# Integrated sustainable and adaptive management of natural resources to support land degradation neutrality and livelihoods in the Miombo-Mopane landscapes of North-east Botswana

## Part I: Project Information

**Name of Parent Program**

Sustainable Forest Management Impact Program on Dryland Sustainable Landscapes

**GEF ID**

10255

**Project Type**

FSP

**Type of Trust Fund**

GET

**CBIT/NGI**

☐ CBIT

☐ NGI

**Project Title**

Integrated sustainable and adaptive management of natural resources to support land degradation neutrality and livelihoods in the Miombo-Mopane landscapes of North-east Botswana

**Countries**

Botswana

**Agency(ies)**
FAO

**Other Executing Partner(s):**
Ministry of Environment, Natural Conservation and Tourism

**Executing Partner Type**
Government

**GEF Focal Area**
Multi Focal Area

**Taxonomy**
Focal Areas, Forest, Forest and Landscape Restoration, REDD - REDD+, Drylands, Biodiversity, Financial and Accounting, Conservation Finance, Payment for Ecosystem Services, Mainstreaming, Agriculture and agrobiodiversity, Forestry - Including HCVF and REDD+, Biomes, Tropical Dry Forests, Desert, Grasslands, Protected Areas and Landscapes, Productive Landscapes, Community Based Natural Resource Mngt, Terrestrial Protected Areas, Land Degradation, Land Degradation Neutrality, Land Cover and Land cover change, Land Productivity, Carbon stocks above or below ground, Sustainable Land Management, Income Generating Activities, Sustainable Pasture Management, Improved Soil and Water Management Techniques, Community-Based Natural Resource Management, Sustainable Fire Management, Drought Mitigation, Sustainable Forest, Sustainable Livelihoods, Sustainable Agriculture, Restoration and Rehabilitation of Degraded Lands, Ecosystem Approach, Integrated and Cross-sectoral approach, Climate Change, Climate Change Mitigation, Agriculture, Forestry, and Other Land Use, Financing, Technology Transfer, Influencing models, Strengthen institutional capacity and decision-making, Deploy innovative financial instruments, Demonstrate innovative approache, Transform policy and regulatory environments, Convene multi-stakeholder alliances, Stakeholders, Local Communities, Communications, Education, Behavior change, Strategic Communications, Awareness Raising, Beneficiaries, Type of Engagement, Participation, Information Dissemination, Partnership, Consultation, Indigenous Peoples, Civil Society, Community Based Organization, Non-Governmental Organization, Academia, Private Sector, Capital providers, Individuals/Entrepreneurs, Large corporations, Financial intermediaries and market facilitators, SMEs, Gender Equality, Gender results areas, Access and control over natural resources, Participation and leadership, Access to benefits and services, Capacity Development, Knowledge Generation and Exchange, Gender Mainstreaming, Sex-disaggregated indicators, Gender-sensitive indicators, Women groups, Capacity, Knowledge and Research, Knowledge Generation, Learning, Indicators to measure change, Theory of change, Adaptive management, Targeted Research, Innovation, Knowledge Exchange

**Rio Markers**

**Climate Change Mitigation**

Climate Change Mitigation 1

**Climate Change Adaptation**

Climate Change Adaptation 1

**Submission Date**

12/13/2020

**Expected Implementation Start**

5/1/2021

**Expected Completion Date**

4/30/2026

**Duration**

60In Months

**Agency Fee($)**

481,913.00

**A. FOCAL/NON-FOCAL AREA ELEMENTS**

| Objectives/Programs | Focal Area Outcomes | Trust Fund | GEF Amount($) | Co-Fin Amount($) |
|---|---|---|---|---|
| LD-1-1 | Maintain or improve flow of agro-ecosystem services to sustain food production and livelihoods through Sustainable Land Management (SLM) | GET | 2,000,000.00 | 25,100,929.00 |
| LD-1-2 | Maintain or improve flow of ecosystem services, including sustaining livelihoods of forest-dependent people through Sustainable Forest Management (SFM) | GET | 1,569,725.00 | 25,475,000.00 |
| IP SFM Drylands | GEF-7 Program: Sustainable Forest Management Dryland Sustainable Landscapes (DSL) | GET | 1,784,862.00 | 28,400,000.00 |
| | | **Total Project Cost($)** | **5,354,587.00** | **78,975,929.00** |

**B. Project description summary**

**Project Objective**

Promote the integrated management of Miombo and Mopane landscapes in Chobe and Tutume-Mosetse sub-basins through the implementation of SLM and SFM interventions designed to achieve LDN targets. 20,000 hectares of degraded lands restored (primarily cultivated agricultural lands) 565,000 hectares of landscapes under improved practices 140,660 hectares of lands achieving LDN (primarily productive cultivated and grazing lands in Miombo/Mopane landscapes avoid, reduce and reverse LD) 637,745 tCO2eq sequestered or avoided over 20-years due to direct project interventions 15,200 direct beneficiaries (Female: 9,800 Male: 8,100)

| Project Component | Financing Type | Expected Outcomes | Expected Outputs | Trust Fund | GEF Project Financing($) | Confirmed Co-Financing($) |
|---|---|---|---|---|---|---|

| Project Component | Financing Type | Expected Outcomes | Expected Outputs | Trust Fund | GEF Project Financing($) | Confirmed Co-Financing($) |
|---|---|---|---|---|---|---|
| Component 1: Strengthening the enabling environment for the sustainable management of the targeted Mopane /Miombo ecoregion | Technical Assistance | Outcome 1:<br><br>Capacity of national and district level stakeholders to design, adopt, and implement strategic land use management planning enhanced to avoid, reduce, and reverse land degradation and biodiversity loss.<br><br>Indicators<br><br>Two (2) integrated Land-Use Plans adopted, funded, implemented and monitored strategically addressing SLM and SFM relevant to forest, agriculture, and rangeland practices<br><br>At least 565,000 hectares covered by adopted land use plans measuring LDN with objective of SLM and SFM (Ag lands: 43,000 ha; rangelands: 208,000 ha; forest 315,000 ha) | Output 1.1:<br><br>Capacity of national and district level stakeholders to design, adopt, and implement strategic land use management planning enhanced.<br><br>Intensive learning program for diverse government agencies responsible for various aspects of SLM/SFM achievement, including vertical and horizontal institutional coordination mechanisms to design and implement integrated land use management plans.<br><br>Strong emphasis upon issues of gender, including planning processes that ensure greater gender equality and mainstreaming of gender within all actions. | GET | 753,333.00 | 34,091,778.00 |

| Project Component | Financing Type | Expected Outcomes | Expected Outputs | Trust Fund | GEF Project Financing($) | Confirmed Co-Financing($) |
|---|---|---|---|---|---|---|
| Component 2: Scaling up SLM and SFM best practices at landscape level and with a transboundary focus to benefit people and ecosystems | Investment | Outcome 2: Improved production practices adopted across the targeted sub-basins and delivering LDN, SLM and SFM benefits<br><br>Indicators<br><br>72 extension officers leading on-going FFS programming designed to deliver SFM and SLM improvements that contribute to achievement of LDN targets.<br><br>7,350 private sector farmers, ranchers and NTFP users enrolled in FFS and reporting positive production trends as a result of adopting SLM/SFM practices<br><br>20,000 private sector forest product users enrolled in FFS at each target location.<br><br>Over 150,000 head of | Output 2.1:<br><br>Capacity of extension services to deliver sustainable production options strengthened through effective Farmer Field School Program<br><br>Comprehensive learning program and job performance standards for extension officers required to support SLM/SFM/LDN targets, including sustainable financial support by GoB<br><br>Output 2.2:<br><br>Private producers implement sustainable production practices that deliver SLM, SFM and LDN benefits, including land restoration.<br><br>FFS learning program implemented across | GET | 3,024,940.00 | 33,528,831.00 |

| Project Component | Financing Type | Expected Outcomes | Expected Outputs | Trust Fund | GEF Project Financing($) | Confirmed Co-Financing($) |
|---|---|---|---|---|---|---|
| Component 3: Effective knowledge management, monitoring, and linkages with other Miombo and Mopane countries under the SFM DSL IP | Technical Assistance | Outcome 3: Monitoring, evaluation and knowledge management effectively informs decision-making and amplify SLM and SFM practices to achieve LDN.<br><br>Indicators<br><br>1,500 monthly users of publicly accessible web-based national LDN platform hosting information on SLM/SFM/LDN operational and reporting on progress towards LDN targets<br><br>100 % of LDN indicators as defined under the national LDN framework incorporated into environment, agriculture and forestry sector development plans<br><br>2 land use management plans applying participatory landscape-level LDN monitoring | Output 3.1:<br><br>Communications strategy created and implemented to enhance skills of private producers and amplify best SLM, SFM, and LDN practices.<br><br>Professional communications strategy supported by knowledge management portal and innovative information sharing/marketing program linked to SLM/SFM improvements.<br><br>Output 3.2:<br><br>District and national level monitoring and reporting successfully inform government decision-making to support SLM, SFM and LDN targets.<br><br>Rigorous monitoring | GET | 1,321,334.00 | 10,715,320.00 |

| Project Component | Financing Type | Expected Outcomes | Expected Outputs | Trust Fund | GEF Project Financing($) | Confirmed Co-Financing($) |
|---|---|---|---|---|---|---|
| | | | | **Sub Total ($)** | **5,099,607.00** | **78,335,929.00** |
| **Project Management Cost (PMC)** | | | | | | |
| | | | | GET | 254,980.00 | 640,000.00 |
| | | | | **Sub Total($)** | **254,980.00** | **640,000.00** |
| | | | | **Total Project Cost($)** | **5,354,587.00** | **78,975,929.00** |

**C. Sources of Co-financing for the Project by name and by type**

| Sources of Co-financing | Name of Co-financier | Type of Co-financing | Investment Mobilized | Amount($) |
|---|---|---|---|---|
| Recipient Country Government | Ministry of Agriculture, Development and Food Security | Grant | Recurrent expenditures | 44,784,440.00 |
| Recipient Country Government | Ministry of Environment, Natural Resources, Conservation and Tourism: DEA | Grant | Recurrent expenditures | 367,790.00 |
| Recipient Country Government | Ministry of Environment, Natural Resources, Conservation and Tourism: DFRR | Grant | Recurrent expenditures | 9,736,363.00 |
| Recipient Country Government | Ministry of Presidential Affairs, Governance ,and Public Administration | Grant | Recurrent expenditures | 18,809,847.00 |
| Recipient Country Government | KFW – Ka-Za Phase III | Grant | Investment mobilized | 2,445,834.00 |
| Recipient Country Government | Savanna Fire Management [Organization - SFM.org] | Grant | Investment mobilized | 2,831,655.00 |
| | | | **Total Co-Financing($)** | **78,975,929.00** |

**Describe how any "Investment Mobilized" was identified**

The Government of Botswana working with FAO/Botswana secured co-financing from the listed sources. Please see attached letters of co-financing inclusive of descriptions attached.

**D. Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds**

| Agency | Trust Fund | Country | Focal Area | Programming of Funds | Amount($) | Fee($) |
|---|---|---|---|---|---|---|
| FAO | GET | Botswana | Land Degradation | LD STAR Allocation | 3,569,725 | 321,275 |
| FAO | GET | Botswana | Multi Focal Area | IP SFM Drylands Set-Aside | 1,784,862 | 160,638 |
| | | | | **Total Grant Resources($)** | **5,354,587.00** | **481,913.00** |

**E. Non Grant Instrument**

NON-GRANT INSTRUMENT at CEO Endorsement

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Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

**F. Project Preparation Grant (PPG)**

PPG Required

☐

**PPG Amount ($)**

150,000

**PPG Agency Fee ($)**

13,500

| Agency | Trust Fund | Country | Focal Area | Programming of Funds | Amount($) | Fee($) |
|---|---|---|---|---|---|---|
| FAO | GET | Botswana | Land Degradation | LD STAR Allocation | 100,000 | 9,000 |
| FAO | GET | Botswana | Multi Focal Area | IP SFM Drylands Set-Aside | 50,000 | 4,500 |
| | | | | **Total Project Costs($)** | **150,000.00** | **13,500.00** |

## Core Indicators

**Indicator 3 Area of land restored**

| Ha (Expected at PIF) | Ha (Expected at CEO Endorsement) | Ha (Achieved at MTR) | Ha (Achieved at TE) |
|---|---|---|---|
| 0.00 | 20000.00 | 0.00 | 0.00 |

**Indicator 3.1 Area of degraded agricultural land restored**

| Ha (Expected at PIF) | Ha (Expected at CEO Endorsement) | Ha (Achieved at MTR) | Ha (Achieved at TE) |
|---|---|---|---|
| | 4,000.00 | | |

**Indicator 3.2 Area of Forest and Forest Land restored**

| Ha (Expected at PIF) | Ha (Expected at CEO Endorsement) | Ha (Achieved at MTR) | Ha (Achieved at TE) |
|---|---|---|---|
| | 3,000.00 | | |

**Indicator 3.3 Area of natural grass and shrublands restored**

| Ha (Expected at PIF) | Ha (Expected at CEO Endorsement) | Ha (Achieved at MTR) | Ha (Achieved at TE) |
|---|---|---|---|
| | 13,000.00 | | |

**Indicator 3.4 Area of wetlands (incl. estuaries, mangroves) restored**

| Ha (Expected at PIF) | Ha (Expected at CEO Endorsement) | Ha (Achieved at MTR) | Ha (Achieved at TE) |
|---|---|---|---|

**Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)**

| Ha (Expected at PIF) | Ha (Expected at CEO Endorsement) | Ha (Achieved at MTR) | Ha (Achieved at TE) |
|---|---|---|---|
| 0.00 | 565000.00 | 0.00 | 0.00 |

**Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)**

| Ha (Expected at PIF) | Ha (Expected at CEO Endorsement) | Ha (Achieved at MTR) | Ha (Achieved at TE) |
|---|---|---|---|

**Indicator 4.2 Area of landscapes that meets national or international third party certification that incorporates biodiversity considerations (hectares)**

| Ha (Expected at PIF) | Ha (Expected at CEO Endorsement) | Ha (Achieved at MTR) | Ha (Achieved at TE) |
|---|---|---|---|

**Type/Name of Third Party Certification**

**Indicator 4.3 Area of landscapes under sustainable land management in production systems**

| Ha (Expected at PIF) | Ha (Expected at CEO Endorsement) | Ha (Achieved at MTR) | Ha (Achieved at TE) |
|---|---|---|---|
| | 565,000.00 | | |

**Indicator 4.4 Area of High Conservation Value Forest (HCVF) loss avoided**

| Ha (Expected at PIF) | Ha (Expected at CEO Endorsement) | Ha (Achieved at MTR) | Ha (Achieved at TE) |
|---|---|---|---|

## Documents (Please upload document(s) that justifies the HCVF)

| Title | Submitted |
|---|---|

**Indicator 6 Greenhouse Gas Emissions Mitigated**

| Total Target Benefit | (At PIF) | (At CEO Endorsement) | (Achieved at MTR) | (Achieved at TE) |
|---|---|---|---|---|
| Expected metric tons of $CO_2e$ (direct) | 0 | 9800000 | 0 | 0 |
| Expected metric tons of $CO_2e$ (indirect) | 0 | 0 | 0 | 0 |

**Indicator 6.1 Carbon Sequestered or Emissions Avoided in the AFOLU (Agriculture, Forestry and Other Land Use) sector**

| Total Target Benefit | (At PIF) | (At CEO Endorsement) | (Achieved at MTR) | (Achieved at TE) |
|---|---|---|---|---|
| Expected metric tons of $CO_2e$ (direct) | | | | |
| Expected metric tons of $CO_2e$ (indirect) | | | | |
| Anticipated start year of accounting | | | | |
| Duration of accounting | | | | |

**Indicator 6.2 Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) Sector**

| Total Target Benefit | (At PIF) | (At CEO Endorsement) | (Achieved at MTR) | (Achieved at TE) |
|---|---|---|---|---|
| Expected metric tons of $CO_2e$ (direct) | | 9,800,000 | | |
| Expected metric tons of $CO_2e$ (indirect) | | | | |
| Anticipated start year of accounting | | 2021 | | |
| Duration of accounting | | 20 | | |

**Indicator 6.3 Energy Saved (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)**

| Total Target Benefit | Energy (MJ) (At PIF) | Energy (MJ) (At CEO Endorsement) | Energy (MJ) (Achieved at MTR) | Energy (MJ) (Achieved at TE) |
|---|---|---|---|---|
| Target Energy Saved (MJ) | | | | |

**Indicator 6.4 Increase in Installed Renewable Energy Capacity per Technology (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)**

| Technology | Capacity (MW) (Expected at PIF) | Capacity (MW) (Expected at CEO Endorsement) | Capacity (MW) (Achieved at MTR) | Capacity (MW) (Achieved at TE) |
|---|---|---|---|---|

**Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment**

| | Number (Expected at PIF) | Number (Expected at CEO Endorsement) | Number (Achieved at MTR) | Number (Achieved at TE) |
|---|---|---|---|---|
| Female | | 9,800 | | |
| Male | | 8,100 | | |
| Total | 0 | 17900 | 0 | 0 |

## Part II. Project Justification

### 1a. Project Description

### 1.a PROJECT DESCIPTION

### A. Context

Geographic and Socio-Economic Context

1. Botswana is an upper middle-income, landlocked country located in Southern Africa. The total area is 581,730 km2. Botswana shares borders with Namibia, Zambia, Zimbabwe and South Africa. The total population is approximately 2.4 million people making Botswana one of the world's least densely populated nations. Most inhabitants are concentrated in the eastern parts of the country.

2. From independence in 1966 to the late 1990s, Botswana was one of the world's fastest-growing economies with average annual GDP growth above 10%. Although Botswana's economic growth slowed over the last two decades, Botswana has repeatedly been the top African performer in most governance indicators produced by the World Bank and other international organizations. HIV/AIDS infection rates, however, are the second highest in the world and threaten Botswana's impressive economic gains.

3. Despite having a strong economy, Botswana continues to be among the most unequal countries in the world[1][1]. Economic achievements are not equally shared. Unemployment officially remains 23.8% with unofficial estimates closer to 40%. Poverty is particularly pronounced in rural areas with both youth and women most affected. According to the Botswana Core Welfare Indicators Survey of 2009/2010, the proportion of individuals who were living below Botswana's Poverty Datum Line (PDL) has decreased steadily from 47% (1992/1993) to 30.6% (2002/2003) to 19.3% (2009/2010)[2][2].

4. The country is rich in natural resources, including coal, copper and diamonds. The diamond industry has been the back-bone of Botswana's economy for several decades. Mining currently accounts for nearly 40% of GDP and for 70-80% of export earnings. With limited investments from the private sector, the country strongly relies on mining and on the state budget. Due in part to the revenue generated from mining, nearly 52% of GDP is comprised of the service sector. The Government of Botswana has promoted expansion of financial services based upon the country's relatively stable banking sector.

5. As the country has become more reliant upon the mining and service sectors over the last forty years, Botswana has seen a major increase in urbanization. In 1971, the total population of Botswana was approximately 575,000. As noted, this number has now grown to over 2.4 million. The Government estimates that the urban population has shifted from approximately 9% in 1971 to more than 75% of the total population currently residing in an urban area. At the same time, the number of urban areas has grown from approximately 5 in the early 1970's to now more than 60 including small "villages". Gaborone – the nation's capital and largest urban area – has less than 250,000 inhabitants. Much of this movement and development of villages is associated with the increased provision of government services such as schools and clinics made available as Botswana has developed. Shifted population dynamics has impacted resource use patterns while rural dwellers continue to be some of the nation's most impoverished and food insecure.

6. Tourism is a very important source of revenue and employment for Botswana. According to Government statistics, approximately 500,000 "holiday" tourists visited Botswana in 2017. A vast majority of these tourists visit the country for nature-based tourism activities with the US, Germany, UK, France and Japan being the major markets. Tourism in Botswana is based upon a "high-end" "low-impact" model that focuses upon using tourism as a tool to promote biodiversity conservation and community development. This approach is designed to maximize revenue generation while limiting negative ecological and social impacts and maintaining product and reputational value based upon commensurate levels of service. Many of the tourism operations – including both hunting and photographic safari operators - have multi-year agreements whereby local communities benefit through the country's established Community-Based Natural Resources Management (CBNRM) program.

7. In rural Botswana where poverty is persistent the economy remains focused upon subsistence agriculture and livestock production. The livestock and agriculture sector constitutes less than 5% of GDP. However, these sectors provide substantial benefits in terms of employment and food security for rural poor.

8. Botswana generally presents challenging conditions for agriculture production. The country is primarily defined by sandy soils with low fertility and challenged access to reliable water sources. Less than 1% of Botswana's total land area is considered arable. Although agricultural production is intensifying with higher levels of mechanization, there are still less than 1,000 commercial farms and even fewer large-scale commercial farms. Most of the large-scale commercial farms continue to situated only in the Pandamatenga region. The average farm size in Botswana remains approximately 2 hectares and are primarily rain-fed enterprises producing subsistence quantities of sorghum, maize, millet, beans, sunflowers, groundnuts. Most small-scale producers have very low yields. There are few examples of community gardens and other programs designed to encourage economies of scale and production.

| Crop | Approximate National Hectarage |
|---|---|
| Sorghum | 60,000 ha |
| Maize | 130,000 ha |
| Millet | 8,500 ha |
| Beans/Pulses | 40,000 ha |

9. Livestock production is highly prevalent and important for rural incomes, subsistence and traditional cultural values. The government and FAO estimate that nearly 80% of agriculture's share of GDP comes from livestock production. Beef cattle is the main livestock endeavour with export benefits linked to the EU through special export agreements. Historically, over 95% of cattle produced in Botswana are for the export market. This export production market has led to significant investments in support services, including marketing and veterinary services. However, overall livestock numbers and producers have declined in recent years. The national cattle herd is estimated to be currently 1.6 million animals, down from 2.5 million head in 2011. There are also far fewer livestock producers. The government reports that in 2004, there were approximately 75,000

households engaged in livestock production. This figure dropped to less than 40,000 households by 2015 and estimated to be even lower now. Much of this decline in overall livestock production is attributed to shifting demographics with urban migration, climate change impacts and other resource constraints. Even with cattle reductions, overstocking continues to be a challenge with negative impacts to both range and forest. Small ruminates such as sheep and goats continue to be raised for subsistence and local markets.

| Livestock | National Herd |
|---|---|
| Cattle | 1,740,000 |
| Goats | 1,205,000 |
| Sheep | 242,000 |
| Donkeys | 178,000 |

Land Ownership and Governance

10. Botswana is divided into administrative districts with some districts further divided into sub-districts. State-owned land constitutes 26% of the total country. These lands are primarily devoted to National Parks and Forests Reserves. Freehold land accounts for about 3% of the country. This privately owned is mostly used for commercial farming[3][3].

11. Over 70% of Botswana's territory is classified as tribal land/communal land. Game Reserves, managed as national parks, are situated on tribal lands. Communal lands are mostly used for subsistence farming. The holders of tribal land rights are given certificates that provide owners perpetual and exclusive tribal land rights, except in communal grazing areas where there are no defined property rights to grazing resources.

| Land Ownership and Management | Percentage |
|---|---|
| State Owned Lands | 26% |
| Tribal/Communal Lands | 71% |
| Private/Freehold Lands | 3% |
| Total | 100% |

Climate

12. Botswana's climate is semi-arid with seasonal rainfall from November to March. Mean annual rainfall ranges from 250mm in the extreme southwest to 650mm in the extreme northeast. Rainfall is low, unreliable, unevenly distributed, and highly variable from year to year. The country is prone to drought. The highest mean monthly temperatures range from between 32°C to 35°C and generally recorded in October and January. The lowest monthly temperatures are between 1°C and 5°C, over the southern and eastern parts of the country, and 5°C and 7°C in the northern parts of the country.

13. Climate change will have a strong impact on Botswana, particularly vulnerable rural populations. Based on the global models (i.e. RCP of 4.5 and 8.5. GCM/RCM ensemble), most of the country will experience increased temperatures (1,5 to 3,5°C on average based on the area and model used) by 2050. The seasonal and annual mean precipitation are expected to decrease across most of the country[4][4]. Botswana Institute for Technology Research and Innovation (BITRI) is currently supporting the downscaling of available global climate models to Botswana to get more precise predictions.

14. Botswana has a relatively low carbon footprint. The energy sector (67.12% in 1990, and 74.49% in 2000) and Agriculture, Forestry, and Other Land Use (AFOLU) sector (54.39% in 1994, and 68.72% in 2011) area the main GHG emitters[5][5].

Biodiversity and Protected Areas

15. Botswana is globally famous for valuing its rich biodiversity. Botswana has some 900 known species of amphibians, birds, mammals and reptiles. This includes a national elephant herd currently estimated to be over 200,000. Approximately 45% or over 180,000 km2 of Botswana is a designated protected area. These include forest reserves, game reserves, national monuments, and Wildlife Management Areas[6][6]. However, biodiversity in Botswana faces considerable challenges including poaching as well as the expansion of agriculture and the development of fencing, roads and other infrastructure that have altered traditional grazing and migratory patterns.

| Protected Areas | Description and Summary of Allowed Uses | Percent of National Territory | Total Hectares |
|---|---|---|---|
| National Park | Located on state lands. Managed as protected areas. | 7 | 4,439,000 |
| Game Reserve | Located on tribal lands. Managed as protected areas similar to national parks. | 10 | 5,999,800 |
| Forest Reserve | All the forest reserves are located on State Land except Chobe Forest Reserve which is on Tribal Land. Managed for conservation purposes. | 1 | 410,482 |
| National Monuments | Located on state and tribal lands. Managed as protected and preserved areas to promote Botswana's cultural and natural heritage for sustainable utilisation. | 1 | 10,000 |
| Wildlife Management Areas | Buffer zones designated for wildlife conservation and use with higher natural use constraints. | 23 | 13,787,000 |
| | **Total** | 42 | 24,646,282 |

Forests and Forest Reserves

16. FAO estimates that between 1990 and 2010, Botswana lost 17.3% of its forest cover, or around 2,367,000 ha. According to FAO, approximately 20.0% or about 11,351,000 ha of Botswana is currently forested.

17. Botswana's forests are classified according to the type of land tenure system in which they are located, hence there are forests in State land, which include most Forest Reserves, National Parks, Game Reserves and Wildlife Management Areas, communal land, and freehold land.

18. The Mopane-Miombo ecoregion is situated in northern Botswana. This ecosystem comprises a mosaic of woodlands and rangelands. In 1990, Mopane-Miombo forests covered nearly 24% of Botswana. In 2011, the total Mopane-Miombo forest cover declined to 19.1%. The northern Botswana woodlands are composed primarily of Zambezi teak (*Baikiaea plurijuga*) and Mopane (*Colophospermum mopane*), commonly in association with *Pterocarpus angolensis* and *Terminalia sericea*. These woodlands offer essential habitat for a wide range of taxa, including megafauna such as lions, elephant, and buffalo. The ecosystem provides important ecosystem services such as regulating decomposition processes, nutrient cycling, and improving water quality[7][7].

19. The Mopane-Miombo ecosystem maintains high carbon stocks. FAO estimates that Botswana's forests contain 646 million metric tons of carbon in living forest biomass.

20. Botswana has six gazetted Forest Reserves (FRs): Kasane, Kasane Extension, Chobe, Kazuma, Maikaelelo and Sibuyu. These Forest Reserves account for approximately 1% of the total country's land area. The Forest Reserve estate is located primarily in the northern part of the country which will be targeted by this project. The largest forest reserves are the Chobe Forest Reserve (148,500 ha), Sibuyu Forest Reserve 116,100 ha), and Kasane Extension Forest Reserve (64,111 ha).

| Forest Reserve | Description | Total Hectares |
|---|---|---|
| Kasane Forest Reserve | Located on State Land and the ecoregion protected is Zambezian & Mopane woodlands; Zambezian Baikiaea woodlands. | 11,871 |
| Kasane Extension Forest Reserve | Located on State Land and the ecoregion protected is Zambezian & Mopane woodlands; Zambezian Baikiaea woodlands. | 64,111 |

| | | |
|---|---|---|
| Chobe Forest Reserve | Located on Tribal Land and the ecoregion protected is Zambezian Baikiaea woodlands; Zambezian & Mopane woodlands. The Forest Reserve is part of the Chobe sub-basin. | 148,500 |
| Kazuma Forest Reserve | Located on State Land and the ecoregion protected is Zambezian Baikiaea woodlands; Zambezian & Mopane woodlands | 15,600 |
| Maikaelelo Forest Reserve | Located on State Land and the ecoregion protected is Zambezian & Mopane woodlands; Zambezian Baikiaea woodlands | 54,300 |
| Sibuyu Forest Reserve | Located on State Land and the ecoregion protected is Zambezian & Mopane woodlands; Zambezian Baikiaea woodlands. | 116,100 |
| | Total | 410,482 |

21. Originally created primarily to safeguard commercial timber resources, Forest Reserves were also used by local communities for grazing and collection of building materials, fuelwood, traditional medicines, and other non-timber forest products known in Botswana as "veld" products[8][8]. Forest Reserves are now generally considered as important conservation buffer zones to more strictly protected game reserves and national parks. As a result, most Forest Reserves having extremely limited economic function beyond photographic and hunting tourism.

**B. Description of Target Landscapes**

22. The project design benefitted from information generated through the "Integrated Landscape Assessment Methodology" (ILAM) applied across the DSL program platform. This included remote sensing, multi-stakeholder group discussions, and household surveys (SHARP). For details regarding this methodology, please see Annex O.

Overview

23. The child project will focus upon two of Botswana's most important Miombo and Mopane woodland landscapes. Aligning with the overall program directions, both locations are sub-basins situated in border areas in order to enhance the program's transboundary aspects. Target site one is the Chobe sub-basin within the Chobe District of northern Botswana. Target site one borders both Namibia and Zimbabwe. The second target site is the Tutume-Mosetse sub-basin located in Botswana's Central District along the eastern boundary with Zimbabwe.

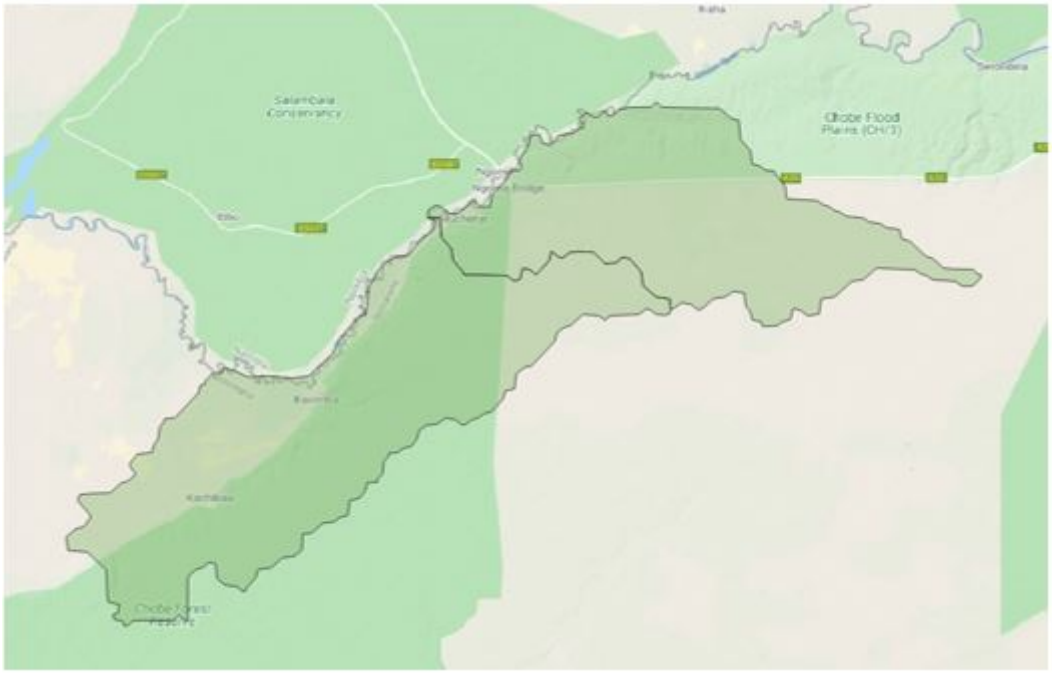
24. Both locations offer a variety of degradation challenges and opportunities to generate proof of concepts designed to deliver GEB impacts at the project and program levels. The areas were identified and selected by a Government of Botswana Task Force inclusive of both the Ministry of Environment, Natural Resources Conservation and Tourism (MENT) and Ministry of Agricultural Development and Food Security (MoA). Selection was based on several criteria, including: i) priority targets for LDN based on currently available information; ii) representativeness of the Miombo and Mopane ecoregion; iii) strategic priority for achieving national policy targets; iv) opportunity to build on previous projects, including GEF investments, through upscaling of SFM and SLM practices; and v) opportunities for transboundary cooperation.

25. To assist with the generation of baseline data during the PPG phase, FAO supported the conduction of a SHARP assessment. The SHARP assessment concluded that 55% of surveyed households were involved in crop production and 28% in livestock production. However, only 4% of surveyed households consider crop production as their main source of income. Surveyed households are mainly employed outside agriculture (40% of households in Tutume-Mosetse vs. 53% in Chobe). As detailed in the gender analysis and action plan, women play an important role throughout the productive sector. Women are also engaged in work beyond the household, including holding positions within the government and private sector. Women commonly manage and are responsible for key decisions within the household, including financial management, and are integrated within local decision-making structures such as the Village Development Councils.

26. The areas display a mosaic of land ownership and use patterns, including forest reserves, national parks, and tribal lands. Portions of the target areas are designated for wildlife conservation and others for productive use. Productive uses include grazing, agriculture, and forest products. Agriculture in both areas is dry land and rain reliant, reflecting the norm of Botswana's agriculture. Both areas have extensive grazing based upon an "open access" management regime. In both areas, local communities rely upon forest resources for Non-Timber Forest Products (better known in Botswana as "Veld Products") such as grasses, clay, reeds, medicinal plants, wild foods (fruits, mopane worms,

bulbs, mushrooms, fodder, game, honey); wood fuel and timber; and invaluable environmental and cultural services. Both target areas suffer from extensive degradation primarily driven by current rangeland, agriculture, and forest management and use approaches compounded by climate change.

