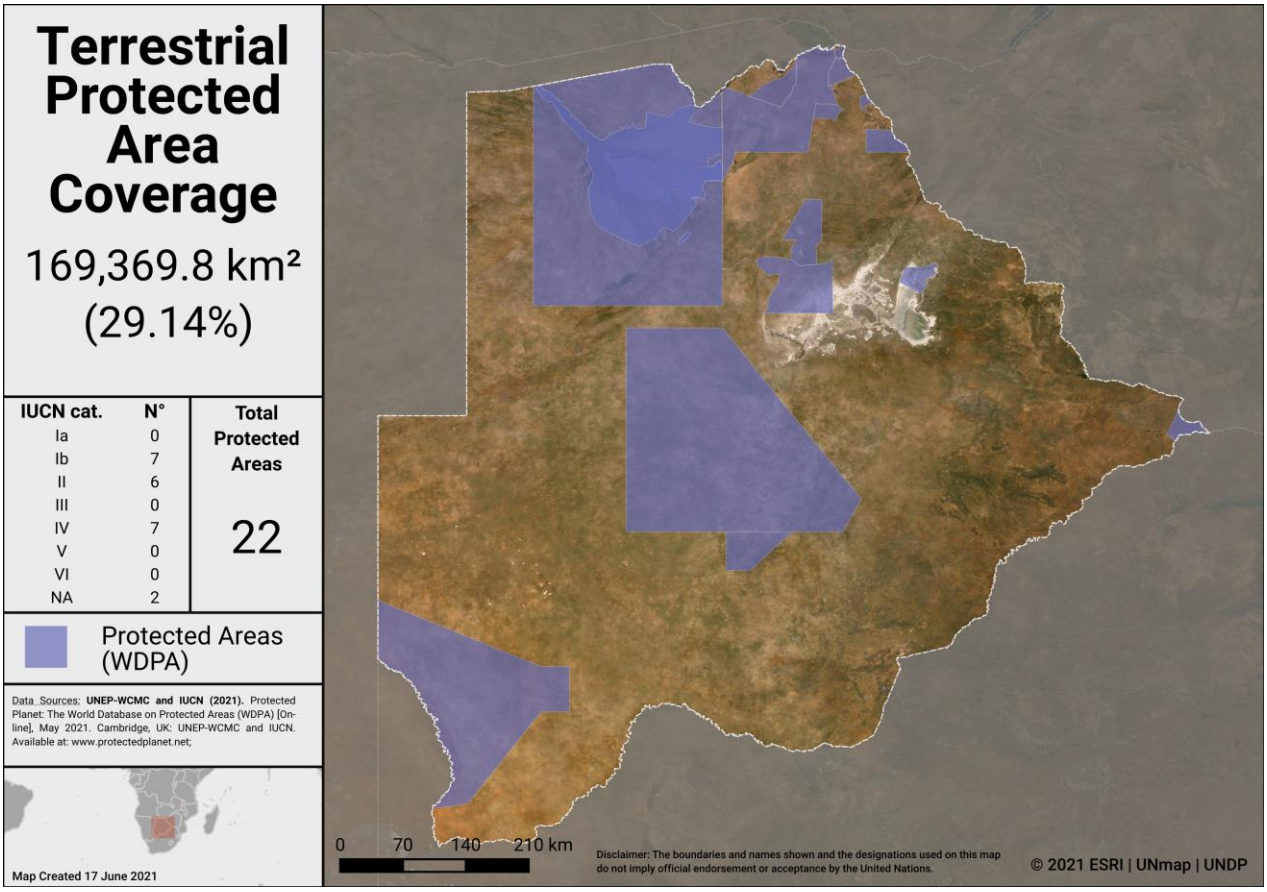
COVERAGE

As of May 2021, Botswana has **22** protected areas reported in the World Database on Protected Areas (WDPA).

As of May 2021, Botswana has **0** OECMs reported in the world database on OECMs (WD-OECM).

Current coverage for Botswana:

- 29.1% terrestrial (22 protected areas, 169,369.8 km^2)



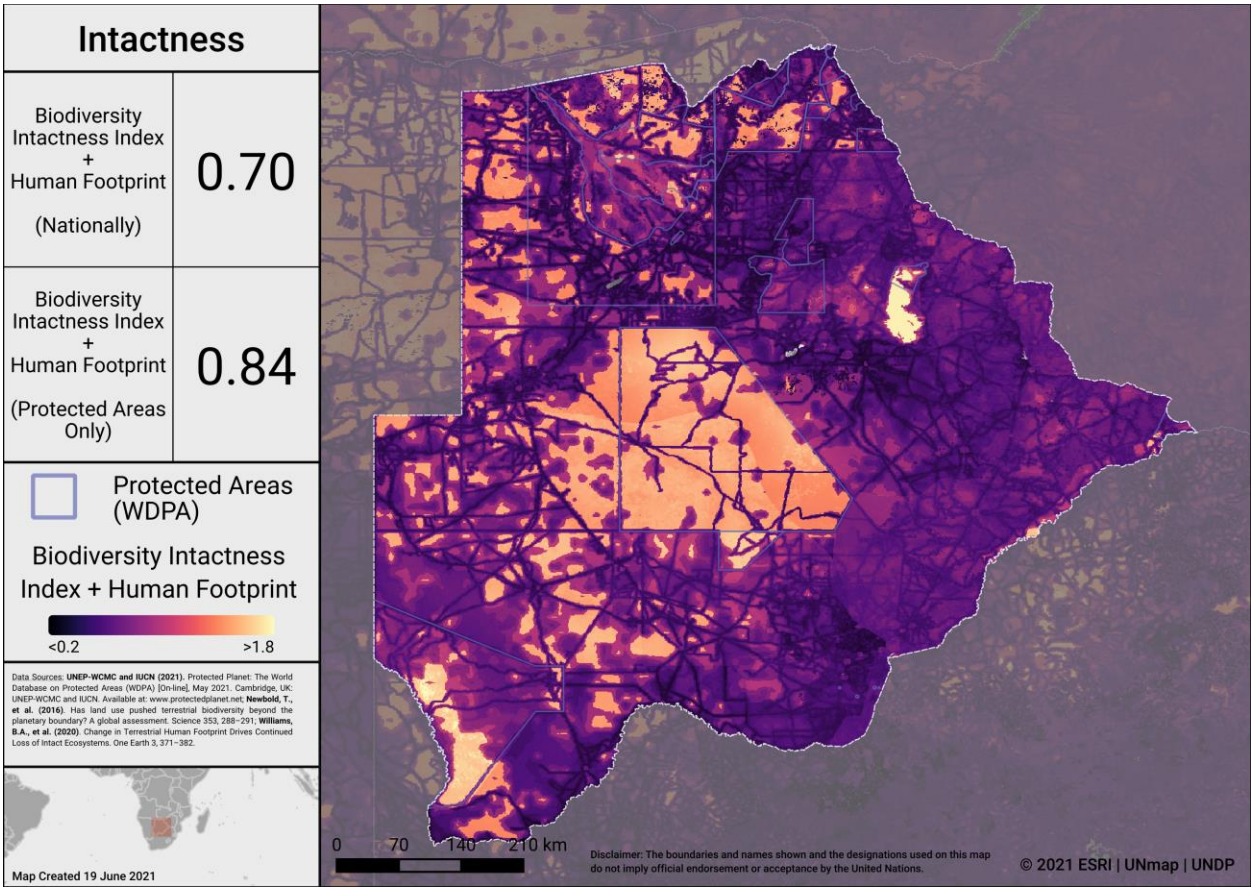
Terrestrial Protected Areas in Botswana

Potential OECMs

There are currently no potential OECM examples in Botswana.

Opportunities for action

Opportunities for the near-term include updating the WDPA with any unreported PAs, and the recognizing and reporting OECMs to the WD-OECM. In the future, as Botswana considers where to add new PAs and OECMs, the map below identifies areas in Botswana where intact areas are not currently protected. Focus on relatively intact areas, while addressing the elements in the following sections, could be considered if planning new PAs or OECMs.



Intactness in Botswana

To explore more on intactness visit the UN Biodiversity Lab: map.unbiodiversitylab.org.