Target Site One: Chobe Sub-Basin




27. The Chobe District borders Namibia and Zimbabwe and includes portions of the Okavango and Zambezi Basins. The District covers 22,052 km2 with approximately 23,347 inhabitants. Critical government stakeholders such as District Agriculture Officers, Veterinary Officers, and DWNP Headquarters are located in the capital, Kasane.

28. Roughly 30% of Chobe District is Tribal Land where productive forestry, agriculture, and rangeland uses occur. There is very limited freehold land. The remaining 70% of the Chobe District is designated as State Land (Forest Reserve and National Park). This includes Chobe National Park and six national forest reserves (Chobe, Kasane, Maikaelelo, Kazuma, Kasane Extension and Sibuyu). These state lands are managed exclusively for wildlife conservation.

29. Tourism is vitally important to the District's economy. Chobe is famous for its wildlife resources, including the continent's largest elephant population. As a transboundary watershed, the Chobe Basin is a core component of the Kavango-Zambezi (KA-ZA) Trans-frontier Conservation Area, shared by Angola, Botswana, Namibia, Zambia, and Zimbabwe. Prior to COVID, tens of thousands of international tourists visited the region each year. Wildlife based tourism is the only commercial activity allowed within Chobe's Forest Reserves and National Park.

30. The District's climate is dry sub-humid with more than 550 mm of rainfall per year[9][9]. The vegetation is characterised by dry deciduous forest.


| | 1995 | 2000 | 2005 | 2010 | 2015 |
|---|---|---|---|---|---|
| Tree-covered areas | 13463,39 | 13514,55 | 13592,77 | 13672,55 | 13672,55 |
| Cropland | 11284,37 | 13447,92 | 14679,34 | 14988,65 | 14988,65 |
| Grassland | 24993,68 | 22761,95 | 21452,31 | 21071,72 | 21071,72 |
| Wetlands | 1248,82 | 1246,82 | 1246,82 | 1238,31 | 1238,31 |
| Artificial surfaces | 101,48 | 120,5 | 120,5 | 120,5 | 120,5 |
| Other land | 0 | 0 | 0 | 0 | 0 |
| Water bodies | 0 | 0 | 0 | 0 | 0 |

31. The project will target a specific sub-basin within the Chobe District, primarily associated with the "Chobe Enclave". This targeted sub-basin has three land use designations: Chobe National Park, Chobe Forest Reserve and a portion of Controlled Hunting Area (CH) 1. The area is known as the "Chobe Enclave" because the residents of CH1 are surrounded by protected areas (Chobe National Park and Chobe Forest Reserve) on three sides and the Namibian border on the north.

32. The term "controlled hunting area" does not mean refer specifically to hunting. Controlled Hunting Area is a land use designation used throughout Botswana to demarcate areas outside of national parks, game reserves and forest reserves. Some of these areas are designated for hunting. Other Controlled Hunting Areas (CHAs) are designated for photographic tourism only. CH1 is designated as a "no hunting" area.

33. The targeted sub-basin covers approximately 87,240 ha. Approximately 25,000 ha of this sub-basin lies within the "productive use" zone of CH1. However, residents use the entire area of CH1 (177,000 ha) both inside and outside of the sub-basin for forestry, rangeland, and agricultural uses. Therefore, to address greater SLM and SFM issues across this productive use zone, the project's LDN and associated land use planning efforts will be expanded to cover the sub-basin and the entirety of CH1. This will bring the total target area to 237,000 ha.

**Key Figures: Chobe Target Sub-Basin**

**Total Sub-Basin Area: 87,000 Ha**

*Note: The project's Component 2 (Practice) activities will focus upon the sub-basin or 87,000 ha. However, the LDN targets and associated LUP activities will cover all of CH1 and the Chobe Forest Reserve within and adjacent to sub-basin for a total of 365,500 ha.*

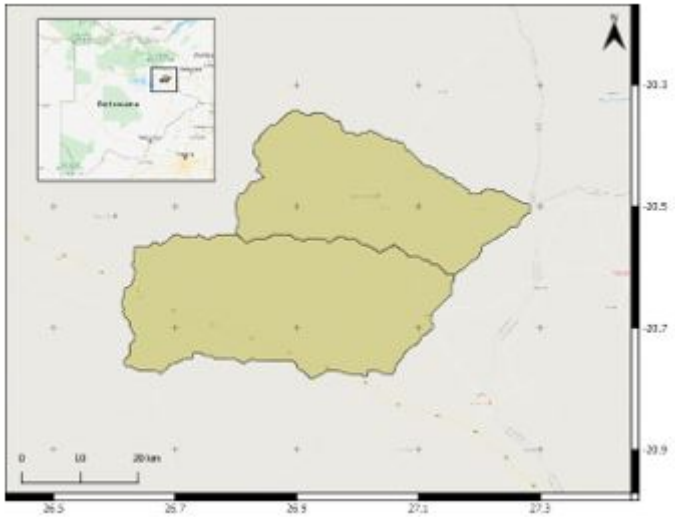
| Category | |
|---|---|
| **Population** | |
| Muchenje/Mabele | 357 men<br>416 women |
| Kavimba | 282 men<br>266 women |
| Kachikau | 669 men<br>687 women |
| **Land Cover and Uses** | |
| Forested Land | 21,000 Ha |
| Cultivated Land | 400 Ha |
| Grasslands | 64,750 Ha |
| Wetlands | 1,250 Ha |
| Artificial Surfaces | 120 Ha |
| **Land Use Designation** | |
| National Park | 40,000 Ha |
| Game Reserve | 0 Ha |
| Wildlife Management Area | 0 Ha |

| | |
|---|---|
| Forest Reserve | 22,000 Ha |
| Tribal (Pastoral/Arable/Residential) | 25,000 Ha |
| Freehold | 0 Ha |
| **Livestock** | |
| Cattle | 5,627 head |
| Small Ruminates | 2,280 head |
| **Agriculture Type** | |
| Irrigated Crop Lands | 0 Ha |
| Dry-Land Crops | 2,100 Ha |
| Garden | 4 Ha |
| **Primary Crops** | |
| Sorghum, Maize and Millet | 1,000 Ha |
| Pulse Crops and groundnuts | 1,000 Ha |
| **Government Services Staff (Extension Officers)** | |
| MENT | 22 men<br>12 women |
| MoA | 11 men<br>2 women |

34. Chobe Enclave residents are some of Botswana's poorest communities. They rely upon livestock, agriculture and direct forest use. Forests are used for fuelwood, thatching grass, fruits such as morula and mokolwane. Small-scale crop farming is practiced on small plots generally of less than 2 hectares per household. These plots have very low yields and market share. Approximately 24% of households own livestock. Rangeland production is challenged for many reasons. The amount of available rangeland is limited relevant to livestock numbers, resulting in overgrazing. The area has regular outbreaks of foot-and-mouth disease and a variety of pests, including tsetse fly. There are many poisonous plants such as Dichapetalum cymosum. Perhaps most importantly, wildlife conflict is an on-going issue. Livestock losses to predators is high. Crops are frequently destroyed by elephants and other wildlife.

35. Residents of the Enclave do benefit from tourism. As noted, more than 50% of households surveyed in the target sub-basin during the PPG generate income from sources other than agriculture and livestock. Data was not disaggregated to determine outside income source (e.g., tourism, small business, and/or government). However, anecdotal evidence indicates that many local households have one or more family members employed through the many tourism lodges in the region. In addition, the communities generate income from tourism via well-established Community-based Natural Resource Management programs and associated joint-venture agreements between communities and tourism companies.

Target Site Two: Tutume-Mosetse Sub-Basin



36. The Tutume-Mosetse sub-basin is located in the Central District covering nearly 15,000,0000 ha. Tutume sub-district covers approximately 4,350,000 ha, stretching from the Makgadikgadi Pans to the border with Zimbabwe.

37. There are approximately 150,000 people living in the Tutume Sub-District. Most residents live in rural areas with only 20,000 persons living in urban areas. Poverty rates are extremely high. More than 30,000 residents rely in part upon government transfers for their support.

38. The rural population engages in mixed livestock and farming. Primary agricultural products are maize, sorghum, and beans. The Integrated Support Programme for Arable Agriculture Development (ISPAAD) programme supports cultivation to improve rural communities' food security, nutrition and health. Livestock production is the main source of income for a large percentage of households. The Sub-District is heavily stocked with mostly free-ranging animals. The government estimates that there are over 150,000 cattle and 140,000 sheep/goats.

39. Over 35% of Botswana's total Miombo and Mopane woodlands are located in Tutume. Forest or "veld" products are very important to local households with an annual economic value estimated to be several millions. Forest products include mopane wood, thatching grass, wild fruit and seasonal collection of mopane worms (caterpillars)[10][10]. Mopane trees provide an estimated US$ 250 annually per household. Thatching grass provides an estimated US$ 220 annually per household.


| | 1995 | 2000 | 2005 | 2010 | 2015 |
|---|---|---|---|---|---|
| Tree-covered areas | 7301,93 | 9058,37 | 10187,02 | 14322,1 | 14261,05 |
| Cropland | 39139,04 | 38795,5 | 40896,11 | 40930,76 | 41114,35 |
| Grassland | 153910,89 | 152497,98 | 149260,32 | 144956,41 | 144599,01 |
| Wetlands | 0 | 0 | 0 | 0 | 0 |
| Artificial surfaces | 8,38 | 8,38 | 16,77 | 150,98 | 385,83 |
| Other land | 0 | 0 | 0 | 0 | 0 |
| Water bodies | 0 | 0 | 0 | 0 | 0 |

40. The project will target a specific sub-basin within Tutume covering approximately 200,000 ha. Over 60% of local residents in the targeted sub-basin rely upon forest use, agriculture, and/or livestock production for their livelihoods. These communities are generally income challenged and highly vulnerable to the negative impacts of land degradation, forest degradation, and climate change. All lands within the sub-basin are designated as tribal lands.

41. The targeted sub-basin has extensive Miombo-Mopane forests. Degradation is being driven by a combination of unsustainable forest use, very high livestock numbers and expanding agricultural production. Households in this region generally farm on plots of 20 hectares or more. Producers are able to maintain and expand these relatively large plots in part as a result of new government programs that supply farm machinery. At the same time, livestock numbers are increasing with nearly 200,000 head of livestock

currently utilizing the sub-basin. Herd management is based upon an “open-access” regime with livestock quickly outpacing available range resources. Forest use continues unabated.

| **Key Figures: Tutume-Mosetse Sub-Basin**<br><br>**Total Area: 200,000 Ha** | |
|---|---|
| **Category** | |
| **Population** | |
| Tutume | 8,557 men<br>9,738 women |
| Mosetse | 1,220 men<br>1,056 women |
| Makuta | 483 men<br>531 women |
| Goshwe | 837 men<br>929 women |
| **Land Area Targeted: 200,000 ha (sub-district:** | |

| | |
|---|---|
| Forested Land | 14,260 Ha |
| Cultivated Land | 41,114 Ha |
| Range Land | 144,600 Ha |
| Artificial Surfaces | 385 Ha |
| **Land Use Designation** | |
| National Park | 0 Ha |
| Game Reserve | 0 Ha |
| Wildlife Management Area | 0 Ha |
| Forest Reserve | 0 Ha |
| Tribal (Pastoral/Arable/Residential) | 200,000 Ha |
| Freehold | 0 Ha |
| **Livestock** | |
| Cattle | 165,000 head |
| Small Ruminates | 35,000 head |
| **Agriculture** | |
| Irrigated Crop Lands | 0 Ha |
| Dry-Land | 41,114 Ha |
| Garden | 44 ha |

| | |
|---|---|
| **Primary Crops** | |
| Sorghum/Maize/Millet | 20,000 Ha |
| Beans/groundnuts | 20,000 Ha |
| **Government Services Staff** | |
| MENT | 25 men<br>7 women |
| MoA | 11 men<br>8 women |

## C. THREATS: ROOT CAUSES AND DRIVERS

42. Approximately 50% of Botswana's forests are affected by land degradation. There are multiple drivers including unsustainable grazing, cropping, fuel-wood and NTFPs harvest, and uncontrolled fires. Botswana's State of the Environment report identifies and quantifies three classes of degraded land[11][11]:

| LD Classification | Total Area National |
|---|---|

| | |
|---|---|
| Bare soils degraded areas | 28,592 km2 |
| Partially degraded areas | 35,159 km2 |
| Bush encroached areas | 37,141 km2 |

43. According to the national Land Degradation Assessment, 30% of Botswana's cropland suffers from land degradation, including water and wind soil erosion. This – in association with climate shocks – leads to a loss of topsoil fertility which results in crop failure, loss of productivity and declined water availability.

44. Botswana's Mopane-Miombo ecoregion suffers from both forest and land degradation. Approximately 50% of forests are affected by land degradation. This includes biomass decline, loss of habitat, and compaction. Active biological degradation also impacts approximately 70% of the vegetation in forest land. This includes reduction of tree cover, deforestation and changes in species composition[12][12]. Soil compaction resulting from over-grazing affects approximately 30% of forests leading to erosion, impacts to water retention, and limiting forest and ground cover regeneration.

45. Degradation is highest in areas with human settlement and cattle grazing[13][13]. This is particularly problematic in communal lands where "open access" grazing is the norm[14][14].

46. Both target landscapes share similar land and forest degradation drivers with national trends. However, analysis conducted during the PPG found that within the target areas degradation figures are higher than national trends. In Tutume, 73% of respondents reported crop failure during to land degradation and 44% reported productivity loss. In Chobe, 46% of the respondents mentioned crop failure, 33% experienced productivity loss, and 10% mentioned a decline in water availability.

47. Crop conversion is a major driver of forest loss in both targeted landscapes where a total of 852,758 ha of tree cover was converted to cropland and pasture during over the last decade. The Tutume region lost an additional 1,370 hectares of forest land to settlement expansion. Approximately 6% of Chobe's forested areas (344 ha) were converted to grassland between 2000 and 2018 in the baseline site according to the Collect Earth Assessment undertaken during the PPG phase.

48. Rangeland degradation is mainly caused by unsustainable grazing management and overstocking[15][15]. In the Tutume region during the dry season and during periods of drought, water for livestock is restricted to boreholes. This results in inflated cattle densities and intensification of overgrazing and associated land and forest degradation.

49. Overgrazing is often worst in areas near natural and artificial (boreholes) watering points. In Chobe, water points are scarce and the river is a major source of water for wildlife and livestock. Areas surrounding open water sources are severely overgrazed. PPG analysis revealed that land degradation and forest loss occurs in 70 % of cropland and grassland in Chobe due to poor management practices including overgrazing. This results in the disappearance of forest cover, shrub encroachment and the siltation of streams and wetlands[16][16]. In Tutume, rangeland proximate to both natural and artificial watering points (boreholes) suffer from heightened levels of overgrazing and associated degradation.

50. A vast majority of rural Botswana households and many peri-urban communities rely upon fuelwood. Fuelwood is primarily gathered from unmanaged forests. Comprehensive studies on the rate of fuelwood consumption have not been conducted in Botswana for a long period[17][17]. A SHARP analysis of fuelwood use was completed during the PPG. This rapid appraisal found that more than 97% of rural households rely upon fuelwood in the target areas. The growth of villages in areas such as Tutume are resulting in increasing fuel-wood pressures. Wood is frequently collected in rural areas to sell in urban areas, e.g. from Tutume to Francistown. The SHARP assessment found that over 67% of respondents considered access to fuelwood and charcoal "difficult" or "very difficult". Only 25% considered fuelwood access "easy" or "very easy".

51. Human caused wildfires are a major driver of degradation resulting in increased rates of erosion, forest loss and inhibited forest regeneration. In 2010, an estimated that over 50% of Botswana was impacted by wildfire. Livestock owners often set fires at the end of the dry season to increase rangeland. The intensity and scale of these fires generally increases following years of above average rainfall. From 2006 – 2010, fires consumed between 3.3 million to 13.6 million hectares of range and forest land annually[18][18]. These amount of landscape consumed by fires was reduced drastically during the dry years between 2012 and 2016 (from 11,327,000 ha to 339,234 ha)[19][19]. Often fires started in communal lands will "jump" and consume protected area landscapes.

52. Government data indicates that wildfires are almost exclusively started by people. Some sources are "accidental" e.g., campfires, discarded cigarettes, vehicles, field burning, etc. However, many of these fires are intentionally set fires by villagers. Recent Chobe District wildfires have covered 5% of land area (2015) and up to 20% (2016). In the Central District, where Tutume is located, fires have burned in recent years burned over 40% of the district surface area (2015) and as little as 6% (2016). Importantly, fire incidences in Chobe are focused upon forested landscapes such as the Kasane Forest extension (CH4), Pandamatenga West (CH8), North-Eastern part of Chobe National Park, and Chobe Enclave (at the intersection between Chobe Enclave South and Chobe Enclave North)[20][20].

53. Human wildlife conflict in rural Botswana is often related to land and forest degradation. Wildlife conflict does occur regularly with significant crop damage and livestock loss. One study (Hemson, 2005) estimated that each cattle post within the vicinity of the Makgadikgadi Pans National Park lost $168 per annum to lions alone. Another (Meynell & Parry 2002) suggested that lions were responsible for 50% of wildlife associated damages. The Chobe Enclave has high densities of wildlife and thousands of annually reported human-wildlife conflicts. The Department of Wildlife and National Parks (DWNP) lifted the hunting ban in September 2019. Hunting is now allowed in specifically defined area at the border of the Forest Reserves and of Chobe National Park. This will again shift the dynamics of land and forest degradation and human wildlife conflict.

54. Inadequate local-level participatory land-use planning, conflicting land use policies, and often uncoordinated approaches between agencies and communities that are not data driven result in both degradation and conflict. For instance, lands allocated for agriculture and/or livestock grazing are often situated on or near known wildlife corridors. This

leads to a high incidence of conflict and impact from predators as well as buffalo, antelope, warthogs, and elephants. As land and forest degradation expand and agriculturalists and herders search out new production areas, these conflicts will be exacerbated as wildlife and rural communities compete for limited resources. This will be undoubtably be exaggerated by climate change as weather patterns shift and impact both production and wildlife patterns. For instance, elephant ranges seem to be expanding southwards as a result of changing rainfall systems.

55. Human and wildlife conflicts in the livestock sector are often related to poor management of communal grazing areas and "open access" grazing regimes. This includes limited zoning, increased herd numbers, and limited incentives to control livestock movements. These same issues that generally drive land and forest degradation also increase rates of degradation and livestock loss. Simultaneously, overgrazing generates competition between domestic and wild ungulates, often pushing wild ungulates from overgrazed rangeland and forest areas to seek out cropped lands.

56. Perceptions are often that deforestation and removal of natural vegetation is due in large part to overgrazing by elephants. Northern Botswana has some of the world's most significant elephant herds. The elephant population in Chobe National Park is currently estimated at 120,000 animals. This size of this herd is increasing. However, a recent study found that elephant populations are not contributing significantly to the loss of interior woodlands.[21][21] Instead, the authors found that land cover change from woodland to shrubland and grassland was largely due to fire (especially anthropogenic fire) and rainfall. Higher annual rainfall leads to higher biomass production and a subsequent increase in fuel loads during winter dry seasons.

57. Mining is linked to limited land and forest degradation in both target areas. Sand mining is a cause of degradation of riverbanks and riverbeds leading to erosion and river siltation in the Tutume-Mosetse sub-basin. There has been an increase in speculative licences for mining prospecting, with little supervision and enforcement of legislation and enforcement/auditing of activities[22][22]. Chobe District mining is mainly undertaken in the Forest Reserves of Kazumgula and Lesoma. This includes smaller borrow pits for road construction as well as mining for dimension stones, sand and clay in Mabele and near Lesoma respectively.

58. Climate change is already having impacts as noted and will over the coming years compound production, conflict, land use, and associated land and forest degradation challenges. Rural communities in Botswana have very limited resilience to climate change for a variety of reasons. Rural communities generally live a subsistence lifestyle reliant upon farm goods, livestock, and non-timber forest products for their daily survival. As noted, the land and forest resources are already under significant strain due to unsustainable management practices.

59. Climate change is expected to intensify this already tenuous situation with fluctuating weather patterns, increased intensity of weather events, higher temperatures and limited overall rainfall. For instance, pest species such as Quelea birds (sorghum) and Fall Army Worm (Maize) seem to be increasing along with the incidence of drought.

60. In Chobe, the average mean temperature is estimated at 23.3°C to 23.7°C and is expected to increase to a range of 24.8°C to 26.9°C. The average mean rainfall in Chobe is currently 505 to 631mm and will likely decrease to a range of 457 to 504 mm. In Tutume, the average mean temperature is estimated at 20.3°C to 21.7°C and will likely increase to a range of 21.8°C to 23.7°C. Tutume's average mean rainfall is currently estimated at 432 to 466 mm and will likely decrease to a range of 365 to 431mm.

## D. BARRIERS

61. Three barriers currently inhibit the successful realization of sustainable land and forest management and the achievement of associated LDN targets under development.

*Barrier One: Land and resource planning, management and governance challenges*

62. There is an urgent need to direct productive practices in a strategic manner through the design and implementation of coherent and coordinated land and resource use management planning. As detailed under the baseline, Botswana has a number of regulations, policies and strategies designed to promote sustainability. To date, the Government and private stakeholders have struggled to implement these policies in a cohesive and informed manner necessary to address land and forest degradation issues. Government agencies often do not have the capacity and/or experience required to successfully implement comprehensive land use planning and management approaches. Strong examples of applying land use planning to productive landscapes necessary to address degradation concerns do not yet exist. Capacity to determine management targets and monitor these targets at the spatial level is low. Financial investments are not well-aligned. Progress and impact are not monitored and evaluated based upon shared objectives.

63. Land use management is fragmented and complicated in Botswana. Local communities, private producers and over a dozen agencies are engaged in daily land management and resource use decision-making on both tribal and state lands. Without a unifying land use plan, actions and investments are often divergent and not strategically aligned to deliver sustainable land and forest management objectives. Botswana does not have a working example of enforceable and inclusive planning processes that identifies land and forest degradation issues and aligns investments, resource use, and development actions to deliver sustainable development targets.

64. Because land use planning is not in place to help harmonize actions, Government financing for development efforts is not strategically aligned. In Botswana, budgets remain sector specific. The Department of Forestry and Range Resources (DFRR) and Department of Wildlife and National Parks (DWNP are under the Ministry of Environment and Natural Resources, Conservation and Tourism (MENT). These key agencies run projects according to budget lines linked to MENT mandates. The Departments of Animal Production and Veterinary Services are both under the Ministry of Agriculture Development and Food Security (MoA) and will likewise prioritize allocations according to MoA directives. Budgets are currently decided at the central level and are not defined based on cross-sectoral plans and/or District Development Plans. Without a cohesive planning framework, expenditures are not aligned to efficiently deliver higher-level sustainable land and forest management objectives. Major projects at the community level that effect SLM and SFM are often not linked to local investments overseen by unrelated governments. In addition, none of the investments are strategically aligned with or evaluated based upon contributions to shared sustainable land and forest management goals.

65. Cohesive management and planning is further hindered by inadequate monitoring and information systems. Many agencies are tasked with gathering information related to specific resource use. However, there is not a systematic approach or strategy in place to prioritize data collection and collate information required to inform land and forest conservation. Local authorities do not have adequate capacity for efficient and effective law enforcement and control of natural resource exploitation.

66. Land and forest degradation is particularly acute on communally managed tribal lands where open access is often a primary driver of degradation. Decision-making, monitoring and evaluation still largely exclude non-government land-users except for consultations at concept stage. Land users do not have institutional and legal authority to be directly involved in land-use management planning. Limited training has been provided to local community representatives to enable them to participate efficiently to decision-making and planning processes. According to the PPG SHARP assessment, only 19% of surveyed households in the targeted areas are aware of policies related to LDN, including sustainable agriculture and climate change adaptation. Normalizing this system to better engage local communities to identify degradation causes and subsequently design, adopt, and implement resource use approaches that create use parameters are urgently required.

67. Land use management gaps are known and recognized in Botswana. Support for change exists. There is a great appreciation by the Government of Botswana that the management of natural resources, including land, water and forest resources, must embrace and be guided by the principles of sustainable integrated planning for the collective benefit of people, ecosystem and economy[23][23]. National and District development plans highlight the imperative of consolidating and updating land and resource use policies focused upon productive land and forest scapes. However, capacity building is urgently required to catalyse a move from “desire” to “reality”.

68. The Town and Country Planning Act was adopted in 2013. This Act creates the enabling environment by specifying that land use planning can and should be adopted at a national level, including both rural and urban areas. However, due to capacity constraints, little progress has been made.

69. District Land Use Planning Units (DLUPU) have been established to help engage, integrate and align diverse interests and investments. Progress in this regard has been very slow and will continue to be challenged unless capacities are built to emplace strategic land use planning. DLUPUs require assistance to build capacity necessary to support land use planning processes.

70. In the Chobe District, a draft Integrated Land Use Plan has been designed. As discussed in the baseline analysis, the Chobe Integrated Land Use Plan (ILUP) is good first step and provides a foundation for more detailed land use planning at both target sites that could serve as a model for replication. However, the ILUP has not yet been formally adopted. In addition, the ILUP is very general providing a solid background assessment of the region and associated land and resource management challenges. However, the

ILUP does not provide details and does not address specifics regarding productive land and resource use. For instance, the ILUP does not establish boundaries and/or set target numbers for grazing management. The ILUP does not provide details regarding agricultural development and direction for the implementation of sustainable agriculture practices. The ILUP does not address fundamental issues related to specific land use requirements designed to reduce land and forest degradation and/or wildlife conflict. Although the ILUP is very useful, there is an immediate need to support stakeholders at both target sites to move beyond the generalities described and towards more rigorous land and resource planning models with firm objectives, targets, monitoring and regulatory frameworks to address the root causes of land and forest degradation.

71. In terms of community engagement and management, Botswana has a very long and generally successful track- of Community-Based Natural Resource Management (CBNRM) applied to the tourism and wildlife conservation sectors. There are two CBOs established within the Chobe Enclave established for this purpose. However, these tools have not yet been applied to address land and forest degradation issues. Capacity needs to be built to apply CBNRM approaches to land use planning and management designed to address degradation issues within community managed productive landscapes.

72. Strategic land use planning and associated monitoring efforts offer a solid approach to developing targets, implementing interventions to drive realization of these targets, and a framework for monitoring and upscaling. Botswana has not yet established LDN targets. This capacity needs to be built with technical assistance offered.

*Barrier Two: Sustainable production experience and capacity challenges*

73. Rural Botswana relies primarily upon two productive sectors: agriculture and livestock. Both sectors along with associated subsistence activities such as fuel-wood consumption drive land and forest degradation across the targeted Mopane-Miombo ecoregions. This is in part related to the first barrier, in that the land and resource management parameters required to guide sustainable production deliver LDN through SLM and SFM objectives and do not exist. However, even if such parameters did exist, communities generally lack the capacity to identify and adopt sustainable production practices that simultaneously deliver LDN through SLM and SFM objectives while supporting climate change resilience, food security and livelihood needs. There is a very strong need to assist small-holder producers in Botswana to access and apply best international principles and practices regarding the nexus between sustainable production options and potential LDN, SLM and SFM benefits. Unfortunately, Botswana has faced significant challenges in terms of strengthening producer level capacity.

74. According to the PPG SHARP assessment, very few producers in the two targeted landscapes are aware of let alone utilize SLM and SFM practices nor are the institutional mechanisms in place to incentivize update of practices. Practices used on a limited basis include crop residues, synthetic fertilizers, crop rotation, intercropping and nitrogen-fixing legumes. Less than 20% of respondents use SLM agricultural practices designed to improve soil conservation and productivity. Value is further reduced, climate change exposure increased and degradation increased due to reliance upon seed subsidies programmes or national providers such the Botswana Agricultural Marketing Board (BAMB). In the target areas, only 15% of farmers access local planting material and 1% have access to community seed banks. More than 80% rely on government support. These seeds are often dependent upon agro-chemicals and other expensive and resource degrading inputs. Due to capacity constraints, farmers do not have access to seed varieties suited for local conditions and/or that allow for sustainable agriculture practices.

75. Unsustainable agricultural practices such as monocropping and conventional tillage systems are still common and lead to soil erosion, loss of soil moisture and loss of organic matter. This leads to a production that is highly unstable and creates a situation of precarity for small-scale farmers. Without sustainable farming practices and a stable and reliant income from farming practices, community members are often forced to expand depleted farming areas and/or resort to extraction of forest products to supplement income. This further intensifies forest degradation.

76. Communities without access to experience with alternative sustainable livestock production methods continue to rely upon open access grazing that maximizes range use and results in land and forest degradation. There are no established models showing the conservation and production values of tools such as carrying capacities linked to access management and monitoring tools. Without awareness, access and incentives to adopt improved livestock management practices, traditional approaches to increasing range result in wildfires that worsen land degradation and result in forest loss.

77. There are very few opportunities for farmers to access the financial support required to shift from unsustainable to sustainable livestock and agricultural practices. Resources such as the Citizen Entrepreneurial Agency (CEDA) do exist to provide limited microloans for small-scale farmers. However, the CEDA has low financial capacity and a very large mandate. Community Development Projects funds are channelled into uniform packages (e.g. beekeeping, small livestock). Under the national Integrated Support Programme for Arable Agriculture Development (ISPAAD) and the Livestock Management and Infrastructure Development Support Scheme (LIMID), the government agencies do not have sufficient knowledge available and capacity to provide input according to unique soil, range, forest and climate conditions. Each of these packages are distributed on a

demand basis with minimal feasibility assessments and structure designed to respond to localized conditions, particularly the need to improve sustainable land and forest management. Again, this is a result of a lack of both clear land use planning guidance and farmer capacity to identify and adopt innovative approaches.

78. Opportunities do exist for farmers to improve the value of their livestock and crops in order to incentivize more sustainable production practices. Markets do exist both within the growing urban populations as well as the "high-end" tourism industry to improve profitability and lift land use management standards. Increased valuation within established and strategic land and forest use planning would result in production approaches that limit negative impacts to land and forest resources. However, producers do not have the fundamental tools and experience required to identify and capitalize upon these opportunities.

79. Producers are not well organized to capitalize upon market opportunities. There are very few producers organisations and cooperatives. Producers do not have the access to the knowledge and awareness required to implement these useful approaches. Those that do exist generally struggle with administrative and financial organizational issues due to a lack of capacity support, e.g., trained extension officers. This is the case with the very small forest users and agricultural producers groups in both target areas. The MoA's Department of Agricultural Business Promotion has limited capacity. As a result, producers have limited access to knowledge regarding commodity pricing and sale. Direct producer access to points of sale are extremely limited. Suppliers are not well linked to buyers. Instead, "middlemen" have historically serviced large numbers of isolated and independent producers. These middlemen consolidate produce and deliver this produce to market. As a result, the producers see a relatively small percentage of the final wholesale price. A classic example of this is mopane worms. This is a high value cash product that is often collected by rural women on a seasonal basis. Middlemen travel to the individual collectors who do all the collecting and initial processing. The middlemen bundle the prepared mopane and deliver the product to market outlets.

80. There is currently no national FFS program or network designed to promote sustainable land and forest management practices. Farmer field schools are an excellent tool for organizing producers to capitalize upon market opportunities, to increase awareness and monitoring regarding land and forest health and associated ecosystem services, and to efficiently and effectively deliver knowledge to improve production practices. Unfortunately, this sector and the associated extension services are not well capacitated in Botswana. Both MENT and MoA have some responsibility for extension services under their specific agencies. However, the capacity of these departments is highly constrained.

*Barrier Three: Coordinated knowledge management and impact monitoring challenges*

81. In the context of integrated land and resource management, Botswana requires capacity enhancement assistance to generate a rigorous and integrated approach to monitoring, data collection and knowledge management. At present, Botswana does not have an example of a consistent and strategic system to identify, monitoring, evaluate and adapt SLM and SFM to achieve LDN.

82. This is very much needed to inform decision-making by both government and private producer stakeholders. Information generation and knowledge management should also be linked to inform higher level decision-making. This includes transboundary monitoring and information sharing regarding conservation of Mopane-Miombo ecoregions. This should also include capturing and sharing lessons learned to amplify the adoption of sustainable practices, again by government agencies and private producers. Because of this barrier in Botswana, the potential value added of regional platforms such as KAZA and SADC do not benefit from a full picture of what is happening across the landscape and how best to direct investments and actions to address persistent degradation challenges. The importance of transboundary boundary collaboration for the integrated management of natural resources such as water, forest, wildlife and fish resources are obvious and there is increasing evidence on the negative effects of transboundary land-degradation issues. At the same time, by not fully engaging in the exchange of lessons and information, Botswana does not fully benefit from valuable examples emerging from neighbouring countries.

83. Although Botswana has some limited monitoring activities, the country has struggled to build the initial capacity required to target the specific information and knowledge management needs related to SLM and SFM realization. Record keeping and monitoring regarding agriculture production, livestock production, fuelwood consumption and other critical resource management constraints is not consistent or rigorous. This barrier has hindered the ability of decision-makers to identify and track land and forest degradation. This barrier has also limited the ability to transfer knowledge and skills to private producers to strategically improve and modify their behaviour to improve SLM and SFM while generating livelihood, food security, climate resilience, and ecosystem services benefits. Without a solid management base and will-informed monitoring of progress towards specific land and forest management objectives, the efficacy of land and forest use planning is constrained.

84. There is a need to support both national and local stakeholders to fill knowledge gaps relevant to land degradation trends and drivers, land cover and changes, land use changes, ecological changes and vegetation shifts (particularly in forests) and soil carbon sequestration. Neither target location benefits from long-term studies on ecological changes in the Forest Reserves to enable longitudinal monitoring and to provide data on aspects of fire regime, forest regeneration and vegetation shifts to support the effective management. There are remote sensing tools in place, but these can only go so far without adequate ground truthing. For instance, range degradation is often the result of

palatable grass species depletion[24][24]. This is not visible and cannot be assessed through remote sensing. Remote sensing cannot monitor and assist with the sustainable regulation of cattle numbers and locations. A global suite of monitoring tools exist that are both cost-effective and efficient, but Botswana has limited exposure and/or experience with these tools.

## E. The Baseline Scenario and any Associated Baseline Projects

National Government Structure and Baseline

85. Botswana has a vibrant democratic system. The National Assembly is made up of 63 parliament members and 35 traditional leaders (the Ntlo ya Dikgosi). The Judiciary is independent. The President leads the executive branch and presides over cabinet[25][25]. There are approximately thirty executive agencies, including eighteen individual ministries. Following is a description of primary national authorities and associated baseline activity.