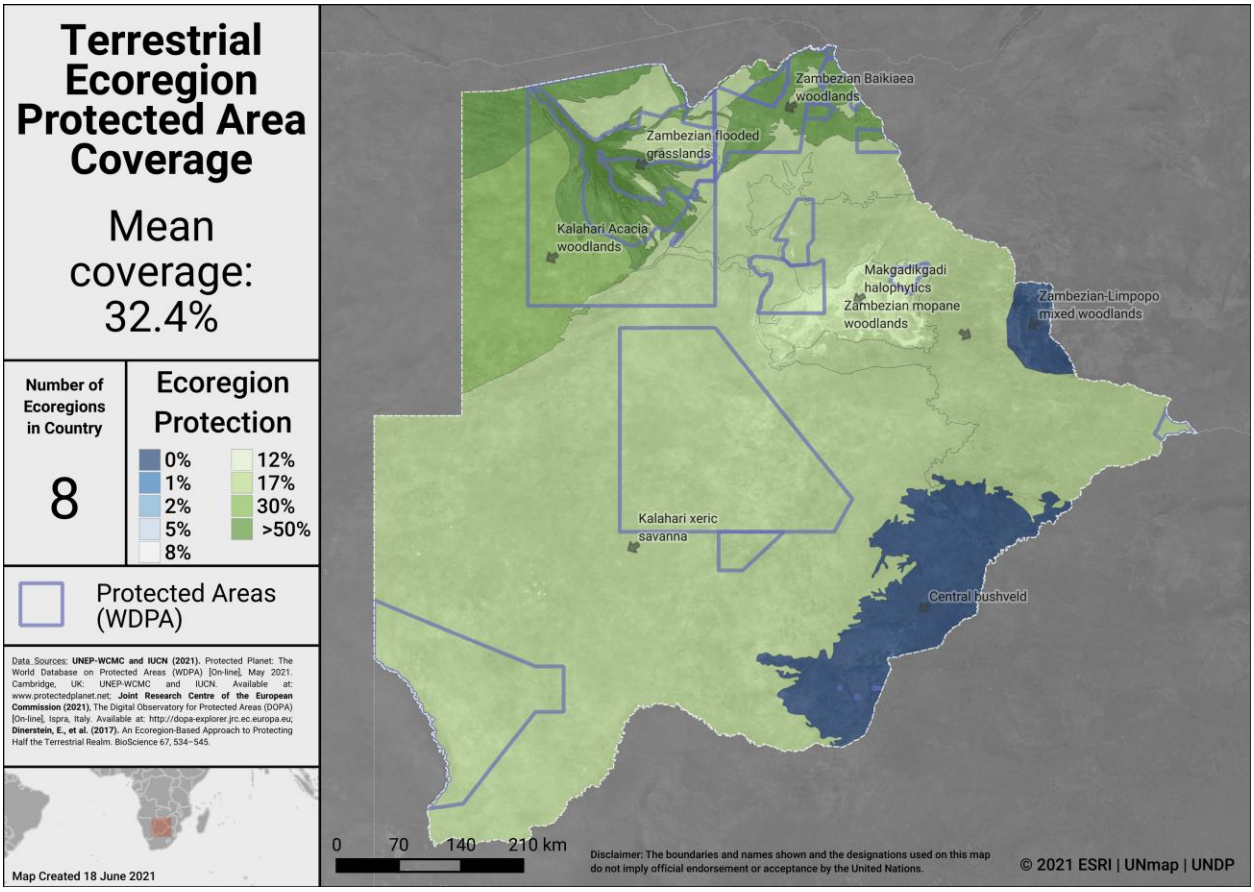
ECOLOGICAL REPRESENTATIVENESS

Ecological representativeness is assessed based on the PAs and OECMs coverage of broad-scale biogeographic units. Globally, ecoregions have been described for terrestrial areas (Dinerstein et al, 2017), marine coastal and shelf ecosystems (to a depth of 200m; Spalding et al 2007) and surface pelagic waters (Spalding et al 2012).

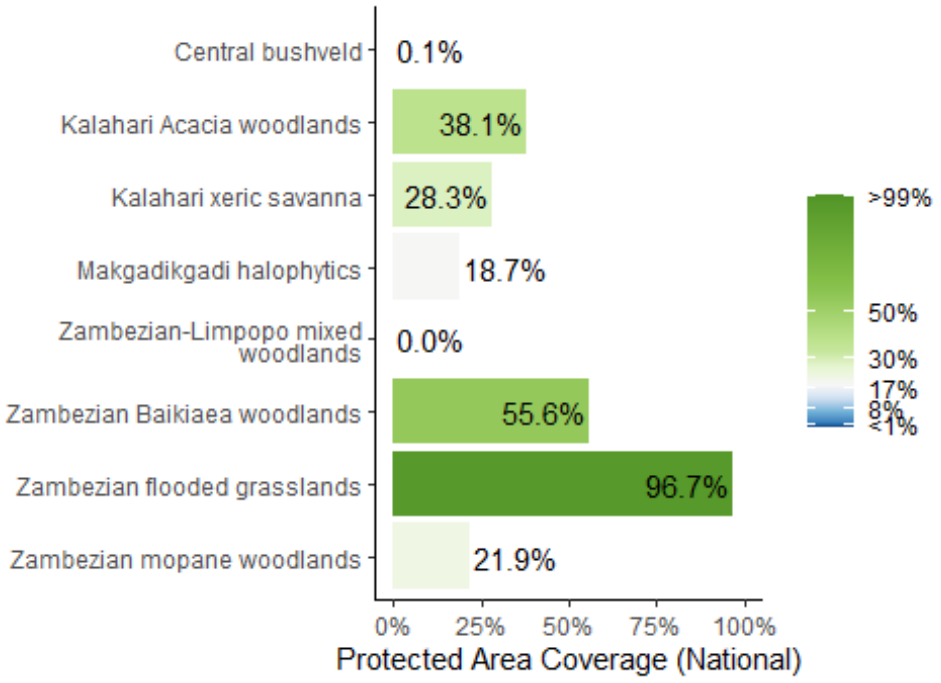
Botswana has 8 **terrestrial** ecoregions. Out of these:

- 7 ecoregions have at least some coverage from PAs and OECMs.
- 6 ecoregions have at least 17% protected within the country.
- The average terrestrial coverage of ecoregions is 32.4%.

A full list of ecoregions in Botswana is available in Annex I.



Terrestrial ecoregions in Botswana



Terrestrial ecoregions of the World (TEOW) in Botswana

Opportunities for action

There is opportunity for Botswana to increase protection in terrestrial ecoregions that have lower levels of coverage by PAs or OECMs; and focus on effective management for ecoregions that already have higher coverage. Ecoregions which currently have no coverage by PAs or OECMs are key areas for action.

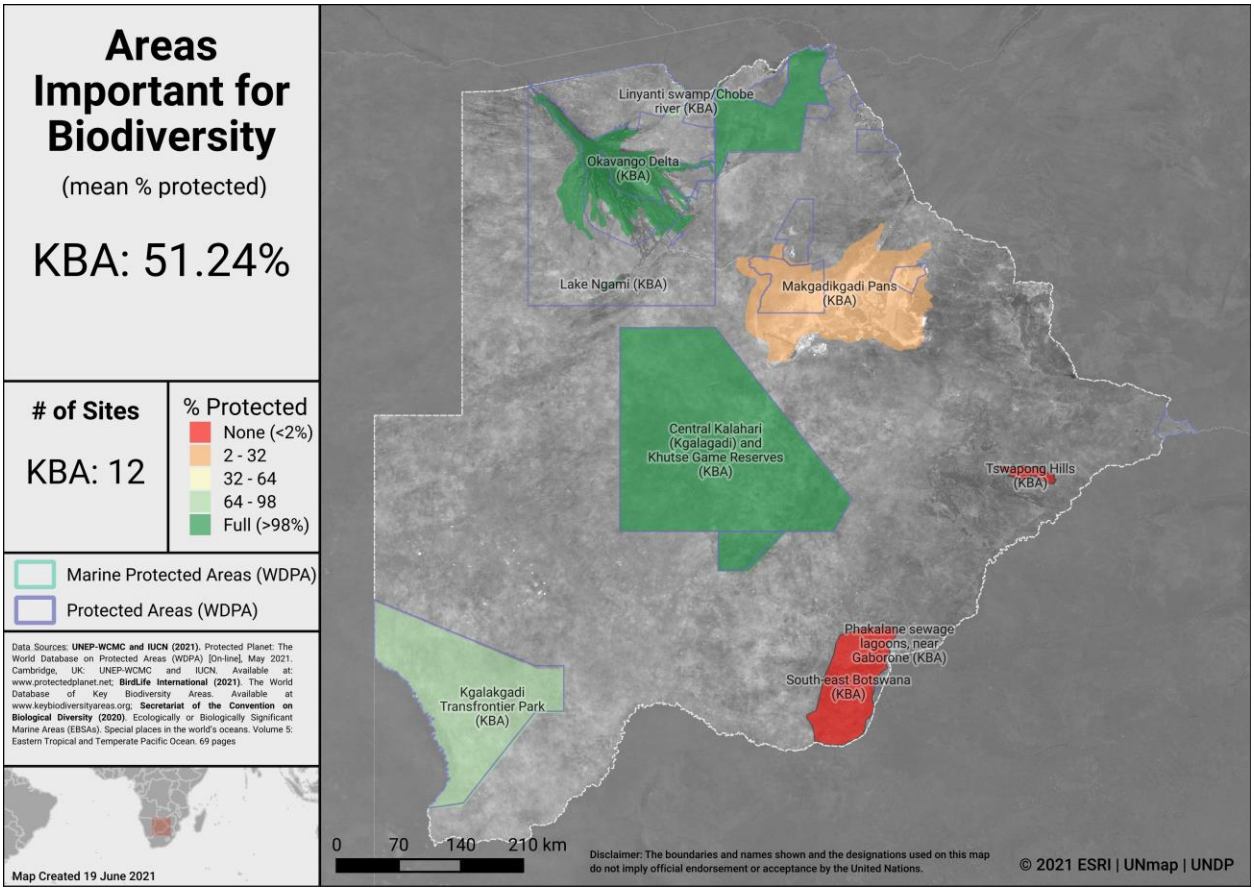
AREAS IMPORTANT FOR BIODIVERSITY

Key Biodiversity Areas (KBAs)

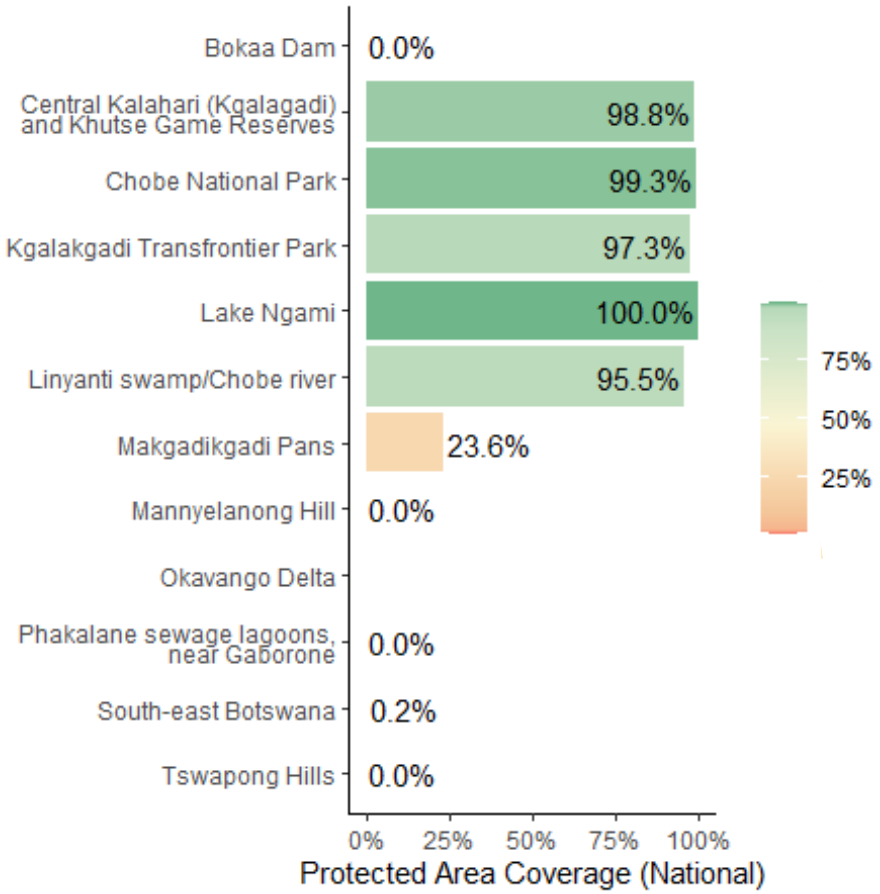
Protected area and OECM coverage of Key Biodiversity Areas (KBAs) provide one proxy for assessing the conservation of areas important for biodiversity at national, regional and global scales. KBAs are sites that make significant contributions to the global persistence of biodiversity (IUCN, 2016). The KBA concept builds on four decades of efforts to identify important sites for biodiversity, including Important Bird and Biodiversity Areas, Alliance for Zero Extinction sites, and KBAs identified through Hotspot ecosystem profiles supported by the Critical Ecosystem Partnership Fund. Incorporating these sites, the dataset of internationally significant KBAs includes Global KBAs (sites shown to meet one or more of 11 criteria in the Global Standard for the Identification of KBAs, clustered into five categories: threatened biodiversity; geographically restricted biodiversity; ecological integrity; biological processes; and irreplaceability), Regional KBAs (sites identified using pre-existing criteria and thresholds, that do not meet the Global KBA criteria based on existing information), and KBAs whose Global/Regional status is Not yet determined, but which will be assessed against the global KBA criteria within 8-12 years. Regional KBAs are often of critical international policy relevance (e.g., in EU legislation and under the Ramsar Convention on Wetlands), and many are likely to qualify as Global KBAs in future once assessed for their biodiversity importance for other taxonomic groups and ecosystems. To date, nearly 16,000 KBAs have identified globally, and information on each of these is presented in the World Database of Key Biodiversity Areas: www.keybiodiversityareas.org.