**Summary of Government Baseline**

| Ministry | Approximate Staff and Annual Budget | Mandate |
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| *Ministry of Environment, Natural Resources, Conservation and Tourism (MENT)* | Staff: 2730<br><br>Annual Budget: US$ 84,679,374 | The MENT houses the following sectorial departments: i) Department of Forestry and Range Resources (DFRR) which has the statutory and policy mandates for the management of range land resources; ii) Department of Environmental Affairs (DEA) responsible for ensuring that all land users and managers comply with the National Environment Impact Assessment regulations; iii) Department of Wildlife and National Parks (DWNP) which is mandated to manage protected habitats of wildlife and plants in national parks; iv) Department of Tourism (DT) mandated to support the development of tourism activities including those related to lands, fauna and flora resources; v) Department of Meteorological Services; vi) Department of Waste Management and Pollution Control; vii) Department of National Museum & Monuments. The Ministry will capitalise on the collaborative partnerships established with other departments through Environmental Sustainability and Economy & Employment Thematic Working Groups for the implementation of the GEF7 project.<br><br>To address the issue of land degradation in Chobe National Park, DWNP has tested a decongestion strategy. It aimed to reduce the number of vehicles passing by the river front in Chobe National Park but this measure was not successful mainly because of the difficulty to enforce it.<br><br>Regarding fire management, the government of Botswana undertakes various measures every year to reduce disasters related to wildland fire. The measures include developing, implementing and reviewing district contingency plans, maintaining network of fire breaks, conducting public education and awareness campaigns, detecting active fire using satellite data, and engaging external assistance to train fire fighters[26][26]. DFRR works with DWNP on fire management in Chobe (mainly through making fire breaks) but the incidence of fires is still high. This is likely due to an inadequate fire reporting system and the insufficient consideration of climate predictions in fire management. Other opportunities for improvement are identified under the Chobe ILUP[27][27]. |

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| *Ministry of Agricultural Development and Food Security (MoA)* | Staff: 6067<br><br>Annual Budget: US$138,780,623 | The Ministry of Agricultural Development and Food Security (MoA) is mandated is to improve food security and champion agricultural development through local production, reduction of import bill, diversification of the sector, value addition, employment, promotion of consumption of local food products and the establishment of agriculture-based poverty eradication projects. Under MoA, the Department of Animal Production is responsible for improving the livestock sub-sector and the Department of Crop Production (DCP) focus on the arable sub-sector. The Department of Agribusiness Promotion (DABP) is in charge of supporting business skills transfer, the promotion of agricultural cooperatives and associations, market access negotiations, investment promotion and promotion of market led production in order to make the agricultural sector more financially beneficial, diversified, sustainable and competitive. Another department under MoA that is an important player for the GEF7 project is the Department of Agricultural Research (DAR) which undertakes research on improved crop and livestock production technologies to promote the development of a productive and environmentally-friendly agricultural sector. The department also provide supportive services and technical advice to the farming community. |

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| *Ministry of Land Management, Water and Sanitation Services (MLMWSS)* | Staff: 1352<br><br>Annual Budget: US$ 103,992,922 | The Ministry of Land Management, Water and Sanitation Services (MLMWSS) is responsible for land allocation and custodianship. This includes key thematic areas of responsibility are economy and employment.<br><br>This ministry fulfils its duties through the Land Boards and Sub-Land Boards based at district and subdistrict levels respectively, as well as some key departments such as Town and Country Planning, Surveys and Mapping, Deeds Registry, Land Tribunal, Department of Lands and Department of Water & Sanitation.<br><br>The MLMWSS is responsible for national physical planning and determining land utilization, management and development. It also provides services and information on cadastral surveying, mapping and remote sensing that inform physical planning. Its Department of Lands is responsible for allocating land in urban areas while the Land Boards are responsible for allocating tribal and communal land. |
| *Ministry of Finance and Economic Development* | Staff: 1690<br><br>Annual Budget: US$ 100,214,207 | The Ministry of Finance and Economic development is mandated to improve the welfare of Batswana through the formulation and coordination of national economic and financial policies. This includes oversight and development of the national government's recurrent and development budgets. The Ministry has two divisions: macro-economic policy and financial policy. |
| *Ministry of Local Government and Rural Development* | Staff: 4111<br><br>Annual Budget: US$ 714,950,161 | The ministry oversees 16 local authorities and semi-autonomous local authorities categorized into City, Town and District Councils inclusive of tribal administrations. These institutions are decentralized to facilitate the Ministry's development programmes and services at local level. They foster local democracy and governance while also promoting social welfare and economic empowerment of disadvantaged groups. |

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| *Ministry of Investment Trade and Industry* | Staff: 718<br><br>Annual Budget: US$ 106,501,691 | Creates a conducive environment for the promotion of Investment and development of Sustainable Industries and Trade, with a view to diversifying and growing the economy, creating wealth and employment, so that there is prosperity for all. |
| *Ministry of Nationality, Immigration and Gender Affairs* | Staff: 1585<br><br>Annual Budget: US$ 47,736,915 | Oversees the integration of the principles of gender equity across sectors and development plans<br><br>The Ministry is a provider of essential services of civil registration and vital statistics, movement of persons across borders and gender equality which are important for the social and economic development of the country. |
| *Ministry of Employment, Labour Productivity and Skills Development* | Staff: 2320<br><br>Annual Budget: US$ 81,958,139 | The Ministry is responsible for facilitating employment and promotion of productivity and work ethic in the workplace.<br><br>It is also charged with workplace health and safety; labour administration; as well as industry focused skills development. |
| *Ministry of Tertiary Education, Research, Science and Technology* | Staff: 2104<br><br>Annual Budget: US$ 488,848,316 | The Ministry of Tertiary Education, Research Science and Technology exists to provide and build knowledge and innovation through the development and implementation of Policy on Tertiary Education, Research, Science and Technology to transform Botswana in to a knowledge based society through effective stakeholder collaboration. |

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| *Ministry of Youth Empowerment, Sport and Culture Development* | Staff: 1325<br><br>Annual Budget: US$ 94,707,233 | The Ministry of Youth Empowerment, Sport and Culture Development (MYSC) was established through a Presidential Directive in January 2007. It exists to create an enabling environment for youth empowerment, sport development and preservation of culture and heritage in collaboration with relevant stakeholders to enhance unity and pride of the people of Botswana |
| *Ministry of Infrastructure and Housing Development* | Staff: 2204<br><br>Annual Budget:<br><br>US$ 50,445,072 | The mandate of this Ministry is to provide policy direction in the development of sound and quality built infrastructure; and promotion of dignified livelihood on one hand and creation of an enabling environment for others to undertake built infrastructure development, on the other. To enhance the latter, three professional regulatory bodies were established, namely Engineers Registration Board (ERB), Architects Registration Council (ARC) and Quantity Surveyors Registration Council (QSRC). Collectively, these bodies enable the construction industry to deliver quality infrastructure through registration/accreditation of professionals in their respective construction disciplines. |
| *Ministry of Transport and Communications* | Staff: 4294<br><br>Annual Budget: US$ 193,258,434 | The Ministry of Transport and Communications was established to drive the development and utilisation of Information Communication Technologies (ICTs) and integrated transport services in Botswana. The Ministry's mandate is to connect network communities; provide a safe, secure and accessible transport and communication infrastructure; and, provide a reliable, affordable and sustainable transport and communications services.<br><br>Departments under the ministry include consists Department of Road Transport and Safety, Department of Information Technology<br><br>Department of Roads and Department of Telecommunications and Postal Services. |

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| *Ministry of Mineral Resources, Green Technology & Energy Security* | Staff: 295<br><br>Annual Budget: US$ 71,150,017 | The Ministry is responsible for provision of services in the mineral and energy sectors. The Department of Mines aims to enhance socio-economic, financial and other benefits to Botswana arising from the exploitation of mineral resources; while the Department of Energy aims to facilitate the availability of effective, reliable and affordable energy services to customers in an environmentally sustainable manner. |

District Level Structure and Baseline

86. District and Sub-District administrative agencies and staff are actively engaged in a host of baseline activities related to the proposed project. The country is divided into 10 districts. Many of these districts are further sub-divided into "Sub-Districts". Botswana is largely centralized as a unitary state. Therefore, districts act largely as administrative agents for national laws and policies.

87. The project will engage the following Districts and Sub-Districts and associated government institutions in the target landscapes.

| **Target Area Districts and Sub Districts** | |
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| Chobe Landscape | District: Chobe District |

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| Tutume-Mosetse Landscape | District: Central District<br><br>Sub-District: Tutume |

88. Each district and sub-district has full-time staff representing national level authorities. These generally include: Department of Crop Production (DCP), Department of Veterinary Services (DVS), Department of Animal Production (DAP, Department of Water Affairs (DWA), Department of Wildlife and National Parks (DWNP), Department of Forestry and Range Resources (DFRR), Department of Environment Affairs (DEA).

89. District Level administration is composed of four primary structures.

· The District Administration (DA) represents the central government and manages implementation of national policies and legislation at the local level. The District Development Committee (DDC) is responsible for coordinating development activities. This includes overseeing the design and implementation of District Development Plans. The Offices of the District Commissioner are under the Office of the President. All departments report to the DC. The DC is composed of District Officers for Land, Administration and Development.

· The District Council serves at the local political authority and oversees local decision-making The District Council (Physical Planning) – under the Office of the President – is the planning authority at district level. The District Technical Advisor Committees (TAC) are the technical reference groups. They regroup technical staff from all sectors (including government and parastatal institutions). They are chaired by the District Officer for Development. At subdistrict levels, the subdistrict councils have the role to assess land use requests and forward them to the District Council. The Office of the Sub-Districts Commissioners have a similar structure to the Office of the District Commissioner.

· The Tribal Administration is responsible for traditional authority. Traditional law continues to be very important in Botswana with individual Kgosi serving as the traditional leader responsible for administration of traditional law, customary courts, and lower level disputes. The Kgotla loosely refers to the local consultative process and is instrumental for stakeholder engagement.

· Land Boards hold land in trust for the citizens of Botswana. Persons are elected to the Land Board. Each Land Board is responsible for administration and equitable allocation of land use and, to some extent, resource use. Land Boards benefit from the technical advisory services of other land authorities such as MoA (for land relating to livestock and arable use), DFRR (for forest resources management and conservation), DEA (for issues relating to environmental impact of land use activities), District Council Physical Planning Unit (for physical planning and mapping) and DWNP.

· The District Land Use Planning Unit (DLUPU) is a very important element under the existing baseline. DLUPU is under the Office of the District Commissioner. Each DLUPU is composed of technical officers who advise both the District Council and Land Board on land use planning. The membership of DLUPU normally comprises of representatives from DWNP, DEA, DFRR, and MoA (usually one or more of the Departments responsible for Crop production, Animal Production and Agricultural Research).

· The District Extension Team (DET) was established to strengthen the planning and interpretation of national policies; develop district annual plans based on a priority list of identified village development programs and ensures their implementation; monitor the implementation of Village Extension Teams (VETs) activities by reviewing their quarterly reports, making visits and providing the necessary assistance; and, promotes communication amongst extension staff in order to facilitate coordination and integration of programs for efficient utilization of resources. DET comprises of the heads of extension departments at district including district commissioner, council secretary, district officer (development), education, health, agriculture, lands, environment, energy/ water, trade/industry, tribal administration and council planning representatives.

Relevant Laws and Policies

| Summary of Legal and Regulatory Baseline | |
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| **Law** | **Description** |
| The Tribal Land Act (2018) | Supersedes the 1968 Act and its amendments in 1991 and 1993. The initial Act in 1968 transferred the land management and administration from traditional chiefs to the Land Boards. Subsequent revisions maintained the Land Boards' mandate of governing the use of communal land while accommodating new policies in agriculture and decentralization and the creation of subordinate land boards. |
| The Forest and Range Resources Bill | Was initially promulgated in 1968 to confer power to the Forestry Department of the then Ministry of Agriculture (the department has relocated to the Ministry of Environment Natural Resources Conservation and Tourism) as sole manager of forest reserves. Its objective was to regulate for and protect forests and forest products in Botswana by establishing forest reserves. The Forest and Range Resources Bill, currently under development, has broadened the mandate to provide for the implementation of international conventions to which Botswana is a signatory (e.g. UNFCCC, CITES, Convention on Wetlands of International Importance especially as Water Fowl Habitat, CBD, UNCCD). The Bill has also diversified management to provide for the participation of local communities, local authorities, traditional institutions, non-governmental organisations and other stakeholders in forest management. |

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| The Agricultural Resources Conservation Act (1974) | Provides for the protection, conservation and improvement of agricultural resources such as soil, water, agricultural animal and plant species. It allows for the making of regulations that serve to protect land against erosion; protect against the deposit thereon of sand, stones or gravel or any other material; prevent siltation of dams; preserve, protect the source and banks of streams or otherwise preserve the soil and its fertility; prohibit, restrict or control the use of insecticides, fertilizers, or any type of chemical compound in, on or over land. |
| The Herbage Preservation Act (1978) | Provides for herbage preservation and protection from fire as well as conservation committees across scale. |
| The Seed Certification Act (1976) | Provides for the seed testing practices to be used, for the conditions for control of the Export, Sale and Use of Seeds, as well as the conditions under which statements and certificates are to be issued. |
| The Wildlife Conservation and National Parks Act (1992) | Established the Wildlife Management Areas and local advisory committees. It provides for the conservation and management of Botswana's wildlife including control and management of National Parks and Game Reserves |

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| The Town and Country Planning Act (2013) | Provides for the orderly and progressive development of land in both urban and rural areas and to preserve and improve the amenities thereof. It includes provision for the minister to issue a tree preservation order to protect trees that may be in danger of destruction for other developments such as road construction, communication infrastructure or buildings.<br><br>This Act provides the basis to allow for planning with District Councils serve as planning authorities. According to the Land Policy, all of Botswana is to be considered a planning area with all land in Botswana subject to land use planning. |
| The Environmental Impact Assessment Act (2005) (revised in 2011) | Provides for environmental impact assessment to be used to assess the potential effects of planned developmental activities; to determine and to provide mitigation measures for the effects of such activities on the environment; to put in place a monitoring process and evaluation of the environmental impacts of implemented activities and to provide for matters incidental to the foregoing. |

**Summary of Policy Baseline**

| Policy | Description |
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| The National Forest Policy (2011) | It is intended to optimize the contribution of the forest subsector to the long-term socio-economic development of Botswana by ensuring an enhanced and sustainable flow of benefits from forestry activities to all sectors of the population of present and future generations. The premise of the policy is articulated into five principal objectives namely to: i) reinforce the role of forestry in poverty reduction; ii) increase contribution of trees, forests and woodland to local, regional and national economy; iii) promote awareness of the role of forests in enhancing environmental sustainability; iv) promote participatory approach to conservation, management and sustainable utilization of forest resources; and v) create enabling legal and institutional environment for effective policy implementation. The above Acts provide a legal framework for policies[28][28] related to land and resource management. The Forestry Policy now allows for the development of sustainable economic activities in Forest Reserves. |
| The Revised Botswana Land Policy (2019) | Is meant to create a conducive environment for complementary resource management and administration while also responding to the needs of economic diversification and growth, food security, poverty eradication, environmental sustainability as well as balancing competing land use needs for social, economic and political harmony.[29][29] |

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| The Botswana Land Policy | Maintains the current land tenure system which comprises of: Tribal Land (administered by Land Boards) which provides the right to perpetual use for residence, water points and ploughing at no charge; State Land (administered by the Department of Lands in the Lands Ministry) administered through fixed term right of 99 years for citizens and 50 years for non-citizens; and Freehold Land encompassing in urban centres which provides ownership in perpetuity.<br><br>The Botswana Land Policy provides for the protection and promotion of land rights with special reference to vulnerable groups such as women (particularly widows), ethnic indigenous communities (referred to nationally as Remote Area Communities or Dwellers following the abandonment of the ethnic identity previously used of Basarwa), youth, people with disability and orphans among others. The policy also recognizes the importance of involving non-government stakeholders more meaningfully in the development and implementation of public policies particularly through the resuscitation of Land Development Committees, the intensification of stakeholder engagement, as well as research for land development and management that will enable informed decision making by all stakeholders. It is the product of the 11th National Development Plan's objective of addressing challenges highlighted from reviews of past policy instruments.<br><br>Until recently the Land Policy was strict about land use categories. Land assigned to arable activities had to be exclusively use for crop production. This policy gap to integrated production systems was recently filled (end 2019) through the development of the Integrated Land Policy (replacing the initial Land Policy). It now allows for mixed land use (crops, bees, agroforestry, small livestock) on agricultural land. This is a good example of successfully resolved conflict. |

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| The Tribal Grazing Land Policy (1975) | Has been heavily criticized for fragmenting and privatizing communal grazing lands with adverse effects on wildlife (particularly the ungulates), biodiversity, and availability of ecosystem resources to communities that heavily depend on such resources[30][30] |
| The National Policy on Agricultural Development (1991, reviewed in 2014 to broaden the value chain scope and expand land for commercial activities) | Sought to improve agricultural production through the provision of secure and productive environment for agricultural producers. The fencing component of the policy provided for extended dedication of land for cattle ranching by allocating demarcated ranches to farmers in the grazing areas where there are boreholes. By mid-2013, a total of 738 ranches were allocated under the policy. However, their contribution to the beef sector has been very marginal as 80% of beef still comes from communal grazing areas. This policy has also been heavily criticised for extending the adverse impacts of the original Tribal Lands Grazing Policy to a wider national scale: further fragmenting ecosystems critically important for mitigation against harsh climatic conditions in the savannahs. |
| The National Master Plan for Arable Agricultural and Dairy Development (2002): | In recognition of the human settlement pressure on agricultural land and need to improve food security at the household and national levels, this policy seeks to secure and preserve scarce agricultural land resources. It propagates for gazetting of soils that are good for arable farming. This policy raises concerns for the integrity of already fragmented and fragile ecosystems: particularly the impact on availability of resources for communities already squeezed by animal disease control fences and the privatization of large chunks of communal rangelands. |

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| The Wildlife Conservation Policy (1986): | The objective of this policy was to encourage sustainable development of a commercial wildlife industry. The policy encourages the sustainable use of wildlife to create economic opportunities, jobs and income for the rural population and the national economy. The policy advocated the recognition of wildlife's potential contribution to the economy in terms of its heritage and aesthetic value and hence calling for land-use planning to give it a position that is commensurate with that contribution. This resulted in the establishment of the community concession areas including Wildlife Management Areas and Community Based Natural Resources Management (CBNRM) initiatives. |
| The Community Based Natural Resource Management Policy (2007) | Was formulated to promote initiatives that can be used to achieve the twin goals of biodiversity conservation and rural development with particular emphasis on improving rural livelihoods, creating jobs, opening pathways for community-based management, and promoting market access for sustainable tourism.<br><br>The CBNRM program for example gives communities (through their CBO) the opportunity to generate funds needed for proper monitoring and protection of the resource. However, so far the CBNRM policy is applied to the Wildlife Management sector – DWNP is the secretariat for the policy – but it is rarely applied to the Forest management sector and not applied to the Water management and Mining sectors. In these sectors, the CBNRM approach is not well understood or the policy is not well known. It is expected that this year the CBNRM Act will be present in front of the parliament to complement the Policy and promote the approach. |
| The National Conservation Strategy (1990) | Was founded to sensitise the nation on the importance of natural resources conservation. The strategy promotes the integration of environmental issues in development planning. The strategy has helped in the conservation of the environment. |

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| The Tourism Policy (1990) | Was formulated to emphasise the contribution of tourism industry in the economy and to encourage formal recognition and designation of areas for commercial tourist activities, as well as regulate such activities. Since the policy was implemented, the contribution of the tourism sector to the national economy has increased substantially. |
| The National Ecotourism Strategy (2002) | Developed to link tourism to Botswana's wildlife and habitats in order to generate income for both the conservation and protection of these resources as well employment creation for communities living in the surrounding areas. |
| The Game Ranching Policy (GRP) (2002) | Was introduced to diversity private cattle ranches and allowing conversion into game ranching ventures. This was an adaptive strategy to mitigate the negative impacts of reduced access to international beef markets due to persistent outbreak of Foot and Mouth Disease |
| Additional relevant policies | Botswana National Water Master Plan (1992)<br><br>National Policy on Disaster Management (1996)<br><br>Botswana Waste Management Strategy (1998)<br><br>Revised National Policy for Rural Development (2002). |

Planning and Resource Monitoring

| Summary of Planning and Resource Monitoring Baseline | |
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| **Planning Framework** | **Description** |
| National Development Plans | Botswana's post-independence development practice has been characterised by consistent national planning that has served to ensure that limited resources are used as judiciously and prudently as possible in order to optimise impact on desired economic, social and environmental goals and objectives. Projects and programs of the development agenda are assigned to different government institutions in accordance with specific mandates enshrined in law and guided by policy formulation, strategic planning and budgetary allocations informed by projected income earnings.<br><br>National Development Plans provide a holistic indication of the development direction Botswana wishes to take in the medium term (5 to 6 years) and the means for realising identified objectives. The 11th National Development Plan (NDP 11) commenced in April 2017 after the country's 50th anniversary of independence and is due to end in April 2023. This national plan coincides with the commencement of the post 2015 global agenda for sustainable development where nations of the world have responded to the threat of global warming and climate change by initiating strategies and international conventions aimed at reducing human contributions to the problem. |

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| Thematic Working Groups | In aligning the international Sustainable Development Goals to the national agenda Botswana adopted a strategy of Thematic Working Groups to try and harmonize interventions that are complementary and have dynamic synergies. This also required vertical and horizontal institutional restructuring and rationalisation. Vertical restructuring involved decentralization and devolution of power from national to local government institutions so they could take greater responsibility for development management and accountability to communities closest to them. During the life of the 9th NDP (i.e. 2003 to 2009) for instance, the Government of Botswana (GoB) initiated comprehensive local authority reforms that would enable districts to take on responsibilities that used to be the purview of central Government. By 2014, more reform initiatives saw further devolution of responsibility and power from district to subdistrict levels. In 2016, horizontal restructuring was initiated and entailed migrating some departments from their historical line ministries to new ministries that brought together departments with compatible mandates and synergies.<br><br>The Sustainable Environment Thematic Working Group is coordinated by MENT to ensure concerted planning in conjunction with other ministries whose mandates depend on natural resources: namely i) MoA, ii) the Ministry of Mineral Resources, Green Technology and Energy Services, and iii) the Ministry of Local Government and Rural Development (MLGRD). The Sustainable Environment Thematic Working Group includes key players in the business sector and NGOs.<br><br>The Economy and Employment Thematic Working Group plays a key planning role is that of which also includes the same partner ministries as well as others not directly charged with the Sustainable Environment mandate. |

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| District and Sub-District Planning | Due to limited resources in both technical and financial terms, the responsibility for land-use planning has historically been undertaken at national level: with subnational authorities being essentially executors of plans as well as collectors of feedback from the community and other landscape level users. The process of decentralization has in recent years become imperative for devolution of power and accountability. |
| Improvement of Land Administration Procedures, Capacity and Systems (LAPCAS) | Administered by the Ministry of Land Management, Water and Sanitation Services the LAPCAS is designed to regularize land tenure systems particularly for tribal lands that currently constitute over 70% of Botswana's land base. The system provides for guidelines that the individual Land Boards are to follow when allocating and registering distributed lands. This is supported by the Botswana Land Policy (as revised). This program was started in 2009 and has so far spent approximately US$ 24 million to adjudicate less than 7% of the total target. Approximately US$ 1 million of this investment was provided by the Government of Sweden. |

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| Chobe Integrated Land Use Plan (ILUP) | The draft Integrated Land Use Plan (ILUP) covers a surface of  the district was divided into twenty planning areas with responsibility divided among the usual key land managing departments. The Land Board was the responsible authority over nine of these planning areas while DWNM had six, DFRR has five planning areas under its wing. The rest of the planning areas fell under the Departments of Crop Production (3), Town and Country Planning (1) and Lands (1).<br><br>The Chobe District ILUP was finalized in 2017[31][31] and was developed for a period not exceeding 10 years. It is still currently awaiting District Council consultation which is final step towards its approval and implementation.<br><br>Improvement opportunities for the ILUP are highlighted in the BioChobe Terminal Evaluation report include: i) increasing the engagement of local communities in the planning and implementation process; ii) ensuring alignment of the ILUP and the District Development Plan; iii) clarifying the different management and planning responsibilities of the various departments and organisations for the different land areas within the District; and iv) ensuring efficient cross-sectoral collaboration where all agencies work closely together to support more integrated planning and management of the area as a whole. In Tutume-Mosetse sub-basin, there is currently no integrated management plan. The targeted sub-basin is just outside of the area covered by the Makgadikgadi Framework Management Plan.<br><br>The draft report summarised the key findings of challenges and potential for its land use as follows [32][32]:<br><br>Detailed soil surveys would be required, to allocate here land for intensive horticultural production, and possibly irrigation;<br><br>Despite the importance of Pandamatenga for commercial farming, the heavy vertisols require expert knowledge to manage it and specific weather events increase the risks of crop failure or limit harvest opportunities.<br><br>The potential for commercial irrigated farming is currently being considered but also criticised (see chapter 10);<br><br>Chobe is very marginally suited for livestock farming, due to lack of water and presence of mogau; The forestry potential is currently limited, due to climatic |

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| Makgadikgadi Framework Management Plan (2010) and Management Plan for Southern Sua Pan (2012) | Makgadikgadi Framework Management Plan (MFMP) was prepared to provide guidance for implementation of activities to improve people's livelihoods through wise use of the Makgadikgadi wetland's natural resources. Management Plan for Southern Sua Pan was developed as guided by the MFMP to outline the key activities that need to be undertaken in order to ensure the appropriate management and development of the area and the ultimate realization of the co-management vision. It provides a comprehensive guide to the effective management and development potential of the area, through a structured and logical approach that is backed up with detailed ecological and socio-economic review and analysis. |
| Strategic Environmental Assessment | A Strategic Environmental Assessment was recently finalised by DFRR to form the baseline for the development of the national management plan for the 6 forest reserves of Chobe District (Kasane, Kasane Extension, Chobe, Kazuma, Maikaelelo, Sibuyu covering a total of 410,482 ha). These reserves are the buffer zone for CNP and because of the absence of physical boundaries they are the same ecosystem. Ecotourism opportunities have been identified. The Forest Reserves legislation is therefore being reviewed. DFRR is currently working on a bill to enable for ecotourism and other activities. |
| Land Use Conflict Identification System (LUCIS) | The LUCIS program is used by Land Boards to reduce land and resource based conflicts. To date, the LUCIS program has been applied to several districts and sub-districts, including through programming supported by GEF funds. |

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| Management Oriented Monitoring System (MOMS) | Management Oriented Monitoring System (MOMS) is an adaptive tool used by DWNP to assist with improved monitoring of protected areas. This includes WMAs which are multiple use areas and one target of proposed project activity. MOMS has been applied to fire management, one of the primary drivers of forest loss and dry land degradation. |
| KAZA Integrated Development Plan (Botswana Component), 2013-2017 | The KAZA TFCA Treaty was signed in 2011 by Angola, Botswana, Namibia, Zambia and Zimbabwe; and it incorporates large portions of the Okavango and Zambezi river basins. It has been established that the development of TFCAs can contribute to the welfare and improvement in the standards of living of rural communities through tourism related products. The principles that underlie TFCA development are related to peaceful neighbourly relations, alleviation of poverty, regional socio-economic integration and a tool to help achieve the Sustainable Development Goals (SDGs). The Integrated Development Plan (IDP) was, therefore, intended to demonstrate how the Government of Botswana would manage and develop the Botswana Component of the KAZA TFCA towards meeting its obligations in respect to the KAZA TFCA vision, mission and objectives. |
| National Spatial Plan | The National Spatial Plan (NSP) is a framework and strategy to influence the distribution of people and activities over Botswana's territory over a twenty year period by guiding spatial development and investment decisions. The NSP is also a planning tool that aims to align the interventions of ministries, departments, agencies, private sector and civil society organisations.<br><br>One of the key proposals from the National Spatial Plan is an international green corridor that will link protected areas and other wildlife habitats in Botswana to create an integrated, contiguous green zone in which human settlements and wildlife habitats could be managed together. |
| Review of the National Landuse Map (2009) | The review was undertaken to synthesise existing information, identify gaps and propose a new policy direction in National Landuse Planning. A revised National Landuse Map was also developed and has since been approved by the Botswana Government for implementation. |

Government Support Services

| Summary of Government Support Services Baseline | | |
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| **Service Framework** | **Annual Budget Allocations** | **Description** |

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| | | ISPAAD provides subsidizes seeds to farmers (i.e. Sorghum, maize, millet, cow peas) as well as fertilisers and herbicides. Since 2008, ISPAAD is one of the main agricultural support schemes to address challenges in the arable sub-sector, such as poor technology adoption by farmers and low agricultural productivity. Everyone benefits from support at small scale (for up to 5 ha) and Pandamatenga can also get support (up to 500 ha for commercial farmers). 4 bags per hectare are provided for subsistence farmers. Based on SHARP assessment, overall the most frequently mentioned source of seeds in the sample is the government (80% of total), followed by farmers' own production (average 15%) and shops/markets (4%). 43% of the respondents mentioned that they could either not afford being seeds, or only sometime. |
| ISPAAD | Approximate Budget:<br><br>US$ 4,800,000 | The Research Department provides the seeds that are sourced from contracted small-scale farmers who do rain-fed agriculture mainly. There is therefore a low production during dry years. There is always a shortage of local seeds, more than 50% of the seeds are imported both because of shortage in national seed supply and because of demand for hybrid seeds from the farmers. Despite being the main department in charge of seed production, the Department of Agricultural Research (DAR) is producing a lot of grains and not enough seeds. The government wants to increase national seed production[33][33]. Theoretically, soil analysis should be undertaken because the seeds are provided but there is insufficient capacity under the programme to do so. There is also insufficient knowledge of the effects of the chemical used on the environment particularly along river beds. The Department of Crop Production has limited information on the resilience of the crop varieties they use in the programme. |

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| Community Nurseries Programme | Approximate Budget:<br><br>US$ 35,083 | DFRR is implementing a Community Nurseries Programme which focuses on the production of 65% indigenous trees species and 35% exotic species. Forest trees selected by DFRR are free of charge to promote reforestation. Other trees are accessible at a subsidised price (5 Pula per tree for indigenous species to 10 Pula per tree for exotic species). Otherwise people buy from the government nurseries the species they want at a subsidised price. The nurseries are located all over the country, including one in Tutume. With these seedlings, people can start their own nurseries. Exotic species are more sought by the villagers than indigenous species.<br><br>National budget: BWP 350,830.00 Chobe: BWP 13,000 Tutume: BWP 10,000 These figures only include materials, and does not include salaries, transport, bills like electricity and water, etc. There are about 9 people at each nursery, with 1 nursery each in Chobe and Tutume, so 2 in total. |

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| Livestock Management and Infrastructure Development (LIMID) | Approximate Budget:<br><br>US$ 10,000,000 | The ongoing Livestock Management and Infrastructure Development (LIMID) programme supports farmers based on demand with access to small livestock (goats or chicken), water infrastructure improvement – focused on groundwater – for livestock (borehole drilling, equipment for water pumping with fuel or solar energy), livestock handling facilities such as kraals and leading ramps for people who own cattle and goats. This support works through grants or with some personal contribution by the farmer. The programme does not include activities around rangeland management.<br><br>It has two components: i) poor resource (packages for 10 goats OR 25 chicken through a grant system); and ii) water infrastructure improvement (for groundwater) and livestock (borehole drilling, equipment for water pumping (fuel or solar energy), livestock handling facilities such as kraals and leading ramps, mainly groundwater harvesting…) for people who own cattle and goats) through grants and personal contribution by the farmer). The support is demand based and is provided throughout the country. |

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| Poverty-Eradication programme | Approximate Budget:<br><br>US$ 21,000,000 | As poverty levels remain relatively high, the government shifted from poverty reduction to poverty eradication, and launched a Poverty Eradication Programme.<br><br>The programme aims at improving the livelihoods of Batswana living in poverty through the establishment of sustainable income generating projects for both individuals and groups as well as aiding attainment of food and economic security amongst the disadvantaged individuals/ families. This is achieved through implementation of 45 business packages that include aquaculture, bee keeping, small stock, horticulture, backyard tree nurseries.<br><br>The programme budget is P210,000,000.00 (USD 21million)for the entire country from 2020 – 2023. |

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| School Feeding Programme | Approximate Budget:<br><br>US$ 2,070,000 | Another ongoing programme of note is the School Feeding Programme of the MLGRD. The programme focuses on purchasing and procuring food rations for vulnerable groups health facilities and school feeding programme. The programme covers 755 primary schools including one school in Mosetse and eight schools around Kasane in Chobe. They provide daily on-site meals and use local products as much as possible (samp, beans, fruits and vegetables, sorghum meals, sorghum grains, sugar, tea, bread, bread sprouts) and support local diversification and home-grown products for women empowerment and local farmers empowerment. No food items are being imported, they come from different parts based on the period of the year. There is often a shortage of fruits and vegetables. School gardens used to be in every school, but the programme stopped when the poverty eradication system started. Secondary school have gardens for horticulture, chicken and bees as it is part of the curricula. Primary school do not have school gardens.<br><br>For the school year 2019 – 2020, 14 million Pula (USD1.4million) was expended for Tutume-Sub district. The budget for Chobe district for school year 2020 – 2021 is<br><br>6.7 million Pula (USD 670,000.00) |
| Zambezi Integrated Agro-Commercial Development Program (ZIACDP) | Approximate Budget:<br><br>US$ 39,500,000 | The Zambezi Integrated Agro-Commercial Development Program (ZIACDP) was initiated by Ministry of Agricultural Development and Food Security to establish a viable commercial agricultural development program aimed at improving the country's food security and create direct employment for over 4,000 people through irrigation development. |

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| Community Development Projects | Approximate Budget:<br><br>US$ N/A | Funds that have been channelled into uniform packages of beekeeping, small stock, etc, since 2010, have been distributed with minimal feasibility assessments of the extent to which the localized ecological, social and economic conditions would conduce successful implementation. Most of the supported projects have therefore been a drain on public resources with little evidence of positive social, economic or environmental impact[34]. |