Botswana has **12** Key Biodiversity Areas (KBAs).

- Mean percent coverage of all KBAs by PAs and OECMs in Botswana is **51.2%**.
- **4** KBAs have full (>98%) coverage by PAs and OECMs.
- **3** KBAs have partial coverage by PAs and OECMs.
- **5** KBAs have no (<2%) coverage by PAs and OECMs.



Areas Important for Biodiversity in Botswana



Key Biodiversity Area Coverage (KBA) in Botswana

Opportunities for action

There is opportunity for Botswana to increase protection of KBAs that have lower levels of coverage by PAs and OECMs; priority could be given to those with no current coverage.

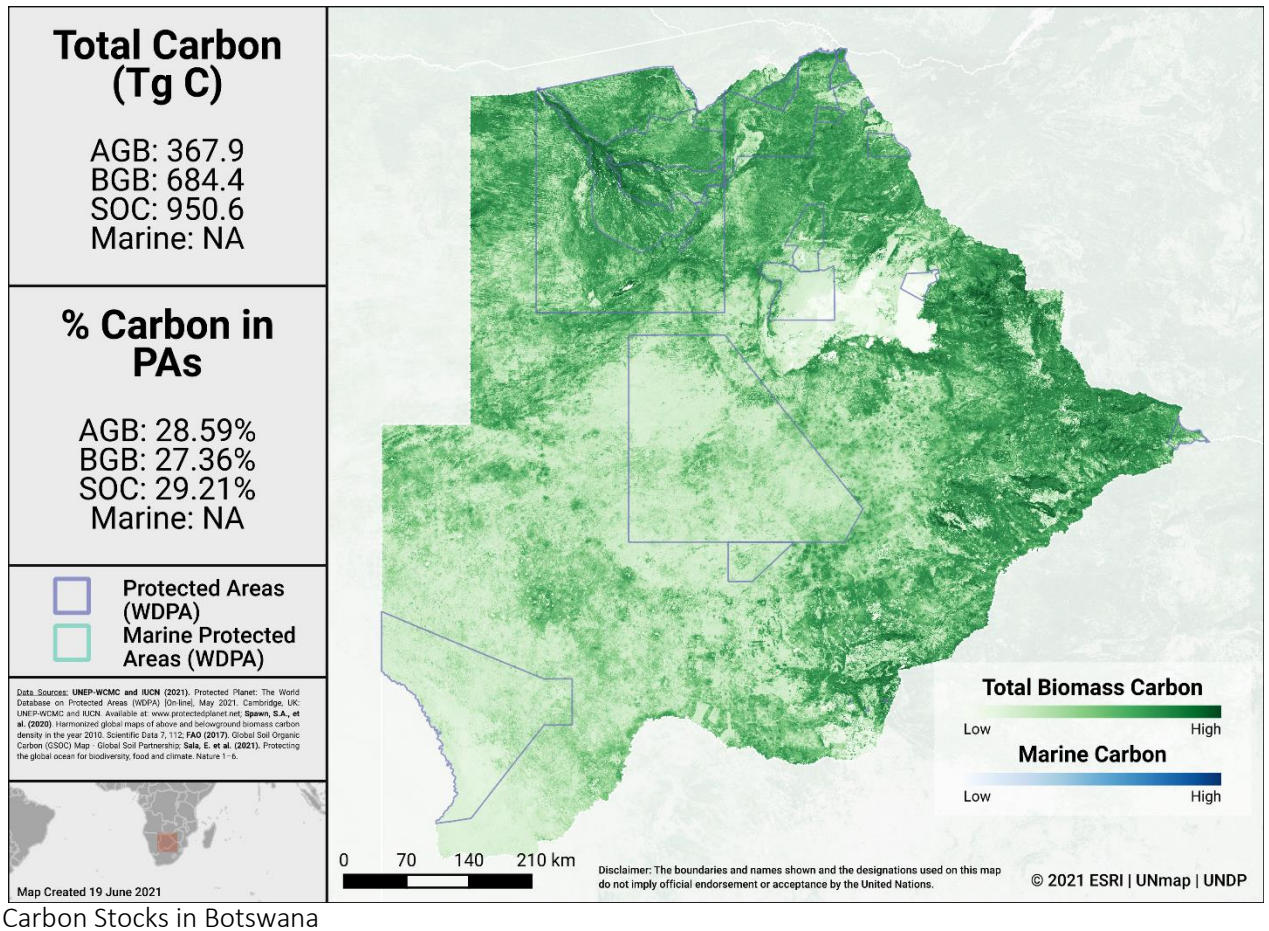
AREAS IMPORTANT FOR ECOSYSTEM SERVICES

There is no single indicator identified for assessing the conservation of areas important for ecosystem services. For simplicity, two services with available global datasets are assessed here (carbon and water). In future, other critical ecosystem services could be explored.

Carbon

Data for biomass carbon comes from temporally consistent and harmonized global maps of aboveground biomass (AGB) and belowground biomass (BGB) carbon density (at a 300-m spatial resolution); the maps integrate land-cover specific, remotely sensed data, and land-cover specific empirical models (see Spawn et al., 2020 for details on methodology). The Global Soil Organic Carbon Map present an estimation of SOC stock from 0 to 30 cm (see FAO, 2017 for further details on methodology).

The map below presents the total carbon stocks in Botswana and the percent of carbon in PAs. The total carbon stocks is 367.9 Tg C from aboveground biomass (AGB), with 28.6% in PAs; 684.4 Tg C from below ground biomass (BGB), with 27.4% PAs and 950.6 Tg C from soil organic carbon (SOC), with 29.2% in PAs.



Carbon Stocks in Botswana

Water

Forests support stormwater management and clean water availability, especially for large urban populations. Research that has examined the role of forests for city drinking water supplies shows that of the world's 105 largest cities, more than 30% (33 cities) rely heavily on the local protected forests, which provide ecosystem services that underpin local drinking water availability and quality (Dudley & Stolton, 2003).

Drinking water supplies for cities in Botswana may similarly depend on protected forest areas within and around water catchments. Intact catchments can support more consistent water supply and improved water quality.

Opportunities for action

For carbon, there is opportunity for Botswana to increase PA and OECM coverage in terrestrial areas with high carbon stocks, as identified in the map above; in cases where there is high levels of protection, focus on effective management for these areas. Protecting areas with high carbon stocks secures the benefits of carbon sequestration in the area.

For water, there is opportunity to increase the area of the water catchment under protection by PAs and OECMs, or in cases where there is high levels of protection, focus on effective management for these areas. Protecting the current area of forested land and potentially reforesting would have benefits for improving water security.

CONNECTIVITY & INTEGRATION

Two global indicators, the Protected Connected land indicator (ProtConn; EC-JRC, 2021; Saura et al., 2018) and the PARC-Connectedness indicator (CSIRO, 2019), have been proposed for assessing the terrestrial connectivity of PA and OECM networks.

Protected Connected Land Indicator (Prot-Conn)

As of January 2021, as reported in the Joint Research Centre of the European Commission's Digital Observatory for Protected Areas (DOPA) (JRC, 2021), the coverage of protected-connected lands (a measure of the connectivity of terrestrial protected area networks, assessed using the ProtConn indicator) in Botswana was 18.1%.

PARC-Connectedness Index

In 2019, as assessed using the PARC-Connectedness Index (values ranging from 0-1, indicating low to high connectivity), connectivity in Botswana is 0.65. This represents no significant change since 2010.

Corridor case studies

Below is a list of case studies on corridors and connectivity in Botswana (further details are available in Hilty et al 2020):

Case study title	Type of study region	Greatest threat to connectivity	Approaches to conserving ecological corridors
Connectivity conservation in the Kavango Zambezi Transfrontier Conservation Area: The Zambezi-Chobe Floodplain Wildlife Dispersal Area	terrestrial, rural	deforestation, uncontrolled settlements, overgrazing, over-exploitation of fish, uncontrolled fires	• establishment of a five-country transfrontier conservation area • development of integrated development plans • creating awareness and engaging local stakeholders • establishment of community conservancies • promotion of conservation agriculture • establishment of wildlife sanctuaries

Opportunities for action

There is opportunity to focus on PA and OECM management for enhancing and maintaining connectivity. Increasing connectivity increases the effectiveness of PAs and OECMs and reduces the impacts of fragmentation. As well, a range of suggested steps for enhancing and supporting integration are included in the voluntary guidance on the integration of PAs and OECMs into the wider land- and seascapes and mainstreaming across sectors to contribute, inter alia, to the SDGs (Annex I of COP Decision 14/8).

GOVERNANCE DIVERSITY

There is a lack of comprehensive global data on governance quality and equity in PAs and OECMs. Here, we provide data on the diversity of governance types for reported PAs and OECMs.

As of May 2021, PAs in Botswana reported in the WDPA have the following governance types:

- 81.8% are governed by **governments**
  - 81.8% by federal or national ministry or agency
  - 0.0% by sub-national ministry or agency
  - 0.0% by government-delegated management
- 0.0% are under **shared** governance
- 4.5% are under **private** governance
  - 4.5% by individual landowners
  - 0.0% by non-profit organisations
  - 0.0% by for-profit organisations
- 4.5% are under **IPLC** governance
  - 0.0% by Indigenous Peoples
  - 4.5% by local communities
- 9.1% **do not** report a governance type
  - (All of which are international designations)

OECMs

As of May 2021, there are **0** OECMs in Botswana reported in the WD-OECM, therefore there is no data available on OECM governance types.

Privately Protected Areas (PPAs)

There is no data available on PPAs for Botswana (see Gloss et al., 2019, and Stolton et al., 2014 for details).

Information on territories and areas conserved by Indigenous Peoples and local communities (ICCAs) reported from CBD technical series case studies:

There is no data available on ICCAs for Botswana (see Kothari et al., 2012 and the ICCA Registry for further details).

Other Indigenous lands

Lands managed and/or controlled by Indigenous Peoples cover an area of 88,352.0 km^2, of which 24,456.0 km^2 falls outside of formal protected areas. Indigenous lands with a human footprint less than 4 (considered as 'natural landscapes') cover an area of 84,513.0 km^2 (for details on analysis see Garnett et al., 2018).