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| | | The main objective of the project is to establish baseline information on land degradation towards informing the strategy to achieve LDN in Botswana. The following interventions will be implemented under the project: assessment and mapping of land degradation trends and severity, and corresponding training on monitoring tools (i.e. Open Foris Collect, Collect Earth, Earth Map) to develop the national baseline for LDN;<br><br>establishment of a Land Degradation Monitoring System to support UNCCD reporting; development of a Land Restoration Strategy (and accompanying financial strategy); setting LDN targets, this includes the establishment of a national LDN working group. |
| National Land Degradation Assessment, Monitoring and Restoration Project | MENT, 2017-2023 budget $1,000,000 | This project will build the knowledge base on land degradation to inform the national targets and strategy and the DSL IP project will pilot the LDN approach in two landscapes thereby generating evidence base knowledge on LDN in the country. The two projects will complement each towards addressing land degradation in two landscapes thereby generating evidence base knowledge on LDN in the country. The two projects will complement each towards addressing land degradation in a holistic manner across the country. The DSL IP project will build on the lessons learned from the establishment of the LDN working group and apply this experience for the establishment of decentralized LDN, in Runde and Save basins. The capacity building interventions of the project on sustainable land management will significantly support the upscaling of the SLM and SFM interventions of the DSL IP project across other landscapes. The DSL IP project interventions will build upon the to be completed LDN targets through planning and budgeting of LDN, as well as the development of the land restoration strategy by providing concrete case studies to be built on. |

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| Wildlife Borehole Drilling and<br><br>Water Reticulation project (WBDWR) | MENT, 2017-2023, budget $1,170,000 | The project entails drilling and equipping of boreholes in Kgalagadi Transfrontier Park, Central Kalahari Game Reserve and Chobe, in order to mitigate the effects of drought and Human-Wildlife Conflict caused by competition for water. |

Government Funding Mechanisms

| **Summary of Government Special Funding Mechanisms Baseline** | | |
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| **Funding Framework** | **Annual Budget Allocations** | **Description** |

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| | | The National Environment Fund was established in 2010 under MENT to help Botswana in achieving the national environmental agenda and meeting international obligations. The board has 9 members. The Department of Environmental Affairs (DEA) host the NEF and is the NEF Secretariat. Interventions that can be eligible include inter alia sustainable development, ecotourism, CBNRM, ecosystem restoration, capacity building or research and monitoring. CBOs, VDCs and NGOs can apply for small to large grants (10,000 to 4,000,000 Pula). The following sources of funding could feed into the fund: revenues from sale of hunting quotas and concessions by communities, royalties, levies, fines and licenses from environmental pollution and management, adequate funds from national assembly. |
| National Environment Fund | Approximate Budget:<br><br>US$ 3,085,000 | The NEF had a limited budget of USD 3,085,000 for the year 2019-2020) that came from the Resource Royalties of Botswana Tourism Organization (BTO). The project supported by the NEF in Chobe District include Human-Wildlife mitigation and coexistence project and Survey and documentation of the extent and abundance of invasive plant species in Chobe and Ngamiland region project. In Central District, the NEF-funded initiatives include: the construction of a Multi -Use Tourism and Accommodation, Diversified strategy for Enterprise Development in the Community Based Natural Resource Management Programme (construction of a Cultural Village for Gwaraga Game Park (Khumaga) for Ngande Trust and a Craft Centre for Molema Community in Mathathane), Integrating Livelihoods and Conservation in The Southern Sua Pan, a Community Park and a VDC-based Waste Recycling projet in Serowe, the Management of Agricultural Waste and Residues through Production and Utilisation of Compost Fertilizer in Lecheng , Malaka and other 4 villages in the Central District. |

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| Conservation Trust Fund | Approximate Budget:<br><br>US$ 1,000,000 | Other sources of funding generated from natural resources exploitation that are accessible to CBOs include the Conservation Trust Fund that gets the funds generated by the government through selling ivory or elephant trophies. This fund aims to help communities in area affected by elephants. It currently finances BirdLife, Elephant without Borders and some CBOs with grants that go up to 5 million per grant. However, currently, the funds received from hunting permits (through the reopening of elephant hunting for example) gets into the government budget and are not reinvested into wildlife management and conservation. |
| Citizen Entrepreneurial Development Agency | Approximate Budget:<br><br>US$ 24,713,330 | The current funding opportunities available to small holder farmers by private sector companies is limited. One financial organisation – CEDA (Citizen Entrepreneurial Development Agency) – which is a parastatal organisation is accessible to farmers groups. CEDA provides loan services including microloans for businesses operating in services industry. This financial support can be accessed by Small and Medium Enterprises across all sectors. The system adopted by CEDA is group financing – rather than financing individuals – and they have a particular focus on women groups (including 5 to 15 people). They also provide support for business plan development where needed. They use a system of co-guaranty through peer monitoring. CEDA's financing system is a revolving fund, therefore, they are getting internal funding through the revolving fund and the budget provided by the government decreases every year accordingly. |

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| UNDP Biodiversity Finance Initiative (BIOFIN) Phase II | Approximate Budget:<br><br>US$ 250,000 | The United Nations Development Programme (UNDP) launched the Biodiversity Finance Initiative<br><br>(BIOFIN) in 2012 as new global partnership seeking to address the global biodiversity finance challenge<br><br>in a comprehensive and systematic manner. The project aims to mainstream biodiversity into national<br><br>development and sectoral planning and address the finance gap for biodiversity. Botswana is one of 35<br><br>countries implementing BIOFIN at the national level led by the Ministry of Environment, Natural<br><br>Resources Conservation and Tourism (MENT) and its partners.<br><br>The Biodiversity Finance Plan presents a comprehensive national approach to biodiversity finance<br><br>centered around priority finance solutions. The Plan is a living document that builds on progress already<br><br>made in Botswana to suggest targets and steps that expand the country's biodiversity finance agenda<br><br>and achieve national biodiversity targets. This offers a means to foster action and support partnerships<br><br>for investing in biodiversity by deepening the understanding of a range of solutions and by framing<br><br>realistic action points. It provides clarity on links and synergies among solutions, finance outcomes,<br><br>implementation roles and the contribution of biodiversity finance towards sustainable development. |

Donor Baseline and Activity

| Project Title | Donor/Partners, Funding, Duration | Project Objectives/Actions |
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| Operationalization of the SADC Regional Agricultural Policy | Donor Partners: EU<br><br>Duration: 2017 - 2022<br><br>Total Budget: US$ 7,050,640 | The Programme of Support towards operationalisation of the SADC Regional Agricultural Policy (RAP) is funded by the EU to the tune of €9.0 Million and was approved by SADC Council in 2014 as the overarching framework for the region's agriculture sector. It defines common agreed objectives and measures to guide, promote and support actions at regional and national levels and contributes to the SADC Common Agenda on sustainable and equitable economic growth.<br><br>The specific objectives of the RAP include; enhancing the sustainable agricultural production, productivity and competitiveness; improving regional and international trade and access to markets for agricultural products; improving private and public sector engagement and investment in agricultural value chains; and, reducing social and economic vulnerability of the region's population in the context of food and nutrition security challenges, economic instability and climate change.<br><br>The implementation of RAP will be through the Regional Agriculture Investment Plan (RAIP) 2017-2022, which was approved in 2016. The RAIP outlines the priority programmes of the RAP to be implemented. It is a vehicle for raising the required resources for the operationalisation of the RAP. The Programme of Support towards operationalisation of the SADC Regional Agricultural Policy (RAP) is one such initiative of the RAIP. |
| LDN TSP | Donor Partner: GM, GEF<br><br>Duration: 2020 - 2021<br><br>Total Budget: US$40,000 | At the policy level, Botswana is committed to LDN TSP and produced an LDN country profile in 2018. The government has requested the UNCCD Global Mechanism (GM) and FAO to support in the finalization of the LDN target setting and has allocated 1 M USD from the national budget for this process. The project will leverage on this development as well as the country's commitment to the SADC's Action Plan to Combat Desertification, which will promote joint actions on trans-boundary natural resources protection. The Department of Environmental Affairs, the custodian of the LDN, has established necessary cross-sectoral coordination mechanism which will be enhanced and strengthened through the DSL IP. |

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| “Capacity Development for the Conservation and Sustainable use of Forest and Range Resources through the process of Master Plan Development” | Donor Partners: JICA<br><br>Duration: 2021 - 2024 | The project aims to develop a Master Plan for the Conservation Sustainable Use of Forest and Range Resources. The document will have a strong focus on forest-fire risk management and ecotourism. Data collection on the current status and changes of vegetative cover, biodiversity and ecosystem, impact of climate change, tourism, socioeconomic contribution of forest and range resources will be undertaken during the JICA project. |
| “Enhancing National Forest Monitoring System for the Promotion of Sustainable National Resources Management” | Donor Partners: JICA<br><br>Duration: 2013-2017 | Capacity building interventions for MENT on the preparation of forest and range resources inventory where provided during the JICA Project for Enhancing National Forest Monitoring System for the Promotion of Sustainable National Resources Management (2013-2017). The inventory of forest and range resources was undertaken under this project. A data collection campaign on the current status and changes of vegetative cover, biodiversity and ecosystem, impact of climate change, tourism, socioeconomic contribution of forest and range resources is also planned under the new national project of JICA and DFRR. |

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| “KAZA Phase 3” | Donor Partners: German Development Cooperation<br><br>Duration: 2019-2022<br><br>Total Budget: EU 15,500,00 | The baseline of information will be further increased under the EU-funded project implemented by KAZA currently assessing the critical land-use and economic transformation drivers (including land-use conflicts) underpinning the degradation and loss of habitat for elephants and other species in sub-Saharan Africa including Chobe. The project also focuses on promoting cross-sectoral dialogues and will create a knowledge sharing platform – to support more integrated and multi-sectoral planning at the landscape level.<br><br>KAZA Phase 3 is currently focusing on community livelihood development including tourism ventures and public/private partnerships in six Wildlife Dispersion Areas including Hwange-Kazuma-Chobe. The targeted sites within Chobe focus on the Eastern part of the district (Sibuyu Forest Reserve, Kazuma Forest Reserve, Maikaelelo Forest Reserve and southern parts of Kasane Forest Reserve; Seloko Plains, and open communal land to the south of the Plains). Other interventions include addressing HWC and improving law enforcement to prevent illegal killing and harvesting.<br><br>In addition, some research projects have been undertaken under KAZA to understand better the movements of some of the shared resources (e.g. ungulate species, elephants, fish) across borders. However, a lot of information gaps remain and the impact of the movement of transboundary resources and of different governance systems on land degradation is poorly known. Transboundary challenges between Botswana and Namibia and between Botswana and Zimbabwe are not addressed efficiently, therefore contributing to land degradation in Chobe basin and Tutume-Mosetse sub-basin (e.g. elephant population and HWC management, wildlife monitoring, fisheries, water quality and flows, anti-poaching).<br><br>The support of the German Development Cooperation to the Kavango Zambezi Transfrontier Conservation area (KAZA TFCA) aims to strengthen regional cooperation in conservation and management of the shared natural and cultural resources for the benefit of the local communities who live in and alongside the TFCA. The first two phases of this support focused mainly on building the capacity of the national authorities responsible for the management of the natural resources in the five partner countries through infrastructure and institutional development. Under KAZA Phase 3, which recently started, a strong emphasis is given to community livelihood development including tourism ventures and public/private partnerships. Phase 3 will prioritise three out of the six Wildlife Dispersion Areas of KAZA TFCA: Kwando River; Zambezi-Chobe Floodplain; and Hwange-Kazuma-Chobe. The feasibility studies are currently being undertaken. Funded by the German Development Cooperation with 15,5 million € for 3 of the 6 Wildlife Dispersal Area (WDA) in the Ka-Za TFCA (i.e. Hwange Zasuma, Chobe Zambezi, Kuanda). The targeted Hwange-Kazuma-Chobe WDA includes Sibuya-, Kazuma-, Maikealo- and southern parts of Kasane Forest Reserve; Seloko Plains, and open communal land to the south of the Plains. The interventions focus on: i) addressing HWC (e.g. cluster fencing against elephants); ii) developing Community Public Private Partnerships (CPPP) to unlock the tourism potential inside protected areas to the benefit of affected communities; iii) improving law enforcement to prevent illegal killing and harvesting. The tourism development activities of the KAZA TFCA project will be built on under the DSL IP project to strengthen and/or upscale the benefits accrued from tourism and protected areas for local communities. The craft development project under the DSL IP project will benefit from the effort of the KAZA TFCA towards securing rights to development sites for local |

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| "Combatting Wildlife Crime in the Namibia and the Kavango-Zambezi Area Project" (CWCP)" | Donor Partners: USAID<br><br>Duration: 2017 – 2022<br><br>Total Budget: US$ 17,600,000 | This project is focused on increasing the black rhino population in Namibia and stabilize and contribute to range expansion of KAZA TFCA elephants over the next five years. The interventions include inter alia increasing the benefits from wildlife, strengthening wildlife stewardship and creating greater pride in their wildlife for local communities as well as increasing collaboration between countries on wildlife crime transboundary issue. These interventions will contributing to creating an enabling environment for the implementation of the DSL IP project through raising communities awareness on natural resources preservation and creating a platform to solve transboundary issues. |
| "Africa's Coexistence Landscapes" (ACL) | Donor Partners: EU, KAZA, UNEP, University of Bacon in Norway<br><br>Duration: 2019 – 2021<br><br>Total Budget: US$800,000 | The project focuses on Hwange-Kazuma-Chobe Wildlife Dispersal Area and aims to understand and articulate the critical land-use and economic transformation drivers underpinning the degradation and loss of habitat for elephants and other species in sub-Saharan Africa and based on this understanding, to identify innovative solutions for securing landscapes for the benefit of both elephants and people, and inform development planning and policies to enable coexistence. This project will work in two coexistence landscapes that have not been defined precisely yet, but Chobe will be included. The information generated on land-use conflicts driving habitat conversion and loss in Chobe district will complement the LDA undertaken during the PPG phase of the DSL IP and inform the fine tuning of the DSL IP interventions. In addition, ACL efforts to promote cross-sectoral dialogue – including a knowledge sharing platform – to support more integrated and multi-sectoral planning at the landscape level is fully aligned with the landscape approach under the DSL IP and will contribute towards creating the enabling environment for landscape-level planning and decision making. The DSL IP project interventions under Component 1 will complement ACL project interventions towards enabling land-use planning beyond administrative boundaries. |

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| Sustainable Wildlife Management (SWM) | Donor Partners: AFD<br><br>Duration: 2020- 2023<br><br>Total Budget: US$3,900,000 | The SWM/AFD project expands the scope of the activities already developed by the SWM programme in Zambia and Zimbabwe, to Botswana and Namibia. It is implemented in Kavango-Zambezi Transfrontier Conservation Area (KAZA): Botswana and Namibia. The selected sites in Botswana and Namibia are located in areas under communal tenure in the Miombo eco-region, where semi-arid habitats, erratic rainfall, poor soils, and high frequencies of HWC are common challenges limiting the development of the livelihood of the communities. This project aims to establish a network of well managed Community Conservancies in Botswana and Namibia able to generate sustainable socio-economic benefits for the communities and ensure ecological connectivity within the whole KAZA landscape. Interventions include the creation of the first Community Conservancy – in Habu (North West District/Ngamiland) – as an innovative model for the sustainable uses of wildlife and natural resources to directly benefit the rural communities. Most of their activities in Botswana focus on Ngamiland. The interventions also include the development of HWC mitigation plans. Their experience in piloting a community conservancy model and in addressing HWC will be built on for the design and implementation of the GEF7 project interventions under Output 2.1.2. |
| "GCF/SADC Transboundary Fire Project" | Donor Partners: GCF/ ISFMI (NSW Australia)<br><br>Duration: TBD<br><br>Total Budget: US$80,000,000 - 100,000,000 (Envisaged) | A GCF project proposal lead by SADC is under development to address the issue of transboundary-forest fires in Southern Africa. |

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| IFAD Agricultural Services Support Project | Donor Partners: IFAD<br><br>Duration: 2010 - 2018<br><br>Total Budget: US$5,560,000 | The FFS approach has been piloted by the Department of Crop Production of MoA under the IFAD-funded project on. Eight FFSs were established including one in Francistown. The Department of Crop Production has undertaken a training-of-trainers programme for all extension workers at the national level on conservation agriculture. It was done in 2016 towards the end of the IFAD-funded project. The interventions included building Service centres, promoting conservation agriculture (at the national level), providing agricultural equipment for conservation agriculture, and establishing water irrigation schemes in Central District. The latter are almost operational, water quality test still have to be undertaken. Some extension workers are continuing the work but some schools are not operational anymore. The results obtained were positive, the production increased significantly within the established through the use of conservation agriculture. |
| International Savanna Fire Management Initiative (ISFMI) | Donor partners: AusAid<br><br>Duration: 2019-2022<br><br>Total Budget: US$ 2,885,000 | This Project seeks to build the foundations to pilot Australia's Traditional Fire Management. Nearly one-quarter of the country was burned in 2010. The Project will draw on Australia's expertise and experience in developing methodologies for emissions offset schemes with Australia's domestic Emissions Reduction Fund having generated economic returns for forest and other land-use activities that abate and sequester emissions. The Project will draw on, and transfer, Australia's capabilities in methodology and project development, MRV, and carbon market design and development. Project builds on the solid bilateral relationship the Australian and Botswanan Governments have, including the fire management activities provided by the NSW Rural Fire Service and others supported by Pretoria Post. It also builds on the partnership with the Australian Government, the United Nations University (UNU) as part of the International Savanna Fire Management Initiative (ISFMI). |

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| Beekeeping Project<br><br>Strengthening Botswana apiculture value chain through coordination and capacity development. | Donor Partners: FAO (TCP)<br><br>Duration: 2020 - 2021<br><br>Total Budget: US$ 43,000, | The key objective is to understand and address the main constraints and challenges in the honey value chain in Botswana. |
| Interventions to improve the food security of communities in wildlife-dominated landscapes in northern Botswana | Donor Partners: FAO (TCP)<br><br>Duration: 2017 - 2019<br><br>Total Budget: US$ 496,000 | In Dec 2019, In northern Botswana, we completed a TCP project on improved livelihoods in wildlife dominated landscapes, with a strong HWC component. Capacity has been strengthened at a local level to prevent and mitigate HWC by ensuring monitoring and surveillance of the area by community scouts; better livestock management, including herding practices; construction of predator-proof bomas and kraals; and engagement of local communities in ecotourism and wildlife-based businesses. This could a good opportunity to build on FAO's existing experience and lesson learnt. |

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| Strengthening the national framework and capacity for implementation of the<br><br>Nagoya Protocol, in support of diversified local livelihoods | Donor Partners: UNDP/ GEF<br><br>Duration: 2020 - 2024<br><br>Total Budget: US$1,960,000 | The Nagoya Protocol on ABS provides a legal framework<br><br>for the effective implementation of the third objective of the Convention on Biological Diversity (CBD). Botswana<br><br>has been making important efforts to develop and strengthen national ABS frameworks, human resources, and administrative capabilities to implement the Nagoya Protocol, including through a national Global Environment Facility (GEF)-financed, United Nations Development Programme (UNDP) -supported pilot project under the<br><br>Global ABS initiative entitled: Strengthening Human Resources, Legal Frameworks, and Institutional Capacities to Implement the Nagoya Protocol, financed by the Global Environment Facility (Project ID 5731). Botswana, Government has since secured USD 1.96 million under GEF cycle 7 for ABS Phase 2 Project building on the results of Phase 1 Project. |

Civil Society

| **Summary of Civil Society Baseline** | |
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| **CSO** | **Description** |

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| Community Based Organizations | There are two main CBOs involved in CBNRM projects and tourism at the landscape level in Chobe. They both have tourism head leases over a Controlled Hunting Area. The five western villages are grouped together within the Chobe Enclave Conservation Trust (CECT) while Kazungula, Lesoma and Pandamatenga are grouped together under the umbrella of the KALEPA. CECT was the first CBNRM organisation formed in Botswana in 1993.Since the hunting industry stopped in 2014, its revenue has drastically reduced. Now most of the revenue comes from joint venture arrangements (mainly sub-leasing of tourism rights to commercial tour operators). CECT also owns its own lodge in Ngoma[35][35]. They have recently engaged BUAN in conjunction with Botswana Tourism Organisation for the development of a management plan for their concession area. It is suggested in the Chobe District ILUP that classic models were communities are expected to function as corporations has not been efficient. Joint Venture Agreement such as sub-leasing tourist activities or land for tourism facilities to individuals or corporations with the necessary skills and interests to make the venture a success could be a more adequate model taking the example of the conservancies in Namibia. This should include a medium-term plan for entrepreneurial and managerial skills transfer to local communities and a share of benefits that suits both parties[36][36].<br><br>Other avenues to create tourism-based sustainable sources of income are being explored through small localised initiatives. For example, Caracal NGO is currently supporting a women CBO to develop their basket weaving activity based on Mokolwane palm tree to sell to tourists. A lot of lodges and hotels have craft shops within their facilities. |

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| BirdLife Botswana | In Makgadikgadi landscape, BirdLife is currently supporting a project for the development of sustainable sources of income. The project started in 2019 in Nata (close to Mosetse) where they support the development of a business plan for an agritourism project in the Bird Sanctuary (Nata sanctuary conservation trust) and its implementation. Professional tour guides have been trained. BirdLife has also been contracted by SGP to mentor, support and monitor nine CBO grantees of the SGP in Makgadikgadi landscape for 2020 and 2021. They are also working on an interesting initiative in Kalahari landscape, funded by the National Environmental Fund, that focuses on the development of ecotourism in Kalahari North (KD1) area (to help the transition from hunting to photographic tourism). Four or five villages are benefitting from the initiative there. |
| Elephants Without Borders | Elephants Without Borders (EWB) is a charitable organization dedicated to conserving wildlife and natural resources; through innovative research, education and information sharing. EWB is implementing EleSenses project which promotes a low-cost human-elephant conflict mitigation system. The organisation also assists small-scale development projects, such as the Women's Basket-weaving Cooperative comprised of groups of women from 3 villages in Chobe Enclave by designing and purchasing signs and materials to help them market their ware. |
| CARACAL | CARACAL is a non-governmental organisation based in northern Botswana (Kasane). The organisation promotes projects on the conservation of wildlife and improvement of community livelihoods, by undertaking research; outreach and education; working with local communities and some government departments. |
| Kalahari Conservation Society | Kalahari Conservation Society (KCS) is the longest serving environmental Non-Governmental Organisation (NGO) dedicated to protecting Botswana's unique biodiversity and community wellbeing. Through their CBNRM programme, KCS is facilitating and implementing a capacity building project aimed at enhancing understanding of alternative livelihoods options for communities to diversify their benefits, whilst maintaining conservation balance in CBNRM. The organisation was previously involved in establishment of Nata Bird Sanctuary, which has members drawn from Nata, Sepako, Maposa and Manxotae. |

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| WildCRU(University of Oxford) | WildCRU is part of the University of Oxford, engaged in tackling emerging biodiversity and environmental issues. WildCRU established the Trans Kalahari Predator Project in three villages of Kavimba and Mabele in the Chobe Enclave; and Khumaga in the Boteti District. Both areas are situated in conflict hot-spots within the KAZA TFCA. The project aims to mitigate predator conflict through introduction of practical and educational measures. |
| Elephants for Africa | Elephants for Africa is dedicated to enhancing human-wildlife coexistence in rural farming communities and conducting research on African elephant behaviour, resource requirements and responses to changing environmental conditions. |

Private Sector Support

90. The private sector baseline for this project is composed primarily of livestock and agricultural producers. In addition, the project will ideally benefit from on-going efforts by private tourism industry to promote SLM and SFM.

Gender

91. Baseline gender issues are discussed within the Gender Action Plan.

GEF Supported Initiatives

| Project Title | GEF Agency/Partners, Funding, Duration | Project Objectives/Actions |
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| GEF SGP | GEF Agency: UNDP<br><br>GoB Partners: Various Ministries<br><br>Duration: 2020-2023<br><br>Total Budget: US$1,231,000 | OP6 focused on Central District. BirdLife Botswana was contracted under the OP6 to help mentor, monitor and manage nine CBO grantees (including trusts). These CBOs were supported on project management and financial management among others.<br><br>The Country Programme Strategy to guide their activities for four years was finalized in December 2019 (BirdLife Botswana contributed to this baseline assessment). One of the three prioritized landscapes is Makgadikgadi Wetland System. The total budget for Operation Phase 7 – 2020 to 2023 (4 years) is USD 1,231,000 USD. OP7 focus on four strategic initiatives: i) Community-based conservation of threatened ecosystems and species through CBNRM approach within a World Heritage site through partnership with UNESCO; ii) sustainable agriculture and fisheries, and food security; iii) low carbon energy access co-benefits; and iv) local to global coalitions for chemicals and waste management. They use a landscape approach from Makgadigadi wetland area to Bubirwa and Okavango. They use a bottom-up approach and support dialogue between Northern, communities (including vulnerable groups such as women, youth and San communities) and private sector. They will work with CBOs and support their operation as enterprises. Their contribution to the LDN targets is not considered in the OP7, support from the GEF7 project will be provided to the GEF SGP team to assess their contribution to LDN. |

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| "Dryland Ecosystem Project"<br><br>Managing the Human-wildlife Interface to Sustain the Flow of Agro-ecosystem Services and Prevent Illegal Wildlife Trafficking in the Kgalagadi and Ghanzi Drylands | GEF Agency: UNDP<br><br>GoB Partners: MENT<br><br>Duration:<br><br>2017-2021<br><br>Total Budget: US$5,996,789 | The project promotes an integrated landscape approach to managing Kgalagadi and Ghanzi drylands for ecosystem resilience, improved livelihoods and reduced conflicts between wildlife conservation and livestock production. The lessons learned from the project on integrated, landscape-level management planning and cross-sectoral collaboration for the implementation of the plans will be built on to the implementation of Output 1.1.2 and 1.1.5 of the project. |
| Mainstreaming SLM in Rangeland Areas of Ngamiland District Productive Landscapes for Improved livelihoods | GEF Agency: UNDP<br><br>GoB Partners: MENT<br><br>Duration: 2013 – 2019<br><br>Total Budget: US$3,081,800 | The Ngamiland SLM project focused on building institutions, policies and markets for mainstreaming SLM in managing rangelands in Ngamiland. Lessons learned from their interventions for improved livestock management to address overgrazing, control of bush encroachment, fire management, improved access to markets (for livestock value chains), and increased regional collaboration for knowledge sharing on SLM will be built on for the design of the SLM and SFM interventions, and value chains development interventions, to be implement under Output 2.1.1 and 2.2.1. |

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| “BioChobe Project”<br><br>Improved Management Effectiveness of the Chobe-Kwando-Linyanti<br><br>Matrix of Protected Areas | GEF Agency: UNDP<br><br>GoB Partners: MENT/ MoA<br><br>Duration: 2013-2017<br><br>Total Budget: US$1,818,182 | Bio-Chobe project aimed at strengthening protected area management within the Chobe-Kwando-Linyanti (CKL) matrix of protected areas, and to put in place measures to ensure that land use in buffer zones around the CKL matrix is compatible with overall biodiversity conservation objectives. The project outputs include the Chobe District Integrated Land-Use Plan whose implementation will be supported under the GEF7 project. The lessons learned and recommendations from the BioChobe project’s Terminal Evaluation have been used for the design of the GEF7 project. It is acknowledged in the Terminal Evaluation that there was some weaknesses in the ILUP development process. The approach adopted under the GEF7 project is to support the implementation of the plan in close collaboration with local communities and local authorities, and to make required adjustment to the ILUP during the implementation process following a bottom-up approach. |

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| “Makgadikgadi SLM<br><br>Project”<br><br>Using SLM to improve the integrity of the Makgadikgadi<br><br>Ecosystem and to secure the Livelihoods of Rangeland-dependent Communities | GEF Agency: UNDP/<br><br>BirdLife Botswana<br><br>GoB Partners: MENT<br><br>Duration: 2014-2017<br><br>Total Budget: US$792,832 | The Makgadikgadi SLM Project focused on addressing rangeland degradation in the Makgadikgadi region and was focussed on piloting SLM within the Southern Sua Pan (SSP) area. As part of the project interventions, the Makgadikgadi Framework Management Plan was developed and the Makgadikgadi Wetlands Management Committee (MWMC) was revived. Interventions for the development of Conservation Agriculture were supported by the Department of Crop Production, for improved rangeland management by the Department of Animal Production, and for fire management and sustainable management of veld products by DFRR. The recommendation from the project’s Terminal Evaluation were very valuable for the GEF7 project design. The implementation of the Management Plan is now supported by GEF SGP and BirdLife that will be closely involved in the GEF7 project for the development and implementation of the Tutume-Mosetse ILUP under Output 2.1.2.<br><br>GEF-funded initiatives for integrated management planning in Chobe District ILUP, Okavango Delta Management Plan, and Makgadikgadi Framework Management Plan, Management Plan for Southern Sua Pans (for the villages of Mmatshumo, Mosu, Mokubilo, and Mmea) and Integrated Land Use Plans for the same villages (as well as Makgaba).<br><br>UNDP and BirdLife – who worked on these projects – have therefore valuable experience in establishing cross-sectoral decision making and planning units. This includes for example the Makgadikgadi Framework Management Plan Implementation Committee, and the Makgadikgadi Wetlands Management Committee which comprise mainly communities, community leaders and CBOs. |

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| Strategic Partnerships to Improve the Financial and Operational Sustainability of Protected Areas | GEF Agency: UNDP<br>GoB Partners: MENT<br>Duration: 2008 - 2014<br>Total Budget: US$953,300 | The project goal was to strengthen the sustainability and management effectiveness of Botswana's system of protected areas. The project objective was to catalyze working partnerships between public, private, NGO, and community stakeholders to improve the financial and operational sustainability of protected areas. The project objective is expected to be achieved through1) Strengthening enabling environment2) Effective PA co-management systems demonstrated at site level3) Increased institutional capacity to effectively fulfill PA management functions |
| Human-Wildlife-Coexistence Management Project in Northern Botswana. | GEF Agency: World Bank<br>GoB Partners: MENT<br>Duration: 2009 - 2016<br>Total Budget: US$5,500,000 | The project goal was to (i) mitigate human-wildlife conflict through proactive prevention strategies in selected rural communities in Northern Botswana and (ii) offer local people employment choices in these same areas in wildlife-based tourism to benefit directly from the presence of wildlife. |

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| Building Local Capacity for Conservation and Sustainable Use of Biodiversity in the Okavango Delta | GEF Agency: World Bank<br><br>GoB Partners: MENT<br><br>Duration: 2006 - 2013<br><br>Total Budget: US$4,000,000 | The project goal was to secure the long-term sustenance of the biological diversity of wetlands in Botswana and contribute to the conservation of wetland biodiversity regionally and globally. The purpose was to put in place community and private sector-based adaptive management models for globally significant wetland ecosystems in the Okavango delta which will ensure the long-term sustenance of its biodiversity.<br><br>To achieve this, the project developed and disseminated best management practices for conservation in the productive landscape, working with rural communities and tourism practitioners in collaboration with local and central government institutions. |

## F. Proposed Alternative and Theory of Change

Harmonized Programmatic Approach

92. This proposed Botswana child project is part of a joint submission of six Southern African countries under the GEF DSL IP[37]. The program is designed to help maintain the ecological cross-boundary integrity of the Miombo and Mopane woodlands ecoregion. Covering nearly 2.7 million km2, the Miombo and Mopane woodlands ecoregion is one of the most extensive and most threatened forest formations in Africa.

93. Each project within the umbrella program is designed to contribute to a shared programmatic goal: “To support a transformational shift towards a sustainable and integrated management of multi-use dryland landscapes of the Miombo and Mopane ecoregions.”

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94. To achieve this objective, the individual projects reflect the programmatic approach and are aligned with the DSL IP’s Theory of Change (ToC). While recognizing that individual countries face unique degradation challenges, each project will apply a harmonized and programmatic approach designed to facilitate each project to remove identified barriers to achieving the ‘situation sought’. Each project within the program will alleviate threats to Miombo and Mopane woodlands and contribute to the maintenance and restoration of globally important environmental values and ecosystem services. Each project within the program will contribute to land degradation neutrality (LDN), livelihood sustainability and climate change resilience.

95. The package of projects is integrated and well-coordinated manner by generally applying the following basic strategies:

· Strengthen multi-sectoral and multi-stakeholder coordination and collaboration at all levels, e.g. LDN platforms at national and landscape scales;

· Improve regulatory framework conditions to support sustainable landscape management;

· Develop stakeholder capacity to identify and assess land degradation drivers and support informed SLM/SFM decision making and reporting (LDN targets);

· Strengthen cross-sectoral rural advisory services and capacitate land users to enable integrated SLM/SFM interventions;

- Provide incentives for land users to engage in SLM/SFM, e.g. sustainable value chains and securing their rights;

- Share evidence-based knowledge regarding best practices and encourage reflective learning through effective transboundary coordination between cluster countries (Miombo/Mopane).

96. The DSL program will benefit from a Miombo/Mopane Regional Exchange Mechanism (REM). The objective of the Miombo/Mopane REM is to increase the magnitude, durability and scope of impacts of GEF-7 investments in sustainable drylands management in DSL IP countries (Angola, Botswana, Malawi, Mozambique, Namibia, Tanzania, Zimbabwe – financed through GCP and child project contributions) and non-DSL IP countries in the ecoregion (Burundi, DRC, Eswatini, South Africa, Zambia - through co-financing and zero cost to DSL IP). The shared land degradation and associated management challenges, along with the high density of child projects in one ecoregion, provide a unique opportunity to find common solutions through regionally harmonized approaches, knowledge and experience/lesson sharing, and taking full advantage of economies of scale in the delivery of technical assistance.

97. The REM is expected to yield the following outcomes:

- Increased collaboration and coordination among Miombo/Mopane child projects resulting in new or strengthened synergies, enhanced impacts and efficiencies, and avoidance of duplication.
- Improved availability and delivery of demand-driven technical, methodological, financial and other capacity development support to child projects, leading to greater impact at country level (through a regional capacity development program).
- The program and its child projects contribute to knowledge access and knowledge exchange on DSL options.
- Impacts scaled out in and beyond IP countries in the Miombo/Mopane region.
- Regional level M&E allows adaptive response to regional impacts and trends.

Botswana Child Project Approach

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98. The project's development objective is to "Support Land Degradation Neutrality and reverse negative land and resource degradation trends in two areas of North-east Botswana by applying an integrated management approach for sustainable and adaptive woodland, rangeland, agriculture and water management, and addressing the human-wildlife conflicts."

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99. The project objective is: to "Promote the integrated management of Miombo and Mopane landscapes in Chobe and Tutume-Mosetse sub-basins through the implementation of SLM and SFM interventions to achieve LDN targets."

100. As noted, three barriers or challenges stand between the current situation and the intended objective:

- Barrier One: Land and resource planning, management and governance challenges
- Barrier Two: Sustainable production experience and capacity challenges
- Barrier Three: Coordinated knowledge management and impact monitoring challenges

101. The Government of Botswana sees this project as a strategic opportunity to address the barriers and root causes of land and forest degradation while achieving impact at a meaningful scale. The project will generate lessons and experience that can be amplified both nationally and regionally. Although the existing baseline does not currently successfully address these challenges, the baseline does presents several foundational investments and activities upon which the project can build.

· *Institutional Capacity:* The Government of Botswana has institutions in place working towards achievement of the project objective. This includes a large and fairly well-funded institutional staff located at both the national and local levels. District level organizations provide a strong entry point for enhancing project effectiveness. This includes an institutional structure that is designed to support the creation and implementation of land and resource use management planning. Perhaps chief amongst these is the District Land Use and Planning Units that are mandated to provide District Councils and Land Boards with the technical support required to generate more sustainable approaches to land and resource use. However, under the baseline, these agencies have not yet benefitted from targeted capacity building designed to motivate and accelerate necessary changes.

· *Laws and Policies:* The Government of Botswana benefits from a very comprehensive and broad set of laws and policies designed to promote sustainable management. Unfortunately, under the baseline, the Government has been challenged in some instances to effectively apply this policy framework in an effective way, particularly in terms of addressing fundamental threats to land degradation such as overgrazing, fire management, forest encroachment, and the reduction of wildlife conflicts each of which contribute to land and forest degradation.

· *Land Use Planning Programs:* As noted, the Town and Country Planning Act (2013) and Land Policy (2019) open the door to allow for regulated land use planning across Botswana. However, advancement on these relatively new policies will be slow without substantial capacity enhancement. The Government of Botswana along with international partners such as GEF have made some progress with the design of land use planning. This includes the national and district level development plans. However, there is a strong need to strengthen these plans in terms of providing the financing, vision and implementation support required to reduce threats to land degradation and sustainable forest management. Progress has been made for the Chobe District with the recently drafted Chobe Integrated Land Use Plan (ILUP). This was completed in 2017 with GEF support. The draft ILUP provides a strong framework under the baseline in terms of compiling data, identifying threats, and offering broad stroke directions for land management and resource use improvements. In addition, the existing ILUP provides only basic guidance. The ILUP has not yet been formally adopted and/or “moved to the next level” primarily due to local government capacity and experience constraints, e.g., how to work with concerned stakeholders to conceptualize, formally adopt and implement concrete LUP processes and procedures. There is an urgent need to assist with the formal adoption of the ILUP and, importantly, to generate a sub-set of more detailed directions in terms of managing specific threats such as overgrazing, fuelwood consumption, and sustainable agriculture in addition to providing parameters, incentives, and capacity to assist and engage communities to adopt sustainable practices. There is also a need to capture lessons from the ILUP and amplify these lessons to other regions of the country facing similar challenges, e.g., the Tutume landscape.

· *Sustainable Government Financing:* The Government of Botswana has in place a number of funding mechanisms that could and should be harnessed to provide focused and targeted support for SLM, SFM and the delivery of ancillary poverty alleviation and biodiversity conservation benefits. These include the National Environment Fund, the Conservation Trust Fund, Citizen Entrepreneurial Development Agency, and others. Under the baseline, these funds along with core government financing (e.g, MENT, MOA, and MoED budgets) are not organized to deliver global environmental impacts. This is in part linked to the absence of coordinated and strategic land and natural resource management guidelines and plans focused upon sound resource management objectives (e.g., land use planning) beyond the boundaries of Game Reserves and National Parks. Without a strong land use planning and resource management program in place, investments are not prioritized to deliver global environmental benefits and/or measure the positive impact of investments towards the achievement of these benefits.

· *Sustainable Private Sector Financing:* Under the baseline, there is little meaningful engagement with the private sector in terms of providing direct and targeted financial support for community development that is organized to deliver global environmental benefits. There is opportunity to better capture revenues from the private tourism industry in positive, not penalizing, ways. Private industry is not interested in further reduction of profit solely based upon increasingly arduous government regulation and fee structures. Again, this is largely due the absence of an organized approach to land and resource use management outside the boundaries of protected areas that is predicated upon both the identification and monitored achievement of specific LDN targets. The value of private sector investments in northern Botswana, particularly in the Chobe region, is predicated strongly sustained and fully functional biodiversity conservation. The private sector would be motivated to invest in community development programs – including sustainable agriculture, livestock management, and forest management – if such programs are perceived as delivering biodiversity conservation benefits that in turn result in higher tourism revenue. The relatively large and "high-end" centred tourism industry in Botswana offers an opportunity and an available market for sustainably produced products. There are also strong opportunities for "farm to table" programs with commodities certified as sustainably and wildlife friendly production provided to the large network of tourism facilities. Unfortunately, under the baseline, very little has been achieved in this regard.

· *Sustainable Production Practices:* Under the baseline, the Government, donor partners, CSOs and others have made very limited progress in terms of assisting private stakeholders and particularly rural communities to engage in sustainable practices designed to deliver LDN targets inclusive of SFM. Botswana has been challenged to capture opportunities for sustainable production improvements based upon best international principles and practices and support private producers to integrate these practices within their production systems. This includes both farming and livestock activities. To date, baseline activities have struggled to assist stakeholders with state of the art extension services designed to build knowledge and exposure to sustainable practices. Baseline activities have had a difficult time addressing issues such as value-chain improvements beyond the ineffective "small-scale" approaches such as basket weaving and community-based tourism that do little to address the fundamental or root causes of behaviours that result in degradation. Investments such as ISPAAD that supplies seeds to producers, community nursery gardens, Livestock Management and Infrastructure Development (LIMID), Poverty Eradication Programs, School Feeding Programs and others need to be better harmonized and focused upon assisting private producers in ways that designed to actually

address the root causes of degradation. In addition, the demand and market elements are weak. These programs needs to be augmented by providing stakeholders with experience that proves that sustainable agriculture and livestock production can deliver meaningful financial and food security benefits while delivering global environmental benefits, including SLM, LDN, climate change resilience and mitigation, and biodiversity conservation.

· *Knowledge Management:* The Government of Botswana is working towards an improved process for collection and dissemination of knowledge to inform decision-making by private enterprises and government agencies. As noted in the baseline analysis, the Government has tools such as the Strategic Environmental Assessment, the Land Use Conflict Identification System, and the Management Oriented Monitoring System. However, the country has struggled to harmonize these tools in a way that is designed to effectively and efficiently capture data and track information. Simultaneously, the stakeholders have been challenged to deliver information and lessons systematically to private stakeholders and government decision-makers to incentivize and improve the uptake of sustainable practices. There is an urgent need to address this short-coming under the baseline, particularly as climate change advances creating emerging challenges that demand adaptive practices to reduce both LD impacts and improve system-wide resilience across the productive sector. In turn, there is a need to link knowledge management improvements with regional and global initiatives to better inform cumulative impacts and strategic approaches to sustain the vitality of shared resources such as the Mopane-Miombo woodlands.

102. Although these baseline initiatives provide a firm foundation for investment, they do not adequately address the barriers that continue to inhibit realization of global environmental benefits. The GEF investment is designed to specifically address the identified barriers through three specific components.

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· Component 1 will focus upon setting in place land use and spatial planning mechanisms designed to secure SLM and SFM. This will directly address Barrier 1. The component will build upon the existing baseline platform of Botswana's existing policy and institutional frameworks that reflect best land use and spatial panning practices. This will build upon FAO's global body of knowledge while adapting practices to fit the unique local situation.[38][38] The process of strategic plan generation, implementation and monitoring will be used to build capacities and create a replicable model for success. The plan will help to guide and inform management decision-making, including incentivizing greater coordination and efficient resource use across diverse Government agencies across national and subnational levels. The plan will facilitate greater community engagement in resource management, including the mainstreaming of gender issues. The plan will provide a baseline for making certain LDN and associated SLM and SFM targets are being achieved. The plan will integrate community-based engagement and development principles. The plan will demarcate landscapes to better identify and address land degradation root causes. The plan will specifically address the drivers associated with degradation with particular attention given to improving livestock

management, sustainable agriculture practices, wildfires and the use and conservation of Mopane-Miombo woodlands. The result will be a legally enforceable, fully monitored strategic management plan that promotes sustainable land and forest management.

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· Component 2 will directly address Barrier 2 by immediately supporting producers to shift to more sustainable practices. Effort under this component will establish a framework for the effective delivery of knowledge, awareness and skills required to identify and adopt improved practices. This will include generating farmer field schools that integrate concepts related to LDN, SFM, and other issues necessary to reach intended GEB targets. This will be supported by enhancing the capacity of agencies associated with both the MoA and MENT to improve their ability support communities to identify and adopt improved practices, including organizational and institutional challenges. Importantly, effort under this Component will also work to address issues related to financing that currently inhibit adopt of sustainable practices. This work will address the value-chain side of the equation through improved marketing and other models. The project will also assist producers to access financing required to invest in improved practices. This effort will involve working with existing government financing programs to make certain they are strategically supporting production efforts designed to address degradation issues. As with Component 1, work under Component 2 will pay special attention to issues of gender incorporating approaches that make certain women benefit from both targeted learning as well as increased opportunities to meaningfully engage in decision-making. All efforts under Component 2 will be informed by and contribute to the objectives and targets established under Component 1's tactical planning process.

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· Component 3 will assist Botswana to dismantle the third barrier related to knowledge management. Under this component, the project will enhance national capacity to systematically capture and amplify best practices. This will include creating an efficient approach to gathering evidence and lessons supported by an innovative communications strategy designed to effectively channel this information to private producers, extension services, and government decision-makers. An important element of Component 3 work will be to establish a monitoring and evaluation system designed to measure impact and results, including the 3 LDN indicators of land cover, land productivity (net primary productivity) and carbon stocks (soil organic carbon). This will be linked to both Component 1 (planning) and Component 2 (practice) to make certain both efforts are successfully contributing to the realization of national and global conservation and development objectives, LDN targets, and GEBs. In addition, Component 3 will link with regional efforts. This will include outside programming such as initiatives supported by SADC as well as the overall SFM/SLM program. This work will reflect and integrate with the objectives and actions to be funded through the overall SFM/SLM program.

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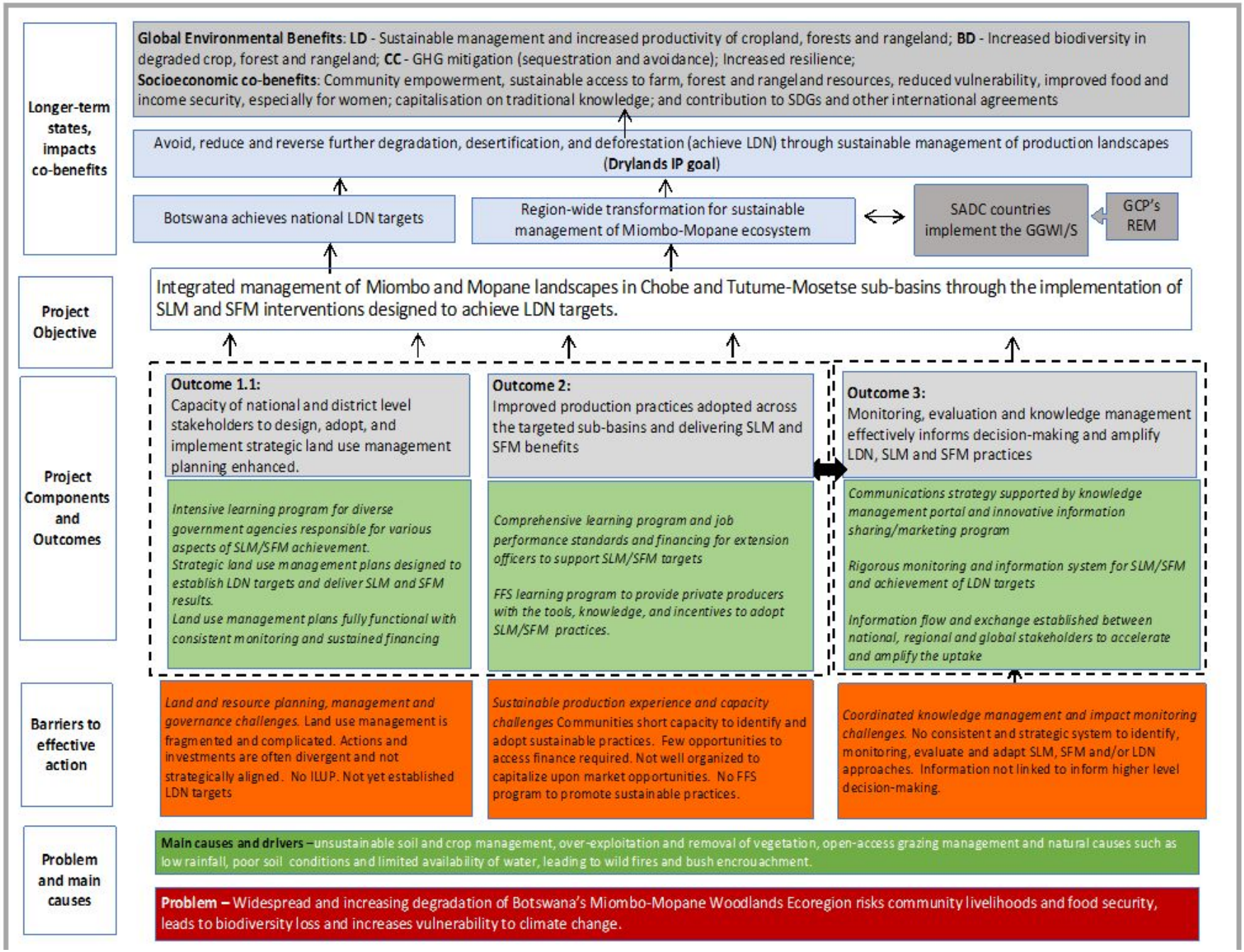
103. The result of the project will be a much more cohesive and coordinated approach to addressing the root causes of land and forest degradation across the Botswana Mopane-Miombo ecoregion. The project will deliver immediate LDN and SFM benefits at both target regions. These locations as noted are of highest importance both nationally

and globally.  The project will also serve to emplace a programmatic approach to addressing degradation issues that will measurably shift the baseline at both national and regional levels to effectively realize LDN targets and associated SFM and SLM objectives and GEBs.  GEF's investment will in this way catalyse an outsized impact that is both effective and sustainable.  A major part of this effort will support the Government of Botswana to adopt a close-out strategy that ensures financial and institutional changes are in place to make certain sustainable financing and human resources are allocated to ensure sustainable results that endure beyond the project's investment period.


Longer-term states, impacts co-benefits
Global Environmental Benefits: LD - Sustainable management and increased productivity of cropland, forests and rangeland; BD - Increased biodiversity in degraded crop, forest and rangeland; CC - GHG mitigation (sequestration and avoidance); Increased resilience;
Socioeconomic co-benefits: Community empowerment, sustainable access to farm, forest and rangeland resources, reduced vulnerability, improved food and income security, especially for women; capitalisation on traditional knowledge; and contribution to SDGs and other international agreements
Avoid, reduce and reverse further degradation, desertification, and deforestation (achieve LDN) through sustainable management of production landscapes (Drylands IP goal)
Botswana achieves national LDN targets
Region-wide transformation for sustainable management of Miombo-Mopane ecosystem
SADC countries implement the GGWI/S
GCP's REM
Project Objective
Integrated management of Miombo and Mopane landscapes in Chobe and Tutume-Mosetse sub-basins through the implementation of SLM and SFM interventions designed to achieve LDN targets.
Project Components and Outcomes
Outcome 1.1:
Capacity of national and district level stakeholders to design, adopt, and implement strategic land use management planning enhanced.
Intensive learning program for diverse government agencies responsible for various aspects of SLM/SFM achievement.
Strategic land use management plans designed to establish LDN targets and deliver SLM and SFM results.
Land use management plans fully functional with consistent monitoring and sustained financing
Outcome 2:
Improved production practices adopted across the targeted sub-basins and delivering SLM and SFM benefits
Comprehensive learning program and job performance standards and financing for extension officers to support SLM/SFM targets
FFS learning program to provide private producers with the tools, knowledge, and incentives to adopt SLM/SFM practices.
Outcome 3:
Monitoring, evaluation and knowledge management effectively informs decision-making and amplify LDN, SLM and SFM practices
Communications strategy supported by knowledge management portal and innovative information sharing/marketing program
Rigorous monitoring and information system for SLM/SFM and achievement of LDN targets
Information flow and exchange established between national, regional and global stakeholders to accelerate and amplify the uptake
Barriers to effective action
Land and resource planning, management and governance challenges. Land use management is fragmented and complicated. Actions and investments are often divergent and not strategically aligned. No ILUP. Not yet established LDN targets
Sustainable production experience and capacity challenges Communities short capacity to identify and adopt sustainable practices. Few opportunities to access finance required. Not well organized to capitalize upon market opportunities. No FFS program to promote sustainable practices.
Coordinated knowledge management and impact monitoring challenges. No consistent and strategic system to identify, monitoring, evaluate and adapt SLM, SFM and/or LDN approaches. Information not linked to inform higher level decision-making.
Problem and main causes
Main causes and drivers – unsustainable soil and crop management, over-exploitation and removal of vegetation, open-access grazing management and natural causes such as low rainfall, poor soil conditions and limited availability of water, leading to wild fires and bush encrouachment.
Problem – Widespread and increasing degradation of Botswana's Miombo-Mopane Woodlands Ecoregion risks community livelihoods and food security, leads to biodiversity loss and increases vulnerability to climate change.

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## G. Brief Description of Expected Outcomes and Components

| *Project Objective* *Promote the integrated management of Miombo and Mopane productive landscapes in Chobe and Tutume-Mosetse sub-basins through the implementation of SLM and SFM interventions to achieve LDN targets.* | |
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| **Impact Indicators** | 20,000 hectares of degraded lands restored (primarily cultivated agricultural lands)<br><br>565,000 hectares of landscapes under improved practices<br><br>140,660 hectares of lands achieving LDN (primarily productive cultivated and grazing lands in Miombo/Mopane landscapes avoid, reduce and reverse LD)<br><br>637,745 tCO2eq sequestered or avoided over 20-years due to direct project interventions<br><br>15,200 direct beneficiaries (Female: 9,800 Male: 8,100) |

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| **Assumptions** | Capacity enhanced by project to adequately monitor results<br><br>Strong government and stakeholder engagement<br><br>Improved practices adopted |
| **Lead Executing Agency** | MENT |
| **Anticipated Budget** | GEF: US$ 5,345,587<br><br>Co-Financing: US$ 78,975,929 |

**Component 1: Strengthening the enabling environment for the sustainable management of the targeted Mopane and Miombo ecoregion of Botswana**

| *Outcome 1:* *Regulatory, institutional and planning LDN, SLM and SFM capacity strengthened with land use planning operationalized and funded.* | |
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| **Impact Indicators** | Two (2) regional integrated Land-Use Plans adopted, funded, implemented and monitored strategically addressing SLM and SFM relevant to forest, agriculture, and rangeland practices<br><br>565,000 hectares covered by adopted land use plans measuring LDN with objective of SLM and SFM<br><br>At least 6 annual land use planning implementation monitoring reports completed and presented by District Authorities (DLUPU) to stakeholders at national and district level mtgs<br><br>At least 3 Government of Botswana annual budget lines approved allocating sustainable financing for land use plan implementation, monitoring, and adaptation |

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| **Assumptions** | Capacity enhanced efficiently and effectively by project<br><br>Strong government and stakeholder engagement<br><br>Improved practices adopted. |
| **Lead Executing Agencies** | MENT and MOA |
| **Anticipated Budget** | GEF: US$ 795,154<br><br>Co-Financing: 34,091,778 |

*Output 1.1 Capacity of national and district level stakeholders to design, adopt, and implement strategic land use management planning enhanced.*

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104. Under this output, the project will emplace a learning program for national and district level agencies to enhance their capacity to design and implement a cohesive land use planning that targets SLM and SFM. The learning program will be composed of at least four formal training sessions of 2 – 3 days each. The learning programs will be led by experts with extensive and proven experience in fields inclusive of: land use planning, sustainable livestock management, conservation agriculture and reduction of human-

wildlife conflict. The learning program will engage each of the relevant national government ministries and associated agencies. The learning programs will also engage district level government officials from both of the targeted regions.

105. The learning program will emphasize the processes and requirements for the generation of legally enforceable land use planning. This will include best international principles and practices relevant to each of the identified degradation drivers, gender inclusive and community participatory planning exercises, and evidence-based decision-making. The project will complete a rapid institutional capacity assessment prior to the commencement of the training programs.. Prior to the commencement of the training programs a rapid assessment of existing institutional capacities will be completed. This will include an analysis and assessment of existing laws and policies; available data and information; and, monitoring and evaluation tools related to land degradation issues.

106. A full training and capacity enhancement strategy will be detailed during the project's inception period and presented at the inception workshop for stakeholder input. This will include an assessment of specific training needs, target stakeholders, and identification of proposed trainers. The project will specifically look towards harnessing existing expertise within FAO, including persons with global knowledge regarding land use planning, sustainable agriculture, sustainable livestock management, data collection, land rehabilitation, and SLM and SFM practices. The project in this way will be able to capture and benefit from the existing global knowledge base which will greatly accelerate completion and implementation.

107. At least four intensive and comprehensive learning programs of approximately 2-days each with initial follow-up activities will be implemented during the project's first year. Each training program should be designed to incrementally enhance and advance capacity with regards to strategic land use management design, adoption, implementation, and monitoring. These capacities must be built rapidly and efficiently to make certain the project benefits from a formally adopted, strategic land use plan to guide implementation. Follow-up training will occur during implementation years 2 – 3 according to a training program strategy to be developed during the project's implementation phase in order to transfer the knowledge into applied practice. These follow-up training programs will be in-service oriented and revolve around the design, implementation, monitoring and reporting of the on-going strategic land use planning process.

*Output 1.2 Land use management plans operational at both target sites and effectively addressing LDN, SLM and SFM issues.*

108. The project will support relevant government agencies at both the national and target region levels to design and formally adopt land use plans contributing to the implementation of the LDN targets. These plans will be directed towards creating the enabling environment required to shift production practices to climate smart production, SLM and SFM.

109. The project will provide technical assistance for this process. This will include engaging international expertise to assist relevant agencies to design and vet land use planning through a consultative process that fully engages relevant private, public, and CSO organizations. Again, this process will serve as a capacity building exercise to make certain private and government stakeholders have capacities required to generate and implement coherent and strategic planning approaches designed to identify and deliver SLM, SFM, and LDN targets.

110. For the Chobe District, the land and resource use management plan will build upon the current draft ILUP. For the Tutume District, the land and resource use management plan will integrate lessons learned from the Chobe ILUP. Each plan will be built upon and reflect the existing institutional and regulatory framework, including DLUPUs and the Town and Country Act.

111. Both finalized strategic land use management plans will specifically address and incorporate the following topics.

| Category | Description |
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| Objectives and Targets | The plans will specify the objectives and targets for land and resource management for each location. This will include incorporation of clear pathways for the achievement of LDN and other SLM and SFM objectives. Each objective will be accompanied by impact targets that provide government and private stakeholders with clear goal posts with regard to strategic processes required to achieve sustainable management targets. This framework will assist to guide the actions of government and private stakeholders, including provision of extension services, more coherent and coordinated approaches regarding the use and prioritization of financial resources and support services and agreed parameters regarding natural resource use. |
| Spatial Zoning | The plan will demarcate areas within the target regions based upon identified criteria. This will likely include livestock management areas, locations for community-based forest management practices, and sustainable agriculture development. This will include refinement of the LDN assessment and identification of issues such as land cover, land uses and productivity, soil carbon, climate change mitigation and resilience issues, quantification of livestock numbers, assessment of water use, tabulation of agriculture practices, identification of wildlife use and corridors, etc. |
| Best Practices | The plan will identify and propose best practices for each of the zones within the targeted areas designed to deliver LDN, SFM, and SLM targets. GEF resources will help identify and design incentive mechanisms for land-users to adopt best climate smart, SLM, and SFM practices Prioritization will be to cover primary degradation challenges, including fire, livestock, agriculture and forest use. The strategic land use plan will detail specific approaches and interventions that will be supported through project effort to address each of the driver. This will include actions to be taken by government, private, and CSO stakeholders. The process will involve engagement with local communities to more clearly define, beyond the results of PPG findings, precisely how best to make certain practices are adopted and enduring. In this way, the strategic land use plan will inform interventions to be funded under Component 2. In addition, the strategic land use plan will provide a concrete program to facilitate decision-makers to track, monitor, and report on the results of funded activities. This will offer decision-makers with a clear understanding of what investments and actions work best to reduce, prevent, and restore degradation, increase climate change resilience and mitigation, and improve livelihood standards. This approach will generate information and models that can then be sustained within each of the target areas and amplified through both Component 2 and Component 3 activities to increase sustainable production practices and reduce degradation at national and regional levels. |

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| Livestock Management | The plans will address and reverse current negative trends associated with livestock management. This will include specifically identifying current challenge and designing innovations to reduce issues associated with open access grazing. The plan will integrate tools such as establishment of carrying capacity numbers and permitting. The objective here will be to reduce the negative impacts of livestock management, limiting overall livestock numbers, and improving the health and value of livestock to local communities. |
| Agriculture Management | The plan will assist stakeholders to improve agriculture management and promote conservation oriented production. This will include identifying the primary degradation issues associated with agriculture management practices and integrating within the approved planning framework incentives to adopt sustainable alternatives. Part of this effort will include mapping and detailed assessment of production practices, productivity and profitability, and relationship with LDN, SFM, and SLM impacts. |
| Forest Use | The plans will identify and quantify forest degradation issues. The plans will then generate innovative approaches to reduce degradation while making certain that forests are able to provide community benefits and sustain globally significant biodiversity. |
| Fire Management | The plans will identify and quantify degradation issues stemming from wildfire. The plans will create and incorporate innovative approaches designed to reduce adverse impacts of current fire management practices. This will include strengthening capacities for fire monitoring, reduction, suppression, and controlled burn as appropriate, and building upon fire management planning examples such as those in Ngamiland, and working closely with the MENT Department of Fire Management. |
| Wildlife Conflict | The plan will address issues related to reduce human-wildlife conflict. Specifically, the plan will detail existing and known wildlife migration and use corridors. The plan will also consider issues related to habitat degradation and sustainable management necessary to reduce wildlife conflict. This will specifically include addressing over-stocking and other livestock management issues that currently acerbate competitive grazing and conflict. |

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| Inter-Sectoral Coordination | A key element of the plans will be to clarify and establish clear mechanisms to improve intersectoral coordination at both national and district levels. This will include clarification of mandates regarding plan development, implementation, financing, monitoring and data collection, reporting, community-engagement, and provision of services. In this way, the plans will serve to harmonize approaches to improve efficiency, effectiveness and value. The plans will also provide directions regarding integration and harmonization with various development plans, including at both the district and village levels. |
| Financial and Human Resources | The plans will specify responsibilities and costs regarding what inputs will be required to make certain the strategic plans are fully operational. This will include a detailing of costs to be covered under the baseline and recurrent costs and resources needed to make certain the plans remain operational and effective after project close. This will include the integration and involvement of the Ministry of Finance and Development to make certain national level allocations and funds (e.g., National Environment Fund, BAMP, ISPAAD, LIMID, DFRR, etc.) are aligned with strategic plan objectives. |
| Community Engagement | The plans will detail how target communities will be meaningfully in during generation, implementation, monitoring and review processes. This will likely include specific avenues for CBO, community leaders, and others to be incorporated within plan implementation guidelines and management. |
| Gender | Both plans will entail specific descriptions regarding issues related to gender. This will include identification of challenges faced by women with regards to SLM and SFM to achieve LDN. The plans' sections on gender will make certain that women have equitable access to decision-making and sustainable development benefits associated with and accruing from the finalized strategic land and resource management approaches. This will include gender specific indicators to be included within the finalized plan to assure that intended gender benefits are fully realized. |

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| Monitoring, data generation, enforcement and reporting | The plans will each incorporate clear targets to measure achievement of proposed objectives. The plans will detail how implementation will be monitored and which parties are responsible for monitoring. As needed, the project will develop additional monitoring capacity within the overall output. The plans will detail how often data will be collected and provide for specific reporting requirements. This should link with and inform Component 3 (knowledge management) activities. Monitoring should be informed by Component 2 (practice) activities with private stakeholders, extension services, etc. contributing information and data to inform plan monitoring and reporting efforts. Each plan will reflect adaptive management principles, making certain that the plan is regularly updated to reflect emerging issues and remains on-track to deliver LDN, SLM, and SFM objectives. Each plan will be legally enforceable according to the laws and policies of Botswana. This will include identification of enforcement responsibilities and penalties associated with failure to abide by plan directives. |

112. Strategic land use management plans will be completed and adopted prior to the close of Project Year 2. If the mid-term evaluation finds that these management plans are not formally adopted and operational, consideration should be given to suspending project activities. Adoption and operationalization of strategic land use planning is critical to project success and perhaps the primary barrier currently inhibiting SLM and SFM progress. Without formal adoption, the overall impact of GEF investment will be limited. The plans should be fully operational during subsequent project years. This will help to provide a foundation to guide project implementation and generate information required to report on project implementation effectiveness and impact. The plans will be adaptive and likely modified and improved during the project's final year to make certain experience and lessons learned are reflected.

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*Output 1.3 Strategic land use management plans rigorously monitored with reporting informing decision-making and adaptive management.*

113. The project will provide technical assistance to government and private stakeholders to implement and monitor the approved strategic land use management plan. This will include making certain that monitoring is rigorous and linked to the results frameworks of both the project and land use plan. A major emphasis will be to build the capacity of national and district level agencies to coordinate monitoring and reporting. Much of this will focus upon enhancing the ability of the following agencies under both the Ministry of Environment, Natural Resources, Conservation and Tourism (e.g., DWNP, DFRR, DEA) and Ministry of Agricultural Development and Food Security (DAA, DVS,

DCP, DAP, DAR, BAMB, etc.). The monitoring program should increase the level of cooperation and harmonization of these diverse agencies in order to better track impacts and inform decision-making.

114. The monitoring program will build upon existing tools and capacities while benefitting from best international principles and practices. Monitoring will link with FAO global capacities and tools for SLM, SFM, LDN, agriculture, forestry, fire, and livestock monitoring. Potential tools to be applied during the project include remote sensing, aerial surveys (e.g., the use of drones to monitoring livestock, forest, and agricultural practices), and ground truthing (e.g., tablet and GPS monitoring of soil and crop productivity, vegetation cover to determine levels of degradation, household surveys to determine livelihood and resilience changes, GPS monitoring of livestock to determine herd movements, and wildlife monitoring and human-wildlife conflict point identification). During the project's implementation period, reporting from monitoring effort will be gathered and collated with comprehensive reporting generated at least every six months. This will serve to inform decision-making as well as project reporting. Reporting and data collection will link with and be informed by Component 2 productive practice improvements. Reporting and data collection will link with and be uploaded through the project's Component 3 communications strategy.

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115. Importantly, implementation monitoring will be used to adapt the strategic land use management plan. This includes making certain that the land use management plan is updated with lessons learned incorporated prior to the project's last six months of operation.

116. A preliminary monitoring strategy will be completed during the project's inception period for implementation to make certain monitoring commences immediately to cover the project's initial years of operation. The strategy will capture existing monitoring tools that can be applied to support the project, assess monitoring gaps, and identify specific monitoring activities and assign responsibilities to associated agencies. The monitoring strategy will be supplemented and improved during Project Year 2 to be integrated within the approved land use management plan. Finally, the monitoring strategy will be again adapted and finalized during the project's final year to be certain that best practices are reflected and ensure that monitoring and reporting endure after project close.

**Component 2: Scaling up SLM and SFM best practices at the landscape level and with a transboundary focus to benefit people and ecosystems**

*Outcome 2:  Improved production practices adopted across the targeted sub-basins and delivering SLM and SFM benefits*

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| **Impact Indicators** | 72 extension officers leading on-going FFS programming designed to deliver SFM and SLM improvements that contribute to achievement of LDN targets.<br><br>7,350 private sector farmers, ranchers and NTFP users enrolled in FFS and reporting positive production trends as a result of adopting SLM/SFM practices<br><br>157,500 head of livestock managed as described in adopted land use plans and actively monitored for delivery of SLM/SFM and production improvements<br><br>40,400 hectares of agricultural lands managed as described in adopted land use plans and actively monitored for delivery of SLM/SFM and production improvements<br><br>162,000 hectares of forest – including forest reserves - managed as described in adopted land use plans and actively monitored for delivery of SLM/SFM improvements<br><br>20,000 ha of land rehabilitated through FFS training and implementation activities |

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| **Assumptions** | Capacity enhanced efficiently and effectively by project<br><br>Strong government and stakeholder engagement<br><br>Improved practices adopted. |
| **Lead Executing Agency** | MENT and MOA |
| **Anticipated Budget** | GEF: US$ 3,111,729<br><br>Co-Financing: US$ 33,528,831 |

*Output 2.1 Capacity of extension services to deliver sustainable production options strengthened through effective Farmer Field School Program*

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117. Existing extension services capacity within the MoA and MENT are and not well financed. They are not harmonized to generate synergetic responses and impact. The level of knowledge and awareness by extension officers with regards to best international principles and practices are low. There is not a formal Farmer Field School program

emplaced to effectively build the private sector's capacity to identify and adopt production practices supportive of LDN, SLM, and SFM objectives. This is particularly needed at both target locations since agriculture, livestock, and forest use practices are the primary drivers of Mopane-Miombo ecosystem degradation.

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118. The project will address gaps in extension services as described in the baseline by providing the technical and catalytic investment required to create and launch an effective FFS program supported by technically capable and well-aligned extension services.