For Botswana, evidence for the presence of Indigenous Peoples comes from: Indigenous Work Group on Indigenous Affairs. Indigenous World 2017 (Indigenous Working Group on Indigenous Affairs, 2017).

Boundaries of the lands Indigenous Peoples manage or have tenure rights over come from: Hitchcock, R. K. 'We are the owners of the land': the San struggle for the Kalahari and its resources. Senri Ethnological Studies 70, 229–256 (2006); and Pelican, M. & Maruyama, J. The Indigenous rights movement in Africa: perspectives from Botswana and Cameroon. Afr. Stud. Monogr. 36, 49–74 (2015).

Opportunities for action

Explore opportunities for governance types that have lower representation, for Botswana this could relate to shared governance, governance by Indigenous Peoples and/or local communities (IPLC), etc.

There is also opportunity for Botswana to complete governance and equity assessments, to establish baselines and identify relevant actions for improvement. Examples of existing tools and methodologies include: Governance Assessment for Protected and Conserved Areas (Franks & Brooker, 2018), Social Assessment of Protected Areas (Franks et al 2018), and Site-level assessment of governance and equity (IIED, 2020). As well, a range of suggested actions are included in the voluntary guidance on effective governance models for management of protected areas, including equity (Annex II of COP Decision 14/8).

PROTECTED AREA MANAGEMENT EFFECTIVENESS

This section provides the percentage of land and marine areas covered by PAs and OECMs with completed protected area management effectiveness (PAME) assessments as reported in the global GD-PAME. The proportion of terrestrial and marine PAs with completed PAME assessments is also calculated and compared with the 60% target agreed to in COP-10 Decision X/31. Information is also included regarding changes in forest cover nationally within PAs and OECMs.

Protected area management effectiveness (PAME) assessments

As of May 2021, Botswana has 22 PAs reported in the WDPA; of these PAs, 6 (27.3%) have management effectiveness evaluations reported in the global database on protected area management effectiveness (GD-PAME).

- 19.3% (111,968 km^2) of the terrestrial area of the country is covered by PAs with completed management effectiveness evaluations.
  - 66.1% of the area of terrestrial PAs have completed evaluations.

The 60% target for completed management effectiveness assessments (per COP Decision X/31) **has** been met for terrestrial PAs.

As of May 2021, there are 0 OECMs in Botswana reported in the WD-OECM and no information available on the management effectiveness of potential OECMs.

Opportunities for action

The 60% target for completed management effectiveness assessments (per COP Decision X/31) **has** been met for terrestrial PAs. However, further increasing this percentage would be beneficial for understanding how well protected areas are being managed.

There is also opportunity to implement the results of completed PAME evaluations, to improve the quality of management for existing PAs and OECMs (e.g. through adaptive management and information sharing, increasing the number of sites reporting 'sound management') and to increase reporting of biodiversity outcomes in PAs and OECMs.

SECTION II: EXISTING PROTECTED AREA AND OECM COMMITMENTS

PRIORITY ACTIONS FROM 2015-2016 REGIONAL WORKSHOPS

National priority actions for Aichi Biodiversity Target 11 were provided by Parties following a series of regional workshops in 2015 and 2016. The Capacity-building workshop for Africa on achieving Aichi Biodiversity Targets 11 and 12 took place 21 - 24 March 2016 in Entebbe, Uganda. Progress towards the quantitative targets for marine and terrestrial coverage has been assessed based on data reported in the WDPA and WD-OECM as of 2021. For more information, see the workshop report at: https://www.cbd.int/meetings/

The following actions were identified during the workshops:

Terrestrial coverage:

1) Utilization of GEF 6 allocation to close the gap and increase conservation by 6.8% [*as of 2020, the 25% target has been surpassed*].

2) To promote an integrated landscape approach to managing Kgalagadi and Ghanzi drylands for ecosystem resilience, improved livelihoods and reduced conflicts between wildlife conservation and livestock production as a way to increase viability of the ecosystems to be eligible for a protected areas status. PIF for drylands (GEF 6 Allocation) POWPA

Ecological representation: To prepare, by 2018, ecoregion-based threatened species lists and maps of their habitats, and initiate systematic monitoring and reporting to the CHM.

Areas Important for biodiversity and ecosystem services: No actions were identified for this element of Target 11.

Connectivity: To finalise and adopt, by 2015, the Cubango-Okavango River Basin (CORB) SEA (NBSAP).

Management effectiveness: Institutionalize management effectiveness assessment towards assessing 60% of the total areas by 2020 and ensure that the results of the assessment are implemented [*as of 2020, the 60% target has been surpassed*]. Effectiveness of the Chobe-Kwando-Linyanti Matrix of Protected Areas project underway.

Governance and Equity: Economic Valuation of 57% of ecoregions for the benefits of communities and government.

Integration:

1) Utilizing GEF 6 STAR allocation to develop project document for Integrated Management plan for Dry land Ecosystem

2) Completion of Improved Management Effectiveness of the Chobe-Kwando-Linyanti Matrix of Protected Areas.

OECMs: To open protected areas for Core Management between government and the communities (This is catered for under the revised Wildlife policy).

NATIONAL BIODIVERSITY STRATEGY AND ACTION PLANS (NBSAPs)

Botswana has submitted an NBSAP during the Strategic Plan for Biodiversity 2011-2020 (most recent NBSAP is available at: https://www.cbd.int/nbsap/search/).

This NBSAP **did** include a quantitative target for **terrestrial** PAs or OECMs.

By 2025, at least 25 percent of all Botswana's ecoregions, particularly the wetlands, rivers and pans in them, are effectively conserved through an ecosystem approach that integrates their management with that of the surrounding landscapes and involves resident communities

- As of May 2021 (based on the WDPA/WD-OECM) has the target been met: **YES**

Actions from the NBSAP will also address other elements of Aichi Biodiversity Target 11:

NBSAP Action #	Action (original language from NBSAP)
10-01	To legislate, by 2020, formal protection for all IBAs and for 25% of wetlands in each of the ecoregions found in Botswana
10-02	To ensure that, by 2018, all protected areas (parks, game reserves, WMAs) and forest reserves and biodiversity hotspots eg IBAs in all ecoregions are actively managed using the ecosystem approach and systems are in place to ensure changes in management effectiveness, in extent, ecological integrity, protection status and key threats are identified and mapped.
10-03	To establish, by 2018, and maintain representative ecological transects for all ecoregions in all districts, that are systematically monitored and reported on to the CHM
11-10	To pursue, by 2016, the application of Biosphere Reserve Status for the Makgadikgadi Wetlands
11-11	To conduct, by 2020, feasibility studies for the nomination of a) the northern forest region and b) the Kgalagadi Transfrontier Park, as Biosphere Reserves

APPROVED GEF-5, GEF-6, & GCF PROTECTED AREA PROJECTS

Approved GEF-5 and GEF-6 PA-related biodiversity projects

This includes biodiversity projects from the fifth and sixth replenishment of the Global Environment Facility (GEF-5 and GEF-6) with a clear impact of the quantity or quality of PAs; also including some projects occurring within the wider landscapes/seascapes around PAs. Only those with a status of 'project approved' or 'concept approved' as of June 2019 were considered. The qualifying elements likely benefiting from each GEF project is assessed based on a keyword search of Project Identification Forms (PIF). Where spatial data for the proposed PAs was available, further details (based on an analysis by UNDP) regarding their impacts for ecological representation, coverage of KBAs, and coverage of areas important for carbon storage is included.

GEF ID	PA increase?	Area to be added (km^2)	Qualitative elements potentially benefitting (based on keyword search of PIFs)
4544	No	N/A	All except Ecosystem services
9154	No	N/A	None

Approved Green Climate Fund (GCF) Protected Area-related biodiversity projects

The Green Climate Fund's investments listed as approved projects as of May 2021 were considered. The GCF supports paradigm shifts in both climate change mitigation and adaptation that may impact quality of PAs or contribute to better integration within the wider land- and seascapes around PAs. Only projects with result areas for either or both *Forest and Land Use and Ecosystems and Ecosystem Services result areas* were included.

GCF ID	Project theme	Result area	Target 11 element
FP158	Cross-cutting	Forest and land use	Integration; Equitably managed

OTHER ACTIONS/COMMITMENTS

High Ambition Coalition for Nature and People

Botswana **has** joined the High Ambition Coalition for Nature and People.

The High Ambition Coalition for Nature and People (HAC) is an intergovernmental group, co-chaired by France and Costa Rica [currently including 65 countries and the European Commission]. Its objective is to support the adoption of a target aiming to protect 30% of the planet's land and 30% of its oceans by 2030 (30x30 target), within the future global framework of the Convention on Biological Diversity (CBD) for the protection of biodiversity, which is to be adopted at the next COP in China this autumn.

Botswana's statement at the 2020 UN Biodiversity Summit mentions PAs, OECMs or corridors:

We've also declared 41% of our land parcel for conservation as protected areas. This is one of the highest proportions in the world, and comprises protected areas in the form of national parks, game reserves and wildlife management areas.

Commitments for PAs and OECMs from Other National Policies

Policy document	Ecosystem	Policy text
Nationally Determined Contribution	Forest ecosystems	Avoided forest conversion: 0.01 Mt CO2e/yr
Nationally Determined Contribution	Wetland ecosystems	Avoided peat impacts: 0.06 Mt CO2e/yr
Nationally Determined Contribution	Grasslands & Agricultural systems	Low to zero tillage, multi-cropping to increase mulching which reduce evapotranspiration and soil erosion.
National Development Plan	Wetland ecosystems	Promote water conservation
Strategic Action Plan on Integrated Water Resource Development and Management 2016-2020	Wetland ecosystems	Facilitating the development of infrastructure for improved groundwater utilization, management and protection.
National Biodiversity Strategy Action Plan	Grasslands & Agricultural systems	Establish broad scale ecosystem approaches to conservation that bring together different categories of land use under joint management to accommodate wildlife migrations.

ANNEX I

FULL LIST OF ECOREGIONS

Ecoregion Name	Area (km^2)	% of Global Ecoregion in Country	% of Country in Ecoregion	Area Protected (km^2)	% Protected in Country
Central bushveld	39,218.8	25.2	6.8	27.1	0.1
Kalahari Acacia woodlands	38,546.3	36.2	6.7	14,689.8	38.1
Kalahari xeric savanna	333,591.1	48.7	57.7	94,334.9	28.3
Makgadikgadi halophytics	17,592.6	100.0	3.0	3,282.6	18.7
Zambezian Baikiaea woodlands	26,826.8	7.5	4.6	14,915.0	55.6
Zambezian flooded grasslands	20,931.6	10.4	3.6	20,248.7	96.7
Zambezian-Limpopo mixed woodlands	5,976.0	3.3	1.0	0.0	0.0
Zambezian mopane woodlands	95,360.2	24.6	16.5	20,897.6	21.9

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