119. The project will support the identification and facilitate the filling of human, financial and equipment resource gaps in the state-run extension services. During the project's first six months of operation, the project will draft a comprehensive strategy for extension services. The purpose of this strategy will be to identify capacity gaps, identify specific approaches required to fill those gaps, and detail project actions that will be taken to fill those gaps. This strategy and associated project investments will cover at least each of the following criteria. The strategy will lay out the project's approach for the entire project period. The strategy will provide specific benchmarks for achievement that will be monitored and reported upon through PIRs, mid-term reviews, and final evaluations.

· Human Resources: There is a need to increase the number of extension officers dedicated to each of the project sites. The project will assist the Government of Botswana to identify these human resource needs and to recruit additional extension officers, including women, for both locations. Funding for extension officers will be provided by the Government of Botswana.

· Equipment Resources: The project will assist with identification and costing of equipment needed. These initial costs will be shared between the Government of Botswana and the project. Costs will be detailed in the project budget and specified during inception.

· Financial Resources: The project will assist the Government of Botswana to identify short and long-term funding needs. This includes methods to redirect and consolidate existing financial programs so that these programs are directed towards assisting stakeholders to adopt practices that support the achievement of LDN, SLM, and SFM objectives

as detailed within Component 1's strategic land use management plan. Examples of targeted programs will include: ISPAAD, LIMID, Community Nurseries Program, Poverty Eradication Program, National Environment Fund, Conservation Trust Fund, etc.

· Mandate: The project will assist relevant government agencies at both the national and district level to improve the professional capacity of extension services. The project will assist the MoA, MENT and relevant District Authorities to clarify the roles and responsibilities of extension officers. This will include updating training requirements to cover climate smart agriculture, degraded land restoration, and sustainable land and forest management, job descriptions, and job evaluation procedures.

· Training: The project will design and implement a training program for extension officers that targets building their capacity to assist private producers to effectively identify and implement production practices designed to deliver SLM, SFM and LDN benefits. The comprehensive extension services capacity enhancement strategy will incorporate a detailed training program within the first 6 months of the project.

120. The project's approach will be to make certain capacity exists to implement an effective Farmer Field School Program. The program will integrate best available international principles and practices related to SFM, SLM, and LDN. The strategy will build upon FAO's global practice and decades of experience with FFS. In parallel with the strategy for extension services training, the project will generate a detailed strategy for the development and implementation of the FFS program. Again, this strategy will be completed and approved by the project's management team (Steering Committee, LTO, and FLO) within the project's first six months of operation.

121. Implementation of the FFS program will serve as a mechanism to further build the capacity of both the MENT and MOA to effectively deliver extension support. In this way, the FFS program will benefit from the project's on-going technical assistance so that extension officers gain "in-service" training experience under the guidance of relevant global expertise. The FFS program will draw upon and integrate resources from the existing Botswana baseline. This includes incorporation of experts and students associated with agricultural universities and government agencies such as the Department of Agricultural Research and the Department of Forestry and Range Resources.

122. The FFS program will have a specific section dedicated to issues of gender. This includes the creation of female cohorts who will be engaged in separate FFS training that focuses upon the unique needs of women and enhances their capacity to effectively engage in decision-making and benefit from sustainable production practices in both target areas.

123. The FFS program will be designed to assist community members to shift towards agriculture, livestock, and forestry management practices that are sustainable and work toward achievement of LDN, SFM, and SLM targets. The project supported FFS program will be fully operational within the project's first 18 months. This will include establishment of FFS programs in both project areas. The FFS program will serve as a platform to assist with community engagement during the design, implementation, and monitoring of Component 1's strategic land use plan. The FFS will facilitate the uploading of training materials to a centralized data-base associated with Component 3's communication strategy.

*Output 2.2 Private producers implement sustainable production practices that deliver SLM, SFM and LDN benefits.*

124. Role of Planning and FFS: The project will provide the technical and limited financial support required for private producers at both target locations to adopt sustainable practices. These practices will be informed by two primary project activities. First, practices will comply with and support the realization of SFM, LDN, and SLM benefits and objectives as described in the strategic land use plan. Secondly, sustainable practices will be further defined and refined through the FFS program. This will include identification of best practices based upon global, regional and national experience. The land use plan will provide the parameters for sustainable production. The FFS will provide the technical knowledge and experience required to adopt improved practices.

125. Producer Groups: The project will support in mapping of existing forest farm producer organizations (FFPOs) that are already engaged in value chains in close alignment with Output 2.1. Where applicable the project will provide training in the steps necessary to formalise and/or strengthen producer groups with management structures, roles, business planning, responsibilities and negotiated by-laws and benefit distribution mechanisms, such as forest business risk self-assessment training, climate resilience and risk trainings.

126. Government Financing: A critical barrier to the adoption of sustainable practices is access to financing. As noted, Botswana has several programs designed to assist rural producers. However, these financing conduits are not well-informed and/or aligned towards a common SLM, SFM, and LDN targets. The land use management strategy will help to align on-going funding mechanisms, such as ISPAAD and the Government's Poverty Reduction Program. The FFS will be designed to facilitate use of financial resources from this program to make certain farmers and ranchers have access to capital and inputs required to adopt sustainable practices.

127. Markets and Value Chains: Each of the FFS programs will be designed to assist producers to better access and develop product markets. This includes market access for sustainable veld products, livestock, and agricultural products. The project through the FFS program and FFPOs approach will assist producers to generate strong business plans and cases for the development and investment in sustainable practices. This includes the identification of markets, marketing plans, and detailed budget analysis to make certain adopted practices remain profitable.

128. Linkage to Land Use Planning: A major part of this effort will be making certain practices conform with and support achievement of LDN, SFM and SLM objectives detailed within the strategic land use plan. This will include monitoring of results from community members who adopt sustainable practices to make certain these practices are meaningfully catalysing positive changes.

129. Sustainable Practices: As noted, the project will support the identification of sustainable practices. Included below is a table of potential practice shifts that will be supported through the project's technical inputs. This will include reference to and integration of a wide variety of global knowledge and practice tools designed to support community uptake of sustainable forestry, agriculture and rangeland management practices.

130. Land Restoration: A major emphasis of action under this output will be to restore ecosystem functionality as a contribution to GEF Core Indicator 3 (Area of land restored). Land restoration priorities and practices will be fully identified in the land use planning process and finely tuned and applied through this output's capacity enhancement activities. Through the FFS and associated production improvement schemes, the project will work with producers and government agencies (e.g., DWNP, DFRR, etc.) to apply principles and practices to show specifically how currently highly degraded agriculture, forest, and grazing lands can be restored to full ecosystem functionality. The project does not foresee the need to actively engage in forest planting. Rather, restoration tools will emphasize the adoption of practices designed to reduce the intensity of production and natural resource use to encourage natural regeneration and restoration. This may include: holistic rangeland management utilizing more engaged and strategic rest-

rotation practices and potential limited application of ex-closures and/or the application of agroecology practices to increase “on farm” diversity and restoration of pollinators. Restoration areas will be prioritized based upon the location’s potential to contribute to biodiversity conservation objectives, including areas of critical migration and/or seasonal habitat needs. This may include habitats such as pans and other seasonal wetlands. Restoration will be designed to limit incidences of human-wildlife conflict. The project will link restoration actions with higher level monitoring, particularly for biodiversity, inclusive of establishing baseline and monitoring studies for avian, terrestrial, and plant diversity linked to restoration actions.

| Practice | Description |
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| Rangeland management | The project will work the land use management process and FFS program to assist communities to shift from “open-access” livestock management to community-based livestock management. Part of this work will be to assist communities to maximize returns from livestock management while minimizing environmental impacts.<br><br>Support improved rangeland management through the strengthening of small livestock associations, promoting on-farm husbandry of small livestock, and the construction of predator-proof biomass and kraals |
| Conservation Agriculture | Crop rotation and inter-cropping with nitrogen-fixing legumes, crop diversification to enable harvesting throughout the year, mulching, production and use of organic compost, integrated pest management, terracing on slopes, and crop-livestock integration systems |

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| Seed Varieties and Storage | The project will support communities again through the FFS program to identify and use seed varieties better suited for local conditions. This will include programs for the community to share resources for seed management and storage.<br><br>Community Seed Banks (CSBs) jointly managed by a community group, association or cooperative in Tutume-Mosetse sub-basin following the step-by-step guide/manual that was developed by FAO and the Treaty of Genetic Resources during the PPG phase, and in collaboration with the ISPAAD programme |
| Business Planning | As noted, the project will assist community members through the FFS and the FFPOs program to improve their business planning acumen. This will be particularly important for women cohorts and others who often fail to maximize profitability due to low market access.<br><br>Develop the eligibility criteria for community groups or CBOs to be supported in the development of business plans (both on tourism development and Value Chains development)<br><br>Provide training on bankable business plan development and support selected groups in finalizing the plans (with focus on women entrepreneurs). |
| Community Gardens | Botswana does not have an operational example of a community garden. This practice has shown to be very effective as a tool for SLM, SFM, and LDN benefits while addressing climate change resilience and food security issues.<br><br>FAO has strong global experience with the development and implementation of community gardening programming. |

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| Sustainable Fuelwood Management | Review the socio-cultural-economic elements around the use of wood fuel in the targeted villages and if people are facing difficulties in harvesting wood and the changes they would be willing to do that would reduce the pressure on forests |
| Financial Management | Provide required training to CBOs and community groups such as training in entrepreneurship, financial management (look at reviving the saving clubs), formalisation of their association if not yet official, and training in administrative management |
| Forest Rehabilitation | Implement land rehabilitation measures through assisted natural regeneration for soil stabilization (tree planting will also be considered at a small scale where required) in Tutume-Mosetse sub-basin over 1000 ha of natural forests and 200 ha of gullies<br><br>Strengthen the network of tree nurseries in collaboration with DFRR to increase the production of agroforestry tree seedlings as well as forest species in support of SLM and SFM interventions |
| Agro-Forestry | Restoring and enhancing the agricultural land productivity based on tree-crop- livestock agroforestry systems. Farmers will be trained to efficiently manage their agricultural technologies (smart –CC technologies), on multi-purpose tree planting and manage the natural regeneration, promoting neglected and underutilized varieties and crop species, improving the utilization of the drought resistant crops.<br><br>Agroforestry practices at the farm level can be incentivized, particularly for fuelwood and production of timber for construction material. |

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| Fire Management | This work aims at implementing efficient measures for the reduction and modification of forest fire risk through adopting an informed decision-making approach. More specifically, the project will focus on reducing the risk of forest fires by addressing fire hazard and vulnerability and developing associated recommendations as part of integrated fire management plans. Overall, the work should involve building on existing fire-related resources to respond to local fire management needs. |
| Rainwater Harvesting | Rainwater harvesting is the collection of surface runoff for productive purposes. Instead of runoff being left to cause erosion, it is harvested and utilized. This can be done through installation of water tanks or construction of small dams to collect rainwater from rooftops or surface runoff. Water harvesting strengthens livestock production. It allows rearing of different livestock species and crops, expanding the sources of income and food security. |

**Component 3: Effective knowledge management, monitoring, and linkages with other Miombo and Mopane countries under the SFM DSL IP**

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| *Outcome 3: Monitoring, evaluation and knowledge management effectively inform decision-making and amplify LDN, SLM and SFM practices.* |

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| **Impact Indicators** | 1,500 monthly users of publicly accessible web-based national LDN platform hosting information on SLM/SFM/LDN operational and reporting on progress towards LDN targets including three LDN indicators: land cover, land productivity (net primary productivity) and carbon stocks (soil organic carbon).<br><br>100 % of LDN indicators as defined under the national LDN framework incorporated into environment, agriculture and forestry sector development plans<br><br>2 land use management plans applying participatory landscape-level LDN monitoring with LDN indicators formally adopted by district level governments with implementation financed by national government.<br><br>12 project knowledge products developed annually and accessible through:<br><br>(a) National (LDN) platform<br><br>(b) Regional and global platforms<br><br>10 Project knowledge products (policy briefs, guidelines, best practice recommendations, etc) referenced/cited in national LDN-related policy and planning forums and decision documents and by stakeholder publications (including government and private sector, CSO/NGO community)<br><br>1 government-level policy related agreements (e.g. joint declarations) designed to facilitate common action on SLM/SFM and LDN across the Miombo-Mopane ecoregion<br><br>3 new or improved transboundary/ regional or global business initiatives (e.g. public-private partnerships, agreements, contracts), focusing on SLM/SFM value chains developed |

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| **Assumptions** | Capacity enhanced efficiently and effectively by project<br><br>Strong government and stakeholder engagement<br><br>Improved practices adopted |
| **Lead Executing Agency** | MENT and MOA |
| **Anticipated Budget** | GEF: US$ 1,180,154<br><br>Co-Financing: US$ 10,715,321 |

*Output 3.1 National and District LDN assessment, monitoring and reporting systems and tools, including LDN knowledge platform, developed and operational, with relevant reporting to global level*

131. Harmonized Information Management: The project will support the development of a centralized, publicly available national database system hosting LDN-related information to enhance the efficient and timely sharing (and reporting) of information between relevant sectors and agencies at both national and sub-national levels, as well as to

regional and global levels. This works will assist adoption of effective SLM and SFM practices across sectors and scales to address degradation drivers in the Miombo-Mopane system and enable transformational change towards the sustainable management of the landscape. The strengthened national knowledge management framework will help to better inform decision-making and scale out successful SLM/SFM and LDN practices to other Miombo-Mopane areas within the country.

132. Key activities under this output will include:

- § Review current national LDN indicators, assessment and monitoring systems, and tools and their utility at national and sub-national (provincial, district, municipality, community/village) levels and identify improvements/standardisation where required, based on LDN core indicators (land cover, land productivity (net primary productivity) and carbon stocks (soil organic carbon), with support for the harmonization of the methods used to calculate them
- § Develop, establish and operationalise a participatory landscape level LDN assessment, monitoring and reporting system, using a participatory methodological approach validated with local communities.
- § Support a digital knowledge platform and focal node for storage, management and analysis of LD and LDN-related data, practices and lessons learned to provide accurate and timely information to inform decision-making, focused on national and sub-national level data but also linking to other relevant regional and global databases (e.g. SADC, the AFR100 countries, TRI).
- § Establish a specific ‘dashboard’ within the LDN knowledge platform targeted at government decision-makers to facilitate ease of reporting under international requirements.
- § Where necessary update existing spatial planning/GIS-based systems/facilities to provide robust data and information management capacity to support the knowledge platform, and link with relevant international and regional databases and tools that can support national spatial analyses of land degradation, such as Trends.Earth[39][39].
- § Operationalize nationally the LDN Framework as a decision-support system to guide LD and SLM/SFM assessment, monitoring and decision-making, including further development and promotion of the use of the ‘avoid, reduce, reverse’ concept (no net loss of land-based natural capital) employed in the integrated land management process.

§ Develop and operationalize a plan for the sustainability (financial, institutional and human capacity) of the LDN monitoring and reporting system at least one year prior to project close. The project will provide the assistance required for the Government to develop a strategy to ensure that project capacity building efforts endure beyond the life of the project.

133. Project Component Linkages: The project will support monitoring and evaluation under both Component 1 (planning) and Component 2 (practice) activities. Under Component 3, the data gathering, monitoring, and evaluation elements of the project will be consolidated to provide decision-makers at both the District and National levels with access to accurate and timely information required to inform decision-making. The project will design and implement a data gathering and information strategy within six months of inception. This strategy will address challenges such as the current "siloed" approaches used for data collection and information management, assisting to harmonize on-going efforts by complex array of engaged government institutions. This will be linked to project efforts under both Components 1 and 2 focused initially upon the project's target Mopane-Miombo ecoregions. However, by project close, information gathering and management protocols will be scaled-up to cover the entirety of Botswana's Mopane-Miombo ecoregion to facilitate much more effective and efficient availability of knowledge to inform decision-making.

134. DSL Program Linkages: The LDN digital knowledge platform will be informed by the experience and lessons emerging from similar platform development being undertaken by other DSL IP child projects, as well as experiences from other relevant national, regional and global platforms and information sources of relevance to SFM, SLM and LDN objectives, e.g., WOCAT, CAADP and DRIP. It is expected that the knowledge platform/CHM will be linked with, and consolidate information from, these other information sources, as well as being open to other experiences from SADC, AFR100 countries, and elsewhere. The effectiveness of the platform will be regularly monitored through usage tracking and interviews with target stakeholders to ensure it is addressing their needs and leading to tangible improvements in good practice.

135. LDN Working Group: As noted under the baseline, Botswana relies upon "working groups" composed of intersectoral agencies to help inform national level planning and budgeting. The project will assist the Government to enhance the LDN Working Group as part of the project's efforts to assist build capacity for national level decision-making that is directed toward achievement of LDN objectives. This LDN Working Group will meet at least once every six months throughout the project period. Part of the LDNs mandate will be to uptake data and information generated in part through the project and assist with making certain this information is informing national and district level decision-making. The GCP will develop and implement a system for collecting, documenting and managing knowledge generated by child projects. For example, the online interactive tool called Dryland Resilience Initiatives Platform (DRIP), which will help to improve the monitoring of the different dryland transformational projects, while giving the possibility to associate it with the LDN monitoring. Thus, DRIP will subsequently facilitate program development, operational project planning and prioritization of actions

and activities aimed at contributing to LDN objectives at the country level. The tool will be aligned with the ongoing UNCCD activities on LDN tools development such as Tools4LDN, GEO LDN initiative and Trends.Earth. A primary result of this effort should be an increased reflection of LDN needs, lessons learned, and best practices integrated within national and district level planning and financing and strengthen the role of the LDN Working Group in monitoring the country's initiatives on LDN.

136. Cloud Computing: This will combine remote sensing and Machine Learning through SEPAL platform for Land Degradation mapping and land restoration activities. SEPAL is a multi-functional platform, combining modern geospatial data infrastructures (e.g. Google Earth Engine) with powerful open-source data processing software (e.g. R, ORFEO, GDAL) and available in a supercomputing environment immediately accessible to users anywhere in the word. It was originally developed for monitoring forest carbon stock and stock changes for reducing emissions from deforestation and forest degradation (REDD+). Considering the large and increasing interests from different stakeholders on using cloud based image processing tools, remote sensing and machine learning, the platform has gained much attention from users across sectors. At current status, users work on SEPAL for various applications related to land monitoring, land cover/use, land productivity, ecological zoning, ecosystem restoration monitoring, peatland rewetting status, flood mapping, mapping impact of disasters and many others.

137. Remote Sensing: Field monitoring data will be complemented by remote sensing data collected at national level. This will be facilitated by FAO through capacity development of both MOA and MENT using a variety of relevant tools, including Trends.Earth or other GIS-based systems that combine high-resolution imagery with a cloud-based architecture and user-friendly interface for monitoring. The DSL-IP Regional Exchange Mechanism (REM) will assist the PMU and the LDN WG to establish a remote sensing data collection system where needed.

138. In the context of LDN, considering that land cover is an essential geospatial information for mapping land degradation and monitoring restoration, SEPAL enables the production of land cover dataset, using international standard for the sub-indicator on land cover (ISO 19144-2:2012), through a friendly user platform using optical and radar satellite imagery and integration field data for model calibration. Accessible user interfaces and documentation have been developed to guide users through the process of data generation using satellite imagery through SEPAL. Utilizing freely-available satellite imagery, users can create custom analysis-ready datasets for image classification for customized time-periods. Object based classification and machine learning classification algorithms are integrated into the platform, allowing user to access sophisticated methodology to accurately map land cover and land cover changes. Using maps of forest area, forest fragmentation analysis and statistics can be generated to indicate forest degradation and impact on ecosystem functions and biodiversity. Finally, tools for accuracy assessment and area estimation are built into the platform linking to visual interpretation tools, Collect Earth and Collect Earth Online, where high and very high resolution imagery can be used to assess and derive statistical estimates from the map

products. SEPAL platform can provide support in monitoring the proportion of land that is degraded over total land area (SDG 15.3) as well as sub-indicators used for LDN and SDG reporting such as Trends in Land Cover, Land Productivity and Carbon Stocks and other national indicators and sub-indicators.

*Output 3.2 Capacity development program for improving assessment, monitoring and analysis among key stakeholders at national and sub-national levels to support national LDN reporting designed and delivered*

139. Monitoring and Assessment Capacity: The project will build knowledge and skills of key stakeholder groups, from national to community level to be able to effectively assess and monitor LDN. It will include technical training and provision of equipment/tools to local government officers and local volunteers for monitoring of land use/land degradation, biodiversity and other relevant indicators to support delivery of and strengthen decision-making with regards to activities and emplaced improvements under each of the project's components.

140. Key activities under this output will include:

- Develop training modules for key stakeholder groups on LDN assessment and monitoring and use of LDN-related indicators at landscape, national and international levels, including use of global monitoring tools designed to support LDN assessment, including building capacities to identify, assess, monitor and report on land degradation trends and degradation hot spots (potential tools to consider include Open Foris Collect, Collect Earth, SEPAL, and Earth Map)
- Support the Landscape Management Committees (LMCs), in the target areas to develop Landscape Monitoring Action Plans (LMAPs) and oversee piloting the use of LDN indicators defined under the national LDN framework.

141. Target Beneficiaries: Groups targeted for training under this output include: national and sub-national government staff, the LMCs, extension services, representatives of involved FFS, and other relevant civil society groups.

142. Training Programs: Training will include: definition of LDN indicators (including the three LDN indicators: land cover, land productivity (net primary productivity) and carbon stocks (soil organic carbon); LDN baseline mapping; data quality standards and specifications; methodologies and tools for estimating and measuring LDN indicators; mechanisms for validation on the ground; and data analytics. Training will follow a 'training of trainers' approach so that capacity building can be multiplied up (this approach is being applied generally across the project). The REM will support the PMU in the organization of training workshops.

143. Government staff at the national and district levels representing both the MoA and MENT will participate in training covering global monitoring tools designed to support LDN assessment (i.e. Open Foris Collect, Collect Earth, SEPAL[40][40], Earth Map, and Trends.Earth). This will include building capacities to identify and monitor land degradation trends, hot spots and degradation. This may include updating current GIS capacities to make certain facilities are able to provide strong data and information management, particularly linked to establishment and achievement of land use planning objectives linked to LDN, SLM, and SFM targets. Trained staff will then be responsible for making certain the knowledge platform is maintained with regular data and information updates provided. The project will provide the technical assistance required for the Government to identify, mandate, equip and fund required positions to ensure that project emplaced advances endure.

*Output 3.3 Project knowledge management, communication and dissemination framework and strategy developed and implemented*

144. Knowledge Management and Communications Strategy: The project will support the documentation and dissemination of knowledge on SLM/SFM and LDN approaches, tools, lessons learned and best practices. Project knowledge management, communications and outreach activities will be guided by a Knowledge Management and Communications Strategy (KMCS), supported by a project web-based knowledge management portal and innovative information-sharing program. The KMCS will make certain that all project knowledge, communication and awareness-raising activities are tailored to the target audience and consider the information needs and ambitions of women and minority groups.

145. To highlight the importance of documenting change management approaches and innovative solutions, and to help show results and impact, FAO's South-South and Triangular Cooperation Division and its partners are documenting the baseline status of the targeted landscapes in every country, using a participatory video approach. This interactive, dynamic and powerful monitoring tool includes local communities and different stakeholders. Moreover, it provides a wholesome view of the project's progress at every stage, including changes within the local community, the local governments and other stakeholders that may occur throughout the lifetime of the project. Through this in-depth observation, the initiative aims to point out what impact these changes may have on dryland management and degradation. Once the baseline is established, each country will continue this monitoring process until best practices are identified and each project reaches its completion. The final product will then be translated and disseminated among the 11 countries involved, cross-pollinating and sharing the identified best practices, the supporting knowledge and the lessons learned. The dissemination will occur through various international and regional mechanisms by leveraging on the convening power of the Working Group on Dryland Forests and Agrosilvopastoral Systems. In the long term, this participatory approach will feed into a digital library containing an array of different contexts and paths, serving as a pragmatic learning platform for contributing partners and members achieving the objective of making every voice count for adaptive management, at every level.

146. DSL Program and GEF Linkages: The project's KMCS will be informed by and closely aligned/integrated with that developed at the program level, as well as harmonized with those of the other Miombo/Mopane child projects (with support of the REM). This will facilitate the sharing of evidence-based good practices between countries and across the program. The KMCS activities will be aligned with the GEF communication and visibility policy and FAO's corporate communication strategy.

147. Communications Specialist: A Knowledge Management and Communications specialist will be employed as part of the PMU, and working with other relevant specialists, such as journalists, to identify and create targeted products including. 'success stories' for the media).

Key activities under this output:

- Develop and implement a gender-sensitive KMCS (based upon an updated gender analysis to identify project-specific gender gaps/issues/constraints in relation to KMC and activities to address them) and associated financing plan to guide all project knowledge management, communication and outreach activities, with tailored knowledge management and communications plans for individual target landscapes and their respective districts/communities.

- Develop project communication materials, activities and events (including a final workshop) to inform multiple stakeholder audiences (from national to community levels) about project aims, progress and results, using the most appropriate means for the target audience, with a web-based platform for hosting and disseminating project-related communication materials, lessons learned and best practices from the project and wider DSL IP network.

- Synthesise all new project-generated knowledge acquired about SLM/SFM and LDN in Miombo-Mopane landscapes and publish relevant results in academic journals.

- Develop a framework/process for a two-way transfer of project information between the national and landscape/community levels. At the landscape level, it is likely that the LMCs, FFS and FFPOs and agriculture and forestry extension services will facilitate dissemination and outreach activities to stakeholders in each target landscape, but also feed results and experiences back into the knowledge management structure at the national level (through the PMU).

- With support from the REM, develop a framework/process for a two-way transfer of information between the project and GCP, with key project reports, studies, experiences and lessons learned, 'best practice' documents, and other relevant material on SLM/SFM/LDN fed to regional and global databases/knowledge platforms while recent scientific knowledge and information on global evidence-based good practices flowing through the REM to the project and its country stakeholders.

- Design and deliver a training module on communication and outreach to develop the capacity of the Project Management Unit and key stakeholders to design and deliver effective social-media content.

- Participate in relevant Communities of Practice to exchange project knowledge and learning and sharing results with project stakeholders.

- Participate in regional and global events of relevance for knowledge management in coordination with the GC

148. Innovative Marketing: The KMCS will set out a systematic knowledge management process to capture and communicate project results, impacts, lessons learned and best practices, addressing the needs of practitioners, decision-makers and local stakeholders, making use of both traditional and new communication media and networks. Project communication materials (culturally appropriate and in relevant languages) will include various digital and printed knowledge products (e.g. publications, leaflets, journal articles, booklets, case studies, best practice documents, presentations and audio-visual materials), as well as social media content and a quarterly electronic project newsletter. Communication events with stakeholders may include information days, on-farm demonstrations, local fairs, and radio programs, as well as national-level workshops and conferences. TV and radio stations will be key partners in the dissemination of news about the project. Outreach will include innovative tools such as smart-phone applications designed to engage and inform stakeholders at multiple levels (e.g. easily accessible to farmers and rural private producers), based upon best international practices.

149. Private Producer Targeted Marketing: The project's KMCS will support the generation and implementation of a communication strategy designed to target private producers associated with Mopane-Miombo ecoregions. The strategy will initially focus upon the project's two target sites. By project close, however, the communications tools identified for implementation will effectively provide information to private stakeholders across the Mopane-Miombo ecoregion. Again, the KMCS will include gender specific approaches to make certain women are engaged and empowered. The strategy will focus upon getting information into the hands of private producers to assist them to make sound decisions regarding the adoption of best SLM, SFM, and LDN practices. Again, this will include the use and application of innovative programming linked to smart-phone applications. The communications strategy will rely in part upon videos and other formats that are easily accessible to rural private producers. This may be based upon best international practices such as the farmer channels and Tanzania's "Mama Shujaa Chakula" (Female Food Heroes).

150. Government Decision-Maker Targeted Marketing: The project will initially sponsor the generation of a monthly electronic newsletter to be distributed to all relevant national and district level government agencies to be absorbed and implemented jointly by MENT and MoA by project close. The purpose of this newsletter will be to provide these agencies and associated staff with relevant updates regarding project progress and activity. Part of this effort will involve providing information regarding project progress towards the achievement of intended LDN, SFM, and SLM impacts. This will provide an impetus for stakeholders to make continual progress and offer greater transparency and awareness across a larger audience. In addition, this will serve to incentivize the regular gathering and tabulation of data.

151. Knowledge Platform/Website (Part 1: Private Sector): The project will support the creation of an electronic knowledge platform (website) that targets private producers. This will include information related to project developed curriculum and results flowing from Component 2 activities. In this way, the platform will serve as a tool that can be used by extension officers and other stakeholders to help build private practice awareness and adoption of sustainable practices. The platform will also integrate and reflect implementation progress towards Component 1's land use plan. The goal will be to engage stakeholders to be able to track and take pride in progress made towards specific indicators. The platform will provide producers with information regarding best practices. This will include information regarding value-chains and markets designed to incentivize adoption of sustainable practices. The knowledge platform will be presented in both English and Tswana. The effectiveness of the platform will be measured in part by usage tracking and interviews with target stakeholders to make certain the platform is addressing their needs and leading to tangible practice improvements.

152. Knowledge Platform/Website (Part 2: Government Sector): The project will create a specific dashboard within the knowledge platform that is targeted towards government decision-makers. This will include information related to best practices, monitoring of SLM, LDN and SFM indicators, project updates, and other relevant information. The dashboard will draw upon and help to consolidate information currently available from existing knowledge platforms but not generally designed to target

specific SFM, SLM and LDN objectives. This dashboard will serve to assist with the integration of knowledge and experience across relevant agencies, including those responsible for tribal lands, wildlife, livestock, veterinary services, crop production, land use planning, and livestock and rangeland management. The government dashboard will be designed and launched prior to the close of the Project Year One. It is envisioned that this dashboard will grow in sophistication throughout the project period and will be ready for complete hand-over to the Government by project close.

153. Annual Reporting Workshop: The project will organize an annual reporting workshop for government stakeholders, donor agencies, CSO's and other interested parties. This workshop will be a one-day event, providing an opportunity for project staff and concerned stakeholders to gather to learn about project progress and exchange ideas regarding emerging SLM, LDN, and SFM progress. Participants from established FFS programs will be invited to the annual workshop to provide presentations regarding project progress and impacts. The workshop will also engage participants responsible for the management and implementation of the DSL program and associated DSL IP Child Projects from the region.

154. Effective Marketing Analysis and Monitoring Tools: The KMCS will incorporate specific monitoring tools to ensure that key audiences are reached and engaged and can contribute and that the project is effectively communicating key messages and results. This will include tracking of items such as attendees, users, downloads, subscriptions, followers, and other tools that help to indicate that information is reaching, engaging and informing intended target audiences. As much as possible, this data will be disaggregated to make certain marketing is adequately reaching and engaging female audiences. Data generated will be used to help prioritize and improve the effective development and delivery of knowledge products.

*Output 3.4 Project M&E framework, supporting lesson learning and guiding adaptive management, developed and operational from national through to community levels*

155. M&E Framework: The project will develop and implement a detailed M&E framework inclusive of the Mid-Term Review (MTR) and Terminal Evaluation (TE) to support an adaptive, results-based management approach to improve the efficiency and effectiveness of project implementation and delivery of project results and impacts. The project M&E framework will be consistent with the overall M&E framework and learning program. The project's M&E framework will generate and systematically document lessons learned that will contribute to the knowledge base on SLM/SFM approaches and practices and means to achieve LDN targets.

156. Key activities under this output will include:

- Further development and implementation of the project M&E strategy with the role of each project stakeholder group/institution involved in project-related monitoring, evaluation and reporting agreed in a participatory manner, and, where needed, training and guidelines provided on the implementation of the M&E strategy.
- Support development of community-level participatory monitoring of project activities, with training in M&E methods as needed.
- Review and revise the project objective and outcome-level indicators and their associated baseline and targets during the project inception period (first 3 months of implementation) to ensure that indicators are SMART[41][41], baseline data complete and targets realistic, particularly with respect to any prevailing COVID-19 limitations on the project at the start of implementation.
- Develop a set of performance/process indicators to measure delivery and achievement of project activities and outputs (FAO FPMIS requirement) and incorporate a set of global platform indicators during first 3 months of implementation).
- Establish a framework and methodology for the identification and capture of best practices[42][42] and lessons learned from the project and disseminate the results through implementation of the KMCS.
- Undertake an MTR no later than project month 30 and a TE at least two months prior to close, disseminate results and deliver their respective management responses.
- Organise annual 1-day project retreats for PMU staff and key stakeholders to provide an opportunity to reflect on project management, operation and delivery, and identify practical solutions to resolve issues and overcome barriers hindering project performance to support adaptive management.
- Feed results and recommendations from project M&E activities into project Knowledge Management framework as appropriate.

157. M&E Specialist: The project will hire an M&E specialist within six months of project start. This person will work throughout the project implementation period to: (i) develop and oversee delivery of the M&E system; (ii) collect and collate information on progress in meeting targets and evaluate results; and (iii) lead on the identification of project best practices and lessons learned and the systematization of experiences, and the preparation of FAO and GEF monitoring reports.

158. Expert Inputs: The project's suite of experts will be expected to contribute to M&E processes, including the gathering of baseline information and elaboration of the initial values of the GEF Core Indicators and selected LDN indicators once demarcation of the target areas is finalised.

159. Mid-Term Review: The MTR is considered particularly crucial, providing a vital opportunity for reviewing progress, identifying successes, shortfall, bottlenecks and any needs for re-alignment through adaptive management. Consultants will be retained and scheduled to conduct the mid-term review at least five months in advance of the anticipated mid-term review activities.

160. Terminal Evaluation: Lessons learnt and recommendations produced by the Terminal Evaluation will inform discussions on sustainability/durability of project results and impacts and future replication and scaling up initiatives. Consultants will be retained and scheduled to conduct the terminal evaluation at least five months in advance of the anticipated review activities.

161. DSL Program Harmonization: M&E tools used by the individual child projects will be harmonised as much as possible to facilitate program-level reporting and monitoring, knowledge sharing, and good practices identified and their successes highlighted. This will include agreement and harmonization on the use of common indicators for LDN assessment and monitoring.

162. GEF Core Indicators: The project is aligned with DSL IP objectives at regional and global levels and includes several relevant GEF-7 Core Indicators, inclusive of 3 (area of land restored); 4 (area of landscapes under improved practices); 6 (Greenhouse Gas Emissions Mitigated); and 11 (number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment).

163. UNCCD Indicators: The project will track contributions to the minimum set of UNCCD LDN indicators – land cover/land cover change, land productivity (metric: net primary productivity), and carbon stocks above and below ground (metric: soil organic carbon) and SDG 15.3.1 – proportion of land that is degraded over total land area.

164. National LDN Assessment: Project M&E will also contribute to the national LDN assessment and monitoring framework, providing important information to help populate the national LDN platform. Links will also be established with program-level monitoring organised through the REM, with relevant M&E data fed to the REM to consolidate data at regional and global levels.

*Output 3.5 Actions and investments identified to address transboundary land and environmental degradation priorities in Miombo-Mopane ecoregion and bi-/multi-lateral initiatives strengthened/established to progress towards LDN*

165. Cross Border Collaboration: This output aims to support and further develop regional and cross-border collaboration and coordination to maintain the ecological integrity of the Miombo-Mopane eco-region. This is expected to involve both DSL-IP countries and non-DSL-IP countries, with the aim to develop joint solutions to common challenges in sustainably managing the region's natural resources, including exploring the possibility of new cross-border and regional initiatives and investments. In doing so it will also facilitate the sustainability and scaling up and scaling out of project results across the region. This will include identification of common or transboundary land degradation, sustainable drylands management and other environmental challenges across the region and joint prioritization of necessary remediation actions.

166. Key activities under this output will include:

- Project stakeholders participate in regional review and identification of priorities for transboundary and regional collaboration to address threats from environmental degradation and unsustainable natural resource use (e.g. due to veldt fires, invasive alien species, illegal mining, charcoal, extraction of indigenous plant resources,

conflicting watershed management) in the Miombo-Mopane region and the identification of joint solutions to address them in a collaborative manner with development of a plan for action (activity organised through the REM);

- Identify and develop proposals for trans-boundary and regional initiatives to address common challenges to managing the Miombo-Mopane system, such as biodiversity conservation, transboundary protected areas coordination, and addressing improved management of shared, transboundary water resources

167. Inter-Project Collaboration: In addition, under this output, collaborative actions with other child projects will be promoted including participation in review (organised by the REM) of regional and global initiatives and investment sources (including private sector companies and institutions) with a mandate including sustainable drylands management (e.g. Miombo Forum SADC-GGWI) to identify potential financing (sources, innovative financial tools) in support of both regional priorities identified through the activities above and the national LDN targets.

*Output 3.6 Collaborative actions to support business and market development for SLM/SFM products across the Miombo-Mopane region undertaken*

168. Market Identification: With the support of the REM, the project will identify and network with cross-border, regional and global markets for LDN-compliant land-use products. Activities under this output will align with value chain development under component 2 with a focus on providing opportunities for selected SLM/SFM products from the project's target areas linked to achievement of LDN targets to be better marketed across the wider region and beyond.

169. Key activities under this output will include:

- Provide national inputs into REM needs assessment surveys related to private sector engagement, market analysis and business opportunities for further development of trans-boundary, regional and global markets with a focus on linkages with other DSL countries for SLM/SFM products and NTFPs, including identification of potential sources of commercial financing.

- Engage with REM-promoted regional business networking events, regional commodity roundtables, multi-stakeholder platforms, relevant for value-chain development and promotion of products from target areas under SLM/SFM practices, and lead on country level engagement with producers, SMEs, local finance institutions to complement outreach and engagement at regional and global scale.

- Provide national input to any proposed development and promotion of a Miombo-Mopane 'brand' for SLM/SFM products, delivered through the project to support market development.

170. Business Development Facility: The REM will provide a dedicated 'business development facility' function, supporting the largely underdeveloped value chains for SLM/SFM products from the target areas. Amongst other support the REM will compile information on potential products, businesses, sources of financing and markets, which will be available to the Botswana and other DSL-IP child projects. The REM will also explore the possibility of developing a Miombo-Mopane 'brand', drawing on FAO's experience with Geographical Indication (GI) schemes[43][43].

*Output 3.7 Opportunities for national and landscape-level stakeholders to exchange knowledge, experiences, and lessons learnt at regional and global levels identified, developed and supported*

171. Inter-Project Information Exchange: The project's framework is closely aligned with the DSL-IP's global framework, and those of the other Miombo/Mopane child projects, which will facilitate the sharing of evidence-based good practices across the initiatives. The REM will play a major role in assisting the project to engage in and deliver this output. Activities under this output will identify and promote opportunities for project stakeholders to exchange knowledge, experiences and lessons learnt and enhance mutual learning with other DSL-IP projects, as well as connecting project stakeholders with other relevant regional and global knowledge sources and learning opportunities. This will further strengthen evidence-based decision-making capacity for LDN.

Key activities under this output:

- Liaise with the REM, other DSL-IP countries and other relevant initiatives and platforms to identify appropriate opportunities being offered through the DSL-IP to improve access to regional and global knowledge and expertise in relation to sustainable drylands management and LDN

- Organise (supported by the REM) national and sub-national participation in regional and global 'cross-fertilisation' exchanges, study tours and peer-to-peer learning opportunities, including exchange-learning visits for key project participants and partners to other DSL-IP projects in the Miombo-Mopane ecoregion, and to other relevant projects providing best practices under the AFR100 network to improve mutual learning

- Develop linkages (supported by the REM) and engage with key global forums and working groups on drylands and related platforms (e.g. Collaborative Partnership on Forests, Global Landscapes Forum, Global Soils Partnership, Global Agenda for Sustainable Livestock, FAO's Family Farming Platform, GEF-6 IAP Policy and Science Interface, and the World Overview of Conservation Approaches and Technologies – WOCAT) and regional-level platforms (e.g. SADC GGWI, Miombo Network), with specific training provided on a demand basis to relevant departments on the use of existing sources of information (e.g. WOCAT, TerrAfrica).

- Ensure close coordination with FAO's Committee on Forestry (COFO) Working Group on Dryland Forests and Agrosilvopastoral Systems, including support for the country's representative to participate in relevant meetings in order to help channel knowledge and policy support between the child project, regional level and GCP steering committee.

- Facilitated by the REM, organize participation of the project team and partners to the annual meetings of DSL IP and other capacity development events and networking opportunities organized by the GCP, SADC, UN COPs (particularly UNCCD), IUCN Global Congress, among others.

172. Site Visits and Exchanges: The project and the REM will jointly identify the most suitable learning opportunities in other DSL-IP countries and organize at least two visits of approximately one week to relevant sites, with the help of the host partner. Visits are expected to involve between 8-10 participants from Botswana. Participants will be required to prepare a report for dissemination and conduct workshops or meetings to share the knowledge acquired on returning to Botswana and identify how it might be applied in a brief action plan. Actions will then be monitored and reported to the PSC. In return for the Botswana project being able to participate in wider learning opportunities, the PMU will liaise with government to host similar learning visits for other DSL IP partners, based on the most successful achievements of the project.

173. Transboundary Coordination: The project will facilitate Botswana to engage in the exchange of information with neighbouring countries that share Miombo-Mopane ecoregion concerns, particularly Zambia, Zimbabwe and Namibia. The project will assist to Botswana to development Memorandum of Understandings with these nations to help

increase cooperative efforts with regards to monitoring, best practices, and informational exchange. This will include actions directed towards arresting the agriculture, livestock, forestry, wildlife, and fire management practices that currently are associated with and/or drive degradation.

174. Extended Regional and International Cooperation: The project will facilitate linkage with the Miombo Cluster of DSL IP Child Projects through REM. This, in turn, will assist on-going efforts in Botswana to inform and be informed by the expanding body of global knowledge and practice. This include the interaction with the COFO Working Group on Dryland Forests and Agrosilvopastoral Systems[44][44] . The WG member in Botswana will play a major role in channelling the knowledge and policy channel between the child project, regional level and GCP steering committeeThis includes entry-points for engagement with NEPAD, the Miombo Network and the GEF-6 IAP Policy and Science Interface, WOCAT, SADC GGWI, the Collaborative Partnership on Forests, the Global Landscapes Forum, the Global Soils Partnership, and the World Overview of Conservation Approaches and Technologies. The project will support the participation of Botswana's representative to the Working Group on Dryland Forests and Agrosilvopastoral Systems. The project should benefit from having the country WG member as the child project coordinator as well.

## H. Alignment with GEF focal area and/or Impact Program Strategies

175. The project is designed to directly respond to GEF-7 LD programming directions. The project will address the drivers of land degradation through generation of knowledge and experience through the implementation of innovative approaches that will be scaled up to maximize global benefits. The project's approach is predicated upon addressing degradation comprehensively across two large landscapes. The project is focused upon productive landscapes where agricultural and rangeland practices define the livelihoods of rural producers and, unfortunately, where current management regimes drive degradation and vulnerability. The project will build the capacities of government and private stakeholders to address and reverse negative trends. This will include making certain that producers have access to both the knowledge and financing required to adopt improved practices. The project will measure success and contribute to the improvement of national and global practice through a rigorous evaluation and monitoring approach designed to measure and achieve meaningful contributions to global environmental benefits and capture best practices for amplification.

176. GEF's Sustainable Forest Management (SFM) Impact Program seeks to avoid further degradation, desertification, and deforestation of land and ecosystems in drylands through the sustainable management of production landscapes. As part of a joint submission from a coalition of six southern African countries[8] the project will contribute to the SFM IP's overall vision to maintain the ecological integrity of the Miombo and Mopane woodlands (across borders). This will be achieved through DSL-IP interventions at country level that are well coordinated at the regional level.

177. The child project's framework is closely aligned with the DSL IP's global framework and ToC as well as harmonized with that of the other five Miombo/Mopane child projects. This will facilitate the sharing of evidence-based good practices and adaptive learning across the country initiatives, which will be done through the relevant global (e.g. Working Group on Dryland Forests and Agrosilvopastoral Systems, of the Committee on Forestry, the Collaborative Partnership on Forests, the Global Landscapes Forum, the Global Soils Partnership, and the World Overview of Conservation Approaches and Technologies) and regional (e.g. SADC GGWI, Miombo Network and the GEF-6 IAP Policy and Science Interface) knowledge and exchange structures.

178. As noted under Component 3, the Botswana child project will actively "feed" and share knowledge to the global and regional platforms, while benefiting from recent scientific knowledge and global best practices provided by the platforms in return. Moreover, the child project will use part of the DSL IP incentive to "access" additional services provided by the global project on demand and adaptive basis (e.g. in the form of technical assistance) to support the child project(s) in achieving the anticipated impact at (ecosystem) scale. For that purpose, common management challenges across the DSL IP's three components that lead to the degradation of the Miombo and Mopane ecosystem will be jointly identified and prioritized by Botswana and the other countries in this region. The process will be facilitated by SADC in alignment with relevant regional strategies and frameworks, on-going as well as planned investments. The regional hub will further provide opportunities for effective knowledge sharing between the countries (e.g. through study tours and exchange visits for peer-to-peer learning), aligning tools and approaches for ecosystem-level impact monitoring as well as sustainable and innovative financial mechanisms and market opportunities for scaling-up INRM/SLM/SFM approaches.

179. The project will be guided by and will monitor contributions according to UNCCD's checklist for Land Degradation Neutrality Transformative Projects and Programmes (LDN TPP).

| ✓ | LDN Guidance | Project Response |
|---|---|---|
| ✓ | Use a landscape approach by choosing an area large enough to involve multiple land units of a variety of land types (e.g., within a watershed), sectors and jurisdictions/administrative boundaries that are inclusive of different land tenure governance (communal, private and public land). | The project will encompass two large landscapes within the Mopane-Miombo ecoregion |
| ✓ | Employ fundamental elements of the LDN-SCF:<br><br>Promote neutrality (i.e., counterbalancing for no net loss) within the project area; Use the response hierarchy through a mosaic of interventions across different land units to avoid > reduce > reverse land degradation; and Present the interventions according to land type for each component of the response hierarchy. | The project addresses each of these fundamental issues, including counterbalancing using a mosaic approach designed to align with each land type. |
| ✓ | Contribute to (sub)national LDN targets | Botswana has not yet defined the national LDN targets. The project will contribute to the implementation of the LDN targets that the country is currently defining as part of the activities foreseen in the National Land Degradation Assessment, Monitoring and Restoration Project. |
| ✓ | Select project location considering the countries' priorities identified through their national sustainable development plans and/or land use planning policy/legislation and/or LDN target setting process | This was done through reference to relevant policy documents and close collaboration with key stakeholders representing multiple government agencies and communities. |

| | | |
|---|---|---|
| ✓ | Include a monitoring system consistent with national LDN targets and Sustainable Development Goal (SDG) targets, particularly SDG 15.3 and its indicator 15.3.1 on LDN | The enhanced LDN monitoring system that will be supported by project investment will assist Botswana to better track LDN and SDG targets, building upon the outcomes of the ongoing National Land Degradation Assessment, Monitoring and Restoration Project. These will be integrated and tracked as well in the strategic land use plan to be developed. |
| ✓ | Ensure there are mitigating measures for potential leakage (negative offsite effects as opposed to positive spill over effects) beyond the project area | The project intends to provide amplification and improvement. There will be no leakage for each of the primary productive sectors: livestock, agriculture, and forest use. |
| ✓ | Ensure the commitment to the principle of gender equality throughout the entire process | The project will take an aggressive and pro-active approach to issues of gender. This will include the design of not only gender specific indicators but also gender specific cohorts within certain project activities. These include the land use planning process, the FFS program framework, and the project's communication strategy and program. |
| ✓ | Apply methods to manage or minimise environmental, economic, social and cultural trade-offs | The project will support community-based approaches to ensure there are no trade-offs or leakage. The project will establish a strong data generation and information management program designed specifically to address leakage and monitor impacts to be sure that all activities are directed towards SLM and SFM objectives. |
| ✓ | Ensure methods for gender responsive evaluation and adaptive learning are applied throughout the project cycle | As noted, the project incorporates gender based programming and indicators to be tracked through on-going M&E. |

| | | |
|---|---|---|
| ✓ | Establish a system that involves relevant stakeholders in the regular monitoring and validation of LDN status reporting as well as project implementation outcomes, with a particular attention to gender | The project design has aggressively engaged communities. This will continue during project implementation including stakeholders representing women, user groups, community-groups, and the private sector. |

B. Features that deliver multiple benefits

| ✓ | LDN Guidance | Project Response |
|---|---|---|
| ✓ | Create linkages to multiple SDGs by designing interventions that generate multiple environmental, economic and social benefits, while minimising trade-offs and maximising synergies and taking into account the different needs and priorities of women and men | The project integrates SDGs and will track achievement through monitoring under each of the three components. |
| ✓ | Show a clear pathway to deliver multiple benefits whereby gains in natural capital contribute to improved and more sustainable livelihoods | The project is based upon an approach designed to improve livelihoods, resilience, and quality of life through the promotion of sustainable practices that build greater food security and economic benefits. |
| ✓ | Provide economic incentives that benefit both men and women to improve livelihoods (e.g., creation of green jobs and enhanced access to inclusive credit lines) | The project will support value chain improvements and other approaches to promote economic incentives. |

| | | |
|---|---|---|
| ✓ | Promote land use decisions based on an assessment approach which takes into account, inter alia: land potential, land condition, resilience;<br><br>social, cultural and economic factors and their impacts, including consideration of vulnerable groups and gender; participation of relevant stakeholders representing key land uses and land governance systems in the<br><br>intervention area/landscape; both short and long term sustainability. | Each of these are fully factored within the project design, particularly Component 1. |
| ✓ | Identify land-based pathways for improving livelihoods, sustainable food systems and/or inclusive as well as sustainable value chains for current and future generations. | As above, FAO has a strong track record with this globally and within Botswana as it relates to farm diversification, livestock, etc. |

C. Features that promote responsible and inclusive governance

| ✓ | LDN Guidance | Project Response |
|---|---|---|
| ✓ | Safeguard land rights of local land users including individual and collective access to land, land tenure and resource rights, inheritance and customary rights. | These rights are fundamentally supported through existing Botswana policies and will be strengthened through project action. |
| ✓ | Ensure free, prior and informed consent of indigenous people and local communities for any activities affecting their rights to land, territories and resources. | The project is designed to be highly stakeholder inclusive and driven. The San communities living in Tutume will be engaged through a “Free, Prior, and Informed Consent” (FPIC) process. |

| | | |
|---|---|---|
| ✓ | Define mechanisms for ensuring gender-responsive engagement of key stakeholders in project design and implementation. | As above. |
| ✓ | Ensure strong gender equality, inclusiveness, accountability and transparency in land use decisions and planning. | As above. |
| ✓ | Avoid forced displacement/involuntary resettlement resulting from the intervention. | The project is designed to assist and support communities to be able to increase their ability to “stay in place” through more secure livelihood and sustainable development options. |
| ✓ | Strengthen or develop institutional arrangements through collaboration with the range of actors at multiple administrative levels. | A focus of this project is to establish more coordinated approaches to SLM issues in order to increase both efficiency and effectiveness of action. |
| ✓ | Strengthen or develop a grievance redress mechanism. | This is incorporated within the project design. |

D. Features that promote the scale out and up of what works

| ✓ | LDN Guidance | Project Response |
|---|---|---|

| | | |
|---|---|---|
| ✓ | Employ science based and local and indigenous knowledge as well as best practices including sustainable land management that contributes to land-based climate change adaptation and mitigation | The project is fundamentally based upon driving informed decision-making through the generation and use of improved data. |
| ✓ | Apply innovative locally adapted technologies, tools, and techniques that consider context and target group specificities including, for instance, local and indigenous knowledge and traditional practices | The project includes a host of innovative approaches designed to incentivize improvements that Botswana has to date struggled to realize. |
| ✓ | Capture and disseminate what is learned from the interventions and identify ways to address knowledge gaps through accessing all knowledge forms, and where necessary conducting research | The project has several activities that focus entirely upon information capture, awareness, and upscale. |
| ✓ | Ensure there is adequate investment in activities designed to scale-up and out best practices | As above. This includes a final project design that will incorporate a hand-over strategy. |

E. Features that enhance (sub)national ownership and capacities

| ✓ | LDN Guidance | Project Response |
|---|---|---|

| | | |
|---|---|---|
| ✓ | Identify and employ capacity development mechanisms such as public awareness, education and capacity- building campaigns that are aligned with enduring domestic procedures, tailored to the specific needs and social behaviours of both women and men, and existing national strategies and programmes. | The project will integrate several capacity building tools across each of the three components. |
| ✓ | Identify and employ domestic public and private financing vehicles, including co-financing arrangements that ensure the cost-efficient pursuit of multiple benefits. | Sustainable financing is integrated through the project design. |
| ✓ | Identify and employ strategies which can ensure the positive impact of the intervention beyond the project lifetime. | As noted, making certain that the project will be self-sufficient after close is critical. Botswana requires catalytic support from GEF in order to reach this benchmark. This includes applying ILUP, FFS, and other enhancements as well as making certain financing and human resources are in place to ensure sustained implementation of project established innovations. |

F. Features that leverage innovative finance (especially private sector)

| ✓ | LDN Guidance | Project Response |
|---|---|---|

| | | |
|---|---|---|
| ✓ | Include/prepare for an investment component that leverages private sector mobilization. | The private sector is the primary target for nearly all project activities. This includes those engage in agriculture, livestock and forest use. The project will assist these producers to access funding through innovative ways, including assisting the Government of Botswana to re-direct current investments towards actions that will produce GEB and community-benefits in a much more strategic and cost-effective manner. |
| ✓ | Foster activities that incentivise income generation and job creation for the communities in the project intervention areas. | All of Component 2 is directed towards this objective. |
| ✓ | Identify and leverage innovative and sustainable finance mechanisms which create incentives for and/or directly reward land stewardship. | Again, this is associated with each of the three components. The project will build upon and re-align the existing baseline and assist producers and government stakeholders to seek out and capture innovative funding tools to incentivize sustainable practices. |
| ✓ | Promote innovative financing (e.g., blended finance, green bonds) from broad range of financing sources (climate finance, development finance, domestic finance – national forest funds, special taxation scheme, etc.). | As above. |

## I. Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing

180. If the baseline situation persists, Botswana will likely continue to experience increased levels of degradation as described. As detailed in the baseline description, Botswana has a strong foundation of investments and programs upon which the project will build. The country has a good policy framework and fairly well funded institutions. The country is widely known and respected for its wildlife management and conservation programming. This baseline along with several international donor investments will be aligned with the GEF investment. However, Botswana has struggled to make solid progress with addressing degradation issues. This has been particularly challenging across the productive, communal landscapes where issues such as open access hinder progress. These challenges will be addressed through the catalytic investment of GEF funds.

181. The incrementality of GEF funds will be used to assist Botswana to enhance capacities required to address the root causes of degradation issues. An advantage of GEF programming is the ability to incentivize coordination between a variety of stakeholders. This is very much required in Botswana were decision-making and associated development investments are not always well-aligned between divergent government agencies. With GEF investment, Botswana will have a working model for how best to generate strategic land use planning focused upon addressing degradation causes while providing parameters to help guide and coordinate investment and action.

182. The incremental financing supplied by GEF will provide access to sustained technical training and exposure to best international practices. Under the baseline, Botswana does not benefit from a coordinated approach to providing capacity building for rural producers engaged in livestock and agricultural production. Currently, there are many programs and investments made by the Government of Botswana and donor partners that are directed towards improving production and poverty alleviation. However, these investments do not strategically target degradation issues and/or provide a programmatic approach to help producers identify and adopt improved practices.

183. In the existing scenario, the Government of Botswana does not have a consolidated data generation and information management program to again address SLM and SFM issues. There are several institutions and government agencies that do generate data and information. However, this current baseline is not well-coordinated. There is not a basic monitoring program and knowledge management platform in place to inform decision-making. The GEF investment will provide the technical support and capacity to help re-direct this existing baseline to help stakeholder with the information and knowledge required to inform decision-making in a structured manner that is directed towards the delivery of GEBs.

184. The following table summarizes co-financing and expected contributions:

| Co-Financing Source | Component 1 | Component 2 | Component 3 | Total Co-Financing |
|---|---|---|---|---|
| Ministry of Agricultural Development and Food Security (MOA) | $22,392,220 | $22,392,220 | $0 | $44,784,440 |
| MENT: Department of Environmental Affairs | $122,597 | $122,597 | $122,597 | $367,790 |
| MENT, Department of Forestry and Range Resources | $3,743,583 | $3,003,890 | $2,988,890 | $9,736,363 |
| Ministry of Presidential Affairs, Governance, and Public Administration | $6,269,949 | $6,269,949 | $6,269,949 | $18,809,847 |
| Kavango Zambezi Transfrontier Conservation Area (KfW) | $939,544 | $1,116,290 | $390,000 | $2,445,834 |
| International Savanna Fire Management Initiative (Australian Gov't) | $943,885 | $943,885 | $943,885 | $2,831,655 |
| **Totals** | **$34,411,778** | **$33,848,831** | **$10,715,321** | **$78,975,929** |

## J. Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

185. The project will lead to the achievement of the following GEBs:

| **SLM Benefits** | |
|---|---|
| 20,000 ha | Land Restored |
| 565,000 ha | Landscapes under improved practices (250,000 ha of forestland under SFM; 150,000 ha of rainfed mixed crops under conservation agriculture practices; 150,000 ha of rangeland under SLM) |
| 140,660 ha | Productive land achieving Land Degradation Neutrality. |
| **Biodiversity Conservation Benefits** | |
| 300,000 ha | Productive landscapes under improved management to benefit biodiversity |
| 140,000 ha | High Conservation Value Forest (HCV) avoided and managed at ecosystem scale |
| **Climate Change Mitigation Benefits** | |

| | |
|---|---|
| 637,745 tCO2eq | Greenhouse Gas Emissions Mitigated (metric tons of CO2e) |
| **Climate Change Adaptation Benefits** | |
| 3,600 men<br>3,750 women | In rural areas reporting increased food security as a result of project efforts |
| 3,600 men<br>3,750 women | In rural areas shifting to climate change adaption positive practices |

## K. Innovativeness, sustainability, potential for scaling up and capacity development

Innovation

186. The project is directed towards generating innovative approaches to address degradation challenges. Under Component 1, the project will represent the first time that a strategic land use management plan is adopted and enforceable under Botswana's relatively new "Town and Country Planning Act". This will include addressing fundamental challenges such as open access grazing that currently drive degradation across communal lands. Under Component 2, the project will host a series of innovations related to crop production, livestock management and forest management. These innovations will build upon global models and best practices but will be tailored specifically to Botswana's unique environmental, social, and economic situation. The will create the foundation required to amplify success. Under Component 3, the project will generate improved

awareness, monitoring and communication strategies that will represent "firsts" in Botswana and other parts of the region. In addition, the project will innovate linkages and coordination at the regional level in ways that have not yet been accomplished to address SLM and SFM challenges.

Sustainability

187. The project will ensure programmatic, social and environmental sustainability. Programmatic sustainability will be established in part through capacity building and mainstreaming of best practices within government offices, community institutions, and the private sector. This includes the completion of spatial plans which will be legally binding. Financial sustainability will be guaranteed in part by mainstreaming integrating project emplaced success within the Government of Botswana framework. This will include the generation of an end of project "hand over strategy" to make certain financial, human and equipment resources are in place so that the Government and other stakeholders are prepared to seamlessly carry forward successful practices resulting from GEF's incremental financing. The project will further ensure financial sustainability by providing private stakeholders with the tools, markets, and business experience to make SLM and SFM particle and profitable. This is fundamentally important to project success. Environmental and social sustainability are both baked into the project's design and componentry.

Up-Scaling

188. In line with GEF STAP recommended guidance on scaling out, up and deep[45][45], the project is designed to generate models combined with system-wide capacity development that can be upscaled and amplified to increase impact. The project will generate models in two different Districts to address degradation drivers. This includes models for land use planning, financial support, impact monitoring and improved production practices associated with forestry, livestock and agriculture management. Project innovations will build amplification capacity and immediately assist stakeholders within the target districts to reverse degradation trends negatively impacting Miombo-Mopane woodlands. Simultaneously, lessons learned will be systematically captured and strategically dispersed for upscale.

System-Wide Capacity Development

189. This is primarily a capacity development project that will incorporate a system-wide capacity development approach to maximize country ownership, sustainability and scale of intended results[46]. Its interventions are designed to develop capacity of people (women and men) (individual capacity), national and local institutions (organizational, institutional and network capacity), and to strengthen the policy environment (systemic capacity) to enable sustainable dryland management and biodiversity conservation in the target landscape and beyond, in line with the Program's approach. The project will catalyse system-wide capacity development based on an initial participatory assessment of capacity undertaken during the project preparation that will be deepened during year one of implementation. The project will build upon the existing policy and institutional frameworks as described in the baseline to establish the capacities required to maximize the potential positive SLM and SFM impacts of this enabling environment. The intent is to strengthen the human and institutional capacity of government agencies and private enterprises to identify SLM and SFM issues and provide these stakeholders with the tools and knowledge required to strategically and effectively respond to these challenges.

190. The project integrates a number of elements to ensure that this occurs. This includes effective learning programs under each of the project components designed to strengthen the capacities required to SLM and SFM objectives across the Mopane-Miombo ecoregion. All envisioned training activities will apply effective learning practices including pre-event learning needs assessments, post-event follow-up support to facilitate the transfer of knowledge into practice as well as institutionalization of curricula through partnering with and enhancing the capacities of local universities and research centres. Efforts will also include organizational and institutional capacity strengthening efforts such as to strengthen multi-sectoral and multi-coordination and collaboration at all levels such as the LDN platforms at national and landscape. Taking a system-wide, country-driven approach, the project's capacity development efforts will therefore result in a transformational and lasting change in the way Botswana is able to address SLM and SFM needs. As noted, the project will complete a comprehensive hand-over strategy prior to close. The hand-over strategy will specify and document capacities enhanced and high-light any remaining capacity gaps that may inhibit sustainable results. Moreover, all capacity enhancement activities will be aligned with a harmonized approach across the GEF IP Programme including the capacity enhancement strategy of the global coordination project and individual child project strategies. Finally, the Project Management Unit (PMU) will include a dedicated expert to follow the systemic capacity development components together with knowledge management and stakeholder engagement. FAO will provide overall quality assurance through a dedicated member on the internal Project Task Force (PTF) who will be task with the knowledge management, stakeholder engagement and system-wide capacity development components.

**L. Summary of changes in alignment with the project design with the original PIF**

| Summary of Alternation | Justification |
|---|---|
| Project Framework | The project framework was adjusted to be more practical and refined. The basic framework was not altered with similar components and outcomes. This was done to focus effort upon identified barriers, facilitate successful implementation and help make certain desired impact targets are achieved. |
| Indicators | The indicators were refined. However, the same targets outlined within the PIF were captured but for a slight reduction of approximately 10,000 ha targeted.<br><br>GHG mitigation target (Core Indicator 6) were reduced to 637,745 tCO2e at CEO endorsement request. The current figure reflects the benefits from the project's direct interventions. It is expected that additional carbon benefits will be secured during the project implementation as part of the integrated landscape planning and implementation/financing of corresponding land use plans. The latter is difficult to calculate/estimate at this stage as the plans are not yet in place, finances not yet secured and targeted LUS not yet known. |
| Co-Financing | During the PPG, additional sources of co-financing were identified and reflected. |
| Risks | The risks were reviewed and enhanced. This includes more emphasis upon environmental risks such as climate change. The project's risk mitigation now integrates COVID-19 concerns. |

[1] World Bank, 2015. Botswana poverty assessment.

[2] Magombeyi M.T. and Odhiambo N.M., 2017. Poverty dynamics in Botswana: Policies, trends and Challenges. Cogent Social Sciences (2017).

[3] AFD, 2016. Review of land tenure policy, institutional and administrative systems of Botswana: case study.

[4] MENT, 2019. Botswana's Third National Communication to the United Nations Framework Convention on Climate Change.

[5] Statistics Botswana, 2016. Botswana Environment Statistics Report 2016.

[6] MENT, 2002. State of the Environment Report.

[7] Fox, Vandewalle & Alexander, 2017. Land Cover Change in Northern Botswana: The Influence of Climate, Fire, and Elephants on Semi-Arid Savanna Woodlands

[8] MENT, 2019. Botswana's Third National Communication to the United Nations Framework Convention on Climate Change.

[9] Department of Surveys and Mapping, NDP 11.

[10] Centre of Applied Research. 2017. Economic Valuation of Forest and Range Resources in Botswana. Department of Forestry and Range Resources, Gaborone, Botswana.

[11] This figures have not yet been updated.

[12] Statistics Botswana, 2016. Botswana Environment Statistics Report 2016.

[13] MENT, 2002. State of the Environment Report.

[14] Ministry of Land and Housing's final report on the review of Botswana National Land Policy (2003) (and UTF Project Document).

[15] BirdLife Botswana, 2019. GEF-SGP Country Programme Strategy for Operational Phase 2020-2024: Baseline Assessment Report.

[16] Theo van der Sluis et al (2017), Chobe District Integrated Land Use Plan, Wageningen Environmental Research, Wageningen. P33

[17] Statistics Botswana, 2016. Botswana Environment Statistics Report 2016.

[18] Statistics Botswana, 2016. Botswana Environment Statistics Report 2016.

[19] Statistics Botswana, 2016. Botswana Environment Statistics Report 2016.

[20] Theo van der Sluis et al (2017), Chobe District Integrated Land Use Plan, Wageningen Environmental Research, Wageningen. P33

[21] Fox et al, 2017

[22] DEA, BirdLife Botswana and Continental Consultants, 2017. "The Integrated Land use Plan (LUP) for Mokubilo, Mmea, Makgaba, Mosu and Mmatshumo" for Project "Using SLM to improve the integrity of the Makgadikgadi ecosystem and to secure the livelihoods of rangeland-dependent communities"- Government of Botswana, Gaborone.

[23] Government of Botswana, 2017. National Development Plan 11, April 2017 – March 2023. Volume 1

[24] MENT, 2019. Project Document "Technical Support for Land Degradation Assessment, Monitoring and Development of Restoration Strategy"

[25] Government of Botswana, 2017. National Development Plan 11, April 2017 – March 2023. Volume 1

[26] MENT, 2019. Project Document "Technical Support for Land Degradation Assessment, Monitoring and Development of Restoration Strategy"

[27] Theo van der Sluis et al (2017), Chobe District Integrated Land Use Plan, Wageningen Environmental Research, Wageningen. P33

[28] National policies are binding to all sections of government as well as to non-state actors.

[29] Government Paper No. 1 of 2019: page 1 Approved by the National Assembly on the 8th of August 2019.

[30] Perkins (1996), Cullis and Watson (2005), Atkinson, Taylor and Matose (2006), Darkoh and Mbaiwa (2010), Doughill et al (2010, 2016), Basupi et al (2017) and Abel and Blaikie (2019).

[31] Theo van der Sluis et al (2017), Chobe District Integrated Land Use Plan, Wageningen Environmental Research, Wageningen. 182 pp.

[32] Theo van der Sluis et al (2017), Chobe District Integrated Land Use Plan, Wageningen Environmental Research, Wageningen. P33

[33] A private company Croscon has shown interested in getting into seed production.

[34] Interviews with landscape level key informants.

[35] Theo van der Sluis et al (2017), Chobe District Integrated Land Use Plan, Wageningen Environmental Research, Wageningen. P33

[36] Theo van der Sluis et al (2017), Chobe District Integrated Land Use Plan, Wageningen Environmental Research, Wageningen. P33

[37] Angola, Namibia, Zimbabwe, Tanzania, Malawi

[38] *"Strengthening civic spaces in spatial planning processes - A technical guide on regulated spatial planning and tenure to balance societal priorities in the use of land, fisheries and forests".* http://www.fao.org/3/cb0422en/cb0422en.pdf

[39] Trends.Earth is an online platform that monitors land degradation, using satellite imagery and global data, including basic data for reporting on the three key UNCCD indicators. See http://trends.earth/docs/en/

[40] http://www.openforis.org/tools/sepal.html

[41] **S**pecific, **M**easurable, **A**chievable, **R**elevant, and **T**ime-Bound (indicators)

[42] Best practices will also aim to cover "effective learning practices" to document the transfer of skills and knowledge into practice. See http://www.fao.org/3/a-be975e.pdf.

[43] See www.fao.org/family-farming/detail/en/c/1128101/

[44] is an inter-governmental body of the Committee on Forestry (COFO).

[45] See https://mcconnellfoundation.ca/wp-content/uploads/2017/08/ScalingOut_Nov27A_AV_BrandedBleed.pdf

[46] See „System-wide capacity development for country-driven transformations", page 38 in „Feeding People Protecting the Planet – FAO-GEF Partners in Action http://www.fao.org/3/CA0130EN/ca0130en.pdf

**1b. Project Map and Coordinates**

**Please provide geo-referenced information and map where the project interventions will take place.**

**1.b Project Map and Geo-Coordinates.**

*Please describe the project sites and provide geo-referenced information and map where the project interventions will take place.*

1. Please see the annex for a map of Botswana highlighting proposed project sites.

| Proposed Project Site | Coordinates |
|---|---|
| Chobe Landscape | S 12o 27' 48.31"<br>W 53o 49' 53.00" |
| Tutume-Mosetse Landscape | N 17o 11' 01.48"<br>E 54o 05' 32.97" |

**1c. Child Project?**

**If this is a child project under a program, describe how the components contribute to the overall program impact.**

The project is designed to directly respond to GEF-7 LD programming directions. The project will address the drivers of land degradation through generation of knowledge and experience through the implementation of innovative approaches that will be scaled up to maximize global benefits. As part of a joint submission from a coalition of six southern African countries8 the project will contribute to the SFM IP's overall vision to maintain the ecological integrity of the Miombo and Mopane woodlands (across borders). This will be achieved through DSL-IP interventions at country level that are well coordinated at the regional level.

As noted under Component 3, the Botswana child project will actively "feed" and share knowledge to the global and regional platforms, while benefiting from recent scientific knowledge and global best practices provided by the platforms in return. Moreover, the child project will use part of the DSL IP incentive to "access" additional services provided by the global project on demand and adaptive basis (e.g. in the form of technical assistance) to support the child project(s) in achieving the anticipated impact at (ecosystem) scale. For that purpose, common management challenges across the DSL IP's three components that lead to the degradation of the Miombo and Mopane ecosystem will be jointly identified and prioritized by Botswana and the other countries in this region. The process will be facilitated by SADC in alignment with relevant regional strategies and frameworks, on-going as well as planned investments. The regional hub will further provide opportunities for effective knowledge sharing between the countries (e.g. through study tours and exchange visits for peer-to-peer learning), aligning tools and approaches for ecosystem-level impact monitoring as well as sustainable and innovative financial mechanisms and market opportunities for scaling-up INRM/SLM/SFM approaches.

**2. Stakeholders**

**Select the stakeholders that have participated in consultations during the project identification phase:**

**Civil Society Organizations** Yes

**Indigenous Peoples and Local Communities** Yes

**Private Sector Entities** Yes

**If none of the above,please explain why:**

Stakeholder Engagement Plan

1. In line with GEF Policy on Stakeholder engagement and Implementation Guidelines, meaningful and continuous stakeholder engagement during the project design and implementation is key to maximize country ownership and contribute to more enduring results at scale. The project intends to strengthen polycentric, multi-stakeholder

governance mechanisms within the identified landscapes building on integrated spatial planning and management to result in positive impacts within the productive landscapes and contribute to preserving the natural capital. The proposes stakeholder engagement plan is closely aligned with the overall social safeguards plans paying specific attention to ensure inclusion of key stakeholders and vulnerable groups.

2. The PMU will directly be responsible for implementing the stakeholder engagement as outlined in the Stakeholder Engagement Plan and Stakeholder Engagement Matrix. It will also be responsible for monitoring and reporting on stakeholder engagement through the annual project implementation reports (PIRs). Relevant tasks will be incorporated into the Terms of Reference of the project staff. Budget for stakeholder engagement has been allocated through the meeting and travel budget lines.

3. In the annual PIRs, the PMU will report on the following indicators:

- Number of government agencies, civil society organizations, private sector, vulnerable groups and other stakeholder groups that have been involved in the project implementation phase.
- Number of engagements (such as meetings, workshops, official communications) with stakeholders during the project implementation phase.
- Number of grievances received and responded to/resolved.

4. Please see the annex for the project's stakeholder engagement plan.

5. Stakeholder engagement was vigorous during the PPG phase, despite COVID-19 limitations. PPG stakeholder consultations were carried out through inclusive workshops, individual interviews and focus group discussions to solicit views on capacity to manage the proposed project activities to achieve land degradation neutrality. This included the application of a participatory stakeholder analysis methodology at national and landscape level. The results both in terms of product and process will serve as a basis to continuously engage, enable and empower stakeholders throughout the project implementation phase.

6. The PPG Inception Workshop was organised at the central level in Gaborone on 17th September 2019 (34 participant) with the following institutions: MoA, BIUST, BUAN, Botswana National Beef Producers Union (Public Relations), BTO, MENT (DFRR, DMS), Department of Surveys and Mapping under MLMWSS, FAO, FoodBank Botswana Trust, Hospitality and Tourism Association of Botswana (HATAB), International Livestock Centre for Africa, MLGRD, Ngwato Land Board, SADC, KAZA and UNDP. Two Multi-Stakeholders Consultation meetings were thereafter held over two days in Kasane (Chobe District) on 14 and 15 October with 45 participants and in Tutume (Tutume sub-district) on 17 and 18 October with 38 participants. In Kasane, the participants to these workshops included the following organisations: MENT (DFRR, DMS, DWNP), CECT, Botswana Power Corporation, Caracal NGO, Lwaavo Art and Culture association, Pandamatenga Farmers Association, Chobe Land Board, ODC, two VDCs, Tribal Administration, FAO, Police, resource people and DAEWOO Engineering & Construction. In Tutume, representatives from MENT (DFRR), nine VDCs, Masunga Farmers Association, Land Board, Tribal Authorities from nine villages, FAO and NGBBPA participated to the workshop.

7. A participatory stakeholder mapping was conducted during each of these three workshops to identify key, secondary and primary stakeholders in the proposed project. The working groups were able to categorize their identified stakeholders into the three segments of government, private sector and civil society organisation. In addition, complementary individual and group consultations were undertaken in the baseline site between 11 and 19 November 2019 which enabled to further refine the analysis.

8. Bilateral meetings with DFRR were undertaken throughout project design. They participated to all workshops (6 in total), and had multiple meetings with the PPG team members. Representatives from DFRR and DWNP participated to the MSG workshop in Kasane on 14 and 15 October 2020. Decentralised staff of DFRR was also consulted by the Stakeholders and Capacity consultant in Kasane on 12 November 2019 and in Tutume on 14 November 2019. Another meeting was held between Stakeholders and Capacity consultant and DFRR in Gaborone on 19 November 2019. Bilateral and small group meetings with DFRR, DWNP and DEA also took place during the inception mission, the MSG missions and the gap feeling mission undertaken early March 2020.

9. Representatives of MoA participated to the inception workshop in Gaborone on 17th September 2019. Representative of LIMID and Agribusiness consulted by the PPG consultants in Kasane on 07, 08 and 11 November 2019. The PPG consultant (VC) met with DCP (including with ISPAAD representatives) several time between 18 and 21 November 2019. Small group meetings with DAP and DCP (including representatives of ISPADD and LIMID programmes) took place during the gap feeling mission undertaken early March 2020.

10. Meeting with the Stakeholders and Capacity consultant on 11 November 2019 in Mabele. A representative from MLGRD participated to the project Inception Workshop in Gaborone on 17 September 2019. A bilateral consultation with a School Feeding Programme representative was organised during the gap feeling mission early March 2020.

11. Three representatives of the VDC of Mosetse were consulted on 14 November 2020. Two VDCs were represented at the MSG workshop in Kasane and nine VDC were represented at the MSG workshop in Tutume. The Village Chief of Mosetse was consulted on 14 November 2020. Representative from the tribal administrative in Kasane and Parakarungu participated to the workshop in Kasane. Tribal authorities from nine villages were represented at the MSG workshop in Tutume.

12. CECT: Discussion with the Stakeholders and Capacity consultant over the phone on 11 November 2019 and participation to the MSG workshop in Kasane. Vuche-Vuche: meeting with the PPG consultant on 11 November 2019 in Mabele. A representative from Lwaavo Arts and Cultural Centre participated to the MSG workshop in Kasane. A meeting with Lwaavo Arts and Cultural Centre and Swizumboka group was also organised by the PPG consultant (VC) on 7 November 2019. A representative from Pandamatenga Farmers Association participated to the MSG workshop in Kasane.

13. Individual meetings with producers (honey, sorghum, lablab, small livestock, basket weaving) were organised by the PPG consultant (VC) between 7 and 14 November 2019. A representative from BIUST participated to the project Inception Workshop in Gaborone on 17 September 2019. A bilateral meeting was organised on 24 September 2019 Current research projects in Chobe and Makgadikgadi landscape. A meeting with BAMB was held in Tutume on 5 November 2019 by the PPG consultant (VC).

14. A bilateral meeting was held with a BITRI representative during the Inception Mission (on 23 September 2020) to discuss ongoing research projects. A representative from BTO participated to the project Inception Workshop in Gaborone on 17 September 2019. A meeting with JICA was organised on 3 September 2019 to discuss their ongoing project and identify synergies. Further calls and email exchanges with JICA were undertaken to refine the opportunities for collaboration. A bilateral meeting was organised on 3 September 2019 at UNDP Office in Gaborone. A second meeting (over skype) was organised on 12 March 2020. A representative from UNDP participated to the Inception Workshop in Gaborone on 17 September 2020 A skype meeting was organised with a representative of the GEF SGP on 13 March 2020 to discuss the Operational Plans 6 and 7. A representative from KAZA participated to the Inception Workshop in Gaborone on 17 September 2020.

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15. A bilateral meeting was organised with the TFCAs Focal Point under MENT on 23 September 2019. SADC representative participated to the Inception Workshop and to the DSL IP Global Workshop in January 2020. In addition, a bilateral meeting was organised during the inception mission. A meeting over the phone was undertaken at the end of January 2020 to discuss the current financing systems of CEDA and their support to small-scale farmers. A meeting between LEA and the PPG consultant (VC) was organised on 8 November 2011 in Kasane. Botswana Power Corporation participated to the Inception Workshop. Milling Co Thini was consulted by the Stakeholder and Capacity consultant on 14 November 2019 in Thini. A representative of the NGO participated to the MSG workshop in Kasane. A bilateral meeting at Caracal NGO offices was also organised during the MSG mission. A Skype meeting was held on 11 March 2020 to discuss BirdLife previous experience in the targeted sub-basins, capacity and ongoing projects.

Stakeholder Table

| Stakeholder | Mandate | Project Role |
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| **National Government** | | |
| **Ministry of Environment, Natural Resources Conservation and Tourism (MENT)** | The Ministry exists to protect, conserve and derive value out of natural and cultural resources and to promote a sustainable environment for the benefit of the nation. Its vision is to transform Botswana into a world leader in the Management of the environment for Sustainable Development. | Lead Executing Agency OPIM, overall project management, leads cross sectoral coordination for decision-making and policy strengthening |

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| Department of Environmental Affairs<br><br>DEA- MENT | Promotes environmental based projects for the conservation and protection of environment in order to increase the effectiveness with which natural resources are used and managed so that the beneficial interactions are optimised and harmful environment side effects are minimized | Lead cross sectoral coordination of all relevant sectors on environmental issues, support integrated and cross sectotral landscape planning (together with DFRR, DCP, DAP, ODCs and OSDCs), lead the mainstreaming and monitoring LDN, undertake ecosystem assessment,<br><br>DEA will organize and coordinate bilateral consultations at inception to identify more clearly the depth of involvement they can have in the project considering both their mandate and their capacity. |
| Department Wildlife and National Parks (DWNP) - MENT | The Department of Wildlife and National Parks is tasked with the responsibility of conserving and managing the country's fish and wildlife resources and their habitats in consultation with local, regional and international stakeholders for the benefit of present and future generations. It promotes and facilitates sustainable utilization of fish and wildlife resources through active participation of citizens and places emphasis on partnerships with the private and sector to fully develop potential of fish as wildlife resources. | Cross-sectoral management planning, support implementation of interventions in and around National Parks and with the management of HWC, support policy review and enforcement. |
| Department of Forestry & Range Resources (DFRR) - MENT | The DFRR is charged with the conservation, protection, and management of vegetation resources in Botswana. The DFRR as the management authority for vegetation resources ensures that these resources are used sustainably for the benefit of the present and future generations. | DFRR has been intensively involved in the project design process and will continue to central to the project during the implementation phase. The department will support the establishment of local/ community tree nurseries through the provision of technical assistance. District Conservation Committee under Support with the development of rangeland management interventions and improved fire prevention and management under Component 2. The DFRR's Fire Management Division will be highly instrumental with regards to improving fire management in the project areas. |

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| Department of Tourism (DOT) - MENT | Manages and promotes sustainable tourism development through the formulation, monitoring and implementation of policies and strategies that ensure sustainable tourism development. Additionally the department assists in acquiring licenses for tourism related business opportunities | To give support with the Value Chains linked to nature-based tourism/ support policy review and enforcement. |
| Department of Meteorological Services( DMS)- MENT | Provides weather and climate information and related services to the Government and the private sector to make timely and informed decisions for sustainable socio-economic development in circumstances where weather plays a significant role. It also provides guidance in project formulation focused on addressing issues of global warming and adaptation to climate change | It will provide the necessary data on building resilience to climate change |
| **Ministry of Agricultural Development and Food Security (MoA)** | Focuses on improving food security and championing agricultural development through local production, reduction of import bill, diversification of the sector, value addition, employment, promotion of consumption of local food products. | Technical support on crop production matters, development of conservation agricultural, participate actively in the development of the FFS/APFS and CSB networks, support policy review and enforcement, close collaboration on their ISPAAD project. |
| Department of Crop Production (DAP)<br><br>- MoA | To make arable sub-sector competitive and reduce the country's reliance on imports through assisting farmers to upgrade their level of management and technology application | PSC members, technical support on crop and animal production matters, development of conservation agricultural, rangeland management and small livestock production, active participation in the establishment of the CSB and FFS/APFS networks, support policy review and enforcement<br><br>technical support on crop production matters, development of conservation agricultural, participate actively in the development of the FFS/APFS and CSB networks, support policy review and enforcement, close collaboration on their ISPAAD project. |

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| Department of Animal Production- MoA | To make the livestock sub-sector competitive and reduce the country's reliance on imports of livestock products that can be viably produced in the country. | Technical support on animal production matters, rangeland management and small livestock production, participate actively in the development of the FFS/APFS and CSB networks support policy review and enforcement, close collaboration on their LIMID project. |
| Department of Agricultural Business Promotion (DABP)- MoA | Promote a commercialized, diversified, sustainable and competitive agricultural sector through business skills transfer, promotion of agricultural cooperatives and associations, market access negotiations, investment promotion and promotion of market led production. | Close collaboration with BirdLife Botswana on: Assist in Community/ CBOs capacity buildingassessment and strengthening, in Business Plans development, and implementation, and Value Chains development. This will strengthen their capacity and support the sustainability of the project interventions |
| Department of Agricultural Research (DAR)- MoA | Research of SLM and SFM technologies, climate resilience of crop, shrub and tree varieties. | MoU, Cclose collaboration on the development of local seed production and on improving the provision of resilient and locally adapted agricultural inputs under ISPAAD. |
| Department of Veterinary Services (DVS)- MoA | Monitoring of and support in addressing any disease outbreaks. | Provides animal and public health services to achieve sustainable and competitive livestock industry through prevention and control of nationally and economically important animal diseases. |
| Department of Agricultural Research, Statistics & Policy Development (DARSPD) | Provides statistical information services towards a competitive and sustainable agricultural sector, as well as, attainment of food security | It will undertake monitoring and evaluation of agricultural programmes |

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| Botswana Agricultural Marketing Board (BAMB)- MoA | Mandated to provide a market for locally grown scheduled crops such as cereals (e.g. sorghum), pulses/beans and oil seeds, and ensure that adequate supplies exist for sale to customers at affordable prices.<br><br>BAMB operates fourteen (14) branches and twenty three (23) sales offices countrywide where it buys, stores and sells produce and inputs. BAMB has storage capacity in excess of 100 000 metric, 85,000mt of which is of silo space at Pitsane, Francistown and Pandamatenga and the rest is made of warehouses. | Participatory identification of weaknesses of the grading system of price establishment, and identification of improvement opportunities.<br><br>Participate to the discussions to refine the identification of weaknesses and opportunities for improvement of seeds and NUUCs', and seeds and agricultural inputs Value Chains.<br><br>Support the promotion of the products targeted under the Value Chain strengthening interventions under Component 2 |
| **Ministry of Land Management, Water and Sanitation Services (MLMWSS)** | Responsible for the management of land and water resources including physical planning and determining land utilization, management and development | Facilitate socio-economic development through land servicing. Furthermore it will ensure delivery of water and re-use of grey wastewater for both domestic and agricultural development. |
| Department of Water and Sanitation (DWS)- MLMWSS | Responsible for Water resource management and planning. The mandate of the department seeks to ensure that the limited water resources are protected, managed conserved and used sustainability for the benefit of all life forms and the economy, in an integrated manner | PSC members, technical support on the management of surface water resources, rainwater harvesting, support policy review and enforcement |

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| Department of Lands (DoL)- MLMWSS | Facilitation and coordination of land related and property development programmes and projects | The responsibility for land allocation and custodianship is, however, mandated to the Ministry of Land Management, Water & Sanitation Services whose key thematic area of responsibility is Economy and Employment. It will therefore be a key institutional partner in the execution of the project. This ministry discharges its duties through land boards and sub-land boards (based in the districts and subdistricts) as well as some key departments such as Town and Country Planning, Surveys and Mapping, Deeds Registry, Land Tribunal and the Department of Lands. The Ministry is responsible for national physical planning and determining land utilization, management and development. It also provides services and information on cadastral surveying, mapping and remote sensing that inform physical planning. Its Department of Lands is responsible for allocating land in urban areas while the Land Boards are responsible for allocating tribal and communal land.Responsible for allocating land in urban areas while the Land Boards are responsible for allocating tribal and communal land. It will therefore be a key institutional partner in the execution of the project |
| Department of Surveys and Mapping (DSM) - MLMWSS | To provide basic geospatial information and services for socio-economic development. | A representative of the Department of Surveys and Mapping of MLMWSS participated to the Inception Workshop.<br><br>A representative of the Land Boards from Ngwato, Chobe and Tutume participated to the Inception Workshop in Gaborone, the MSG workshop in Chobe and the MSG workshop in Tutume respectively.<br><br>Responsible for national physical planning and determining land utilization, management and development. It also provides services and information on cadastral surveying, mapping and remote sensing that inform physical planning. |

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| **Ministry of Nationality, Immigration and Gender Affairs** | Oversees the integration of the principles of gender equity across sectors and development plans | MoU, capacity building and awareness raising for decentralised government and CBOs, cross-sectoral management planning, integration of gender aspects, CBOs and Business Plans selection for Value Chains development<br><br>Support the integration of gender safeguards across the project interventions<br><br>Capacity building and awareness raising for decentralised government and CBOs on gender issues and gender sensitive interventions<br><br>Participate to cross-sectoral management planning with a particular focus on the integration of gender aspects.<br><br>Assist in the identification of women CBOs and best approach for the active participation of women.<br><br>The MGWE will be consulted at inception to fine tune the identification of any additional opportunities to further increase gender integration in the interventions. Support the training interventions for CBOs The MGWE will be consulted at inception to fine tune the identification of any additional opportunities to further increase gender integration in the interventions. |

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| **Ministry of Local Government and Rural Development (MLGRD)** | Responsible for local community development in rural areas | Close collaboration on their Community Development Programme, School Feeding Programme and other interventions to identify strengths and weaknesses of the programme, opportunities for linkages with the GEF7 project, and provision of targeted support to increase the long-term success of local government's investments through inter alia the strengthening and harmonisation of monitoring and evaluation approaches, supporting efficient cross-sectoral collaboration, and promoting SLM and SFM in alignment with LDN. |
| Department of Community Development (DCD) | It is mandated to enhance the quality of life for Batswana through the promotion of social justice, effective local structure governance, sustainable livelihoods strategies and economic empowerment initiatives. | Mobilize the community for identification and implementation of community based developmental initiatives and deal with the empowerment of Remote Area communities for socio-economic sustenance. |
| **Ministry of Investment Trade And Industry (MITI)** | The ministry's responsibilities includes value chains enhancement and it is a key stakeholder for the implementation of NDP 11 | The Division of Cooperatives and LEA will work in close collaboration with relevant institutions on: CBOs capacity assessment and strengthening, Business Plans development and implementation, and Value Chains development. This will strengthen their capacity and support the sustainability of the project interventions.<br><br>To create a conducive environment for the promotion of Investment and development of Sustainable Industries and Trade, with a view to diversifying and growing the economy, creating wealth and employment |
| Department of Trade and Consumer Affairs (DTCA) | Promotes the growth and development of internal trade, fair business practices and consumer protection and welfare through formulation of Policies and Legislation | Promote Value chains beneficiation amongst the communities. |

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| **Ministry of Finance and Economic Development (MFED)** | Oversees the progress with achieving national goals (under NDPs) and SDGs among others, as well as budget allocation | Collaboration in reviewing budgeting processing and identifying ways to facilitate cross-sectoral management of natural resources.<br><br>Analysis of the capacity of ODCs in fulfilling their roles and identification of means to address the capacity gaps.<br><br>The MFED will be consulted at project inception to finetune the timing for discussion on the budgeting and policy processes as well as the preferred method of involvement and communication. |
| **Local Government** | | |
| ODCs and OSDCs under the Office of the President | District development planning, coordination and administration of Central Government projects/ programmes. Also charged with monitoring and evaluation of policies, statutes and guidelines. | MoU, lead cross-sectoral coordination for the design and implementation of ILUPs at the district level, and oversee adequate budget allocation for the implementation of the ILUPs |
| District Commissioner | Responsible for cross sectoral coordination at district level | Llead cross-sectoral coordination for the design and implementation of ILUPs at the district level A representative from Chobe ODC participated to the MSG workshop in Kasane, the ODC in Chobe and the OSDC in Tutume are expected to play a key role in the project and currently have limited capacity. They will be consulted extensively at project inception to ensure that they are fully on board with all aspects of the project and with the expectations regarding their participation. The preferred means of communication and timing will be decided accordingly at inception. |

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| DLUPU | collective of technical officers who advise the District Council and Land Board on land-use planning, helps to coordinate and integrate different technical land use managers | Support with the integration of SLM and SFM approaches in district-level planning processes |
| District Council Physical Planning Units | Planning authority at district level, responsible for physical planning and mapping | Support with the coordination, linkages and complementarity of the interventions of the GEF7 project with other ongoing projects in the district, and support the development of the ILUPs. |
| District Technical Advisory Committees | Technical reference groups (regroup technical staff from all sectors including government and parastatal institutions) | Role of Landscape LDN TWC through advising all relevant departments at the district level on the adoption of the LDN approach to contribute to national LDN targets, in close collaboration with the National LDN TWG.<br><br>Small group discussions will be undertaken at project inception to assess the current knowledge on the TAC member on LDN and decide on the functioning of the Landscape LDN TWG and their linkages with the National LDN TWG in collaboration with the UTF team. |
| District Officer Development | Responsible for district planning and coordination of district committees under the executive supervision of the District Commissioner. Also serves as the secretary to the District Development Committee (DDC), which is chaired by the DC and made up of Senior field officers of government ministries, representatives of council, landboards and tribal administration. | Involved in the implementation of district development plans. |

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| Land Boards and Sub-Land Boards | Under the Ministry of Land Management, Water and Sanitation Services - MLMWSS) | Land Boards are responsible for allocating tribal and communal land and also implementation of the ILUPs<br><br>lead cross-sectoral management planning and oversee adequate budget and implementation of the ILUPs |
| VDC and Village Chiefs | Responsible for land management at the village level and village development | Actively involved in the development and implementation of the ILUPs. Major role in the downscaling of the plans at the village level. |

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| Dikgosi and Kgotla | Traditional chiefs and head of the community committees (Kgotla) | Community mobilisation.<br><br>Support in identifying and accessing all community groups including minority groups.<br><br>Take ownership of the decision-making and planning processes at the local level.<br><br>Take ownership of the implementation of the ILUPs and collaborate actively with local authorities on the monitoring activities for natural resources management.<br><br>Dikgosi, Kgotla members (community representatives) and community members will be continuously involved in the project during the implementation phase. Kgotla assemblies will be gathered for each step of the decision-making process. In addition, annual reports on the project progress will be submitted to the Kgotla assembly to ensure that the official community consultation system is followed adequately. |
| **International Development Organizations** | | |

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| UNDP | UNDP has implemented the previous GEF projects in Chobe and Makgadikgadi landscapes. UNDP led the development of the three existing ILUPs in the country: Chobe, Makgadikgadi and Okavango Delta. | Provide continuous support throughout the project implementation phase to ensure that the GEF7 project builds adequate on existing experience and lessons learned on cross-sectoral decision-making, integrated land-use planning and plans implementation. |
| FAO | Led detailed project design.<br><br>Representatives from FAO HQ participated to the project Inception Workshop in Gaborone on 17 September 2019.<br><br>FAO HQ Capacity Development expert participated to the MSG workshop in Kasane and Tutume | GEF Lead Implementing Agency GEF Agency for project. Will support implementation and technical back-stopping. |
| JICA | Long experience in working in Botswana on forest resources management.<br><br>Lead agency for the development of the Master Plan for the Conservation Sustainable Use of Forest and Range Resources | Work in close collaboration with GEF7 project to maximise synergy, harmony and complementarity between the GEF7 project and JICA projects particularly concerning the management of forest resources and fires. |
| KAZA | Focusing on the sustainable management of the Kavango Zambezi ecosystem | Close collaboration on tourism development and on mapping and addressing transboundary issues involving Chobe basin |
| CEDA | CEDA provides loan services including microloans for businesses (Small and Medium Enterprises) operating in the services industry. | Promote SLM and SFM through support CBOs of farmers who have adopted improved practices. |
| SADC | Focusing on achieving development and economic growth in Southern Africa | Close collaboration on increased knowledge sharing and the establishment of a harmonised M&E system across southern African countries involved in the GEF7 programme, and on mapping and addressing transboundary issues involving Chobe basin |

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| UNEP | Responsible for coordinating the UN's environmental activities and assisting developing countries in implementing environmentally sound policies and practices | Technical assistance to enhance the integration of sustainable development in national, sector and district level policies, plans, budgets and improve use of integrated tools and methodologies for sustainable natural resource management |
| GIZ | A German development agency that provides services in the field of international development cooperation. | Close collaboration through its programmes on transboundary water management; cross border protection and use of natural resources, including adaptation to climate change. |
| World Bank | An international financial institution that provides loans and grants to the governments of poorer countries for the purpose of pursuing capital projects. It comprises two institutions: the International Bank for Reconstruction and Development, and the International Development Association | Close collaboration on biodiversity related issues. The world bank is currently implementing projects on emergency water security and efficiency; and integrated transport. |
| Africa Development Bank | Contributes to poverty reduction, economic and social development through projects in the areas of infrastructure, agriculture, finance and multi sector. | Possibilities for leverage funding. |
| Comprehensive Africa Agriculture Development Programme (CAADP) | CAADP is Africa's policy framework for agricultural transformation, wealth creation, food security and nutrition, economic growth and prosperity for citizens in the continent. | Guidance on the development of Agricultural Production best practices plans/ programmes; and collaboration on mainstreaming of evidence based planning and inclusive planning processes. |
| **Academia** | | |

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| University of Botswana | A public higher-education institution offering a wide array of undergraduate and postgraduate programmes. | The San Research Centre will assist with issues related to traditional, indigenous cultures.<br><br>The Geospatial and Satellite Fire Field Receiving Station will support related monitoring and data collection.<br><br>The Department of Biological Sciences can execute floral inventories to produce a red data list of threatened plant species and to research on local available indigenous plant species suitable for land reclamation activities (e.g. after mining) and prevention of soil erosion |
| Botswana University of Agriculture and Natural Resources (BUAN) | Provide higher education and training in the field of agriculture, natural resources to produce market–ready graduates | Research of SLM and SFM technologies, climate resilience of crop, shrub and tree varieties.<br><br>Promote the integration of SLM and SFM in the curricula for agricultural and natural resources management.<br><br>A representative from BUAN participated to the project Inception Workshop in Gaborone on 17 September 2019. BUAN is seen as a key partner for the mainstreaming of SLM and SFM. They will be involved at every stage of Component 2 and 3 to ensure that they have all required understanding and evidence-based information to integrate SLM and SFM principles in the curricula of their students. |

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| Botswana International University of Science and Technology (BIUST) | Research based University that specialises in Engineering, Science and Technology | Research of SLM and SFM technologies, climate resilience of crop, shrub and tree varieties. Research on ecosystem carbon, water and energy fluxes.<br><br>Promote the integration of SLM and SFM in the curricula for agricultural and natural resources management BIUSTBITRI is currently undertaking research project that are highly relevant to the GEF7 project (e.g. on carbon storage balance, including flux, storage of water and carbon and land degradation). Strong collaboration will be maintained throughout the implementation phase to ensure timely information sharing between the GEF7 project and BIUST BITRI, and find synergies to fill in knowledge gaps in support for SLM, SFM and LDN. |
| **CSO's** | | |

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| BirdLife Botswana | Focusing on integrated land-use planning and development of sustainable livelihoods in different areas but especially in Makgadikgadi landscape (based in Gaborone) | As Operational Partner, BirdLife will take a leading role throughout the project implementation phase particularly for the work with CBOs and community members under Component 2. Undertake CBOs capacity assessment and training (administrative and financial management, business plan development) under Component 2<br><br>Support the establishment of the FFS network and the CSB network<br><br>Support the development and implementation of Business Plans and Value Chains strengthening, CBOs capacity assessment and training / establishment of the FFS network / establishment of the CSB network / Business Plans development and implementation / Value Chains development |
| Elephants Without Borders | Elephants Without Borders (EWB) is a charitable organization dedicated to conserving wildlife and natural resources; through innovative research, education and information sharing. | EWB is implementing EleSenses project which promotes a low-cost human-elephant conflict mitigation system. The organisation also assists small-scale development projects, such as the Women's Basket-weaving Cooperative comprised of groups of women from 3 villages in Chobe Enclave by designing and purchasing signs and materials to help them market their ware. |

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| Community Trusts (CECT, Mantenge, Domboshaba), associations and cooperatives (Vuche-Vuche, Lwaavo Arts and Cultural Centre), Women groups and Youth groups | CBOs active in the targeted sub-basins and focusing on improving the livelihoods of their members<br><br>(CECT: has a tourism concession, and they support sorghum producers through ploughing and milling) | Participatory identification of their capacity and interests, and related training needs.<br><br>Experience sharing and support in identifying and accessing all community groups including minority groups<br><br>Participatory refinement of the identification of weaknesses and preferred approach to strengthen their Value Chains of interest<br><br>Participation in business plans development<br><br>The project approach under Component 2 is strongly based on community organisation into CBNRM organisations, associations and cooperatives. This will build as much as possible on existing group and CBOs that will be strengthened. The involvement of existing CBOs in the project implementation phase will therefore be central and intensive as they will be selecting their livelihoods of interest as are expected to take ownership of the sustainable management of the corresponding resources. |
| Botswana Tourism Organisation (BTO) | Corporate body focused on developing Botswana into a preferred tourism destination | Support CBOs in the development of tourism-based livelihoods and of partnerships with private sector actors, and in promoting the newly developed tourism activities |

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| CARACAL NGO | Focusing on land degradation causes, land-uses and environmental impacts<br><br>Also support a women association doing basket weaving (based in Kasane) | Technical support for the design and implementation of the interventions in Chobe sub-basin<br><br>Support with the diagnostic of the basket weaving value chain |
| **Private Sector** | | |
| Private Producers (Livestock, fisheries, and agriculture) | Land-users in the targeted sub-basins | Owners of the project<br><br>Active participation in the development of the ILUPs<br><br>Active participation in the capacity assessment work and training sessions<br><br>Active participation in the development of FFS/APFS network, CSB network and business plans Extensive consultations with local communities (through the Kgotla assemblies and focus groups with targeted groups such as women and youth) will be undertaken at project inception to ensure the full support of the community groups on each aspect of the project. |
| Business Botswana | Association of private sector companies focused on enhancing the business environment and building the vitality and competitiveness of the private sector in Botswana | Support in ensuring that all relevant private organizations are identified and engaged with timely to maximise private partnership contribution under the GEF7 project to support the out scaling and sustainability of the project outputs. Business Botswana will be approached at project inception to refine the strategy for the involvement of the private sector in the project interventions particularly under Component 2. |

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| Commercial Enterprises<br><br>Private milling companies<br><br>Private meat processors<br><br>Livestock feed company<br><br>Agricultural outlets<br><br>Chain stores | Private sector companies operating the targeted basins | Collaboration in the development of Value Chains under Component 2 through assisting in undertaking the diagnostic of existing value chains and collaborating in the development of more sustainable Value Chains. The local companies to be engaged closely on the project will be selected based on the value chains targeted under the business plans to be developed under Component 2. |
| Large corporates<br><br>(telecommunication) | National corporates interested in participating into a CSR scheme | Support for the adoption of improved practices by land-users (SLM and SFM) using a CSR scheme. Opportunities for the development of CSR with large corporates will be investigated by the Round Table during the project. |
| Mining companies | Operating and prospecting companies in Chobe and Tutume-Mosetse | Development of CSR or PES agreements with interested companies to support the development of sustainable livelihoods based on SLM and SFM in the communities surrounding their area where they are operating. The best strategy for the involvement of mining companies in Tutume will be determined at inception in a participatory manner with DEA, DFRR, BirdLife, UNDP, ODC, DFRR and Business Botswana. |

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| Tourism Companies | Operating tourism operators, lodges and hotels in Chobe basin | Development of CSR or PES agreements with interested companies to support the development of sustainable livelihoods based on SLM and SFM in the communities surrounding their area where they are operating. The best strategy for the involvement of tourism operators in Chobe will be determined at inception in a participatory manner with DFRR, DEA, DWNP, BTO, ODC, Land Board and CECT. |
| **Indigenous Groups** | | |
| San people | Indigenous groups living in Tutume sub-District | Participatory identification of their capacity and interests regarding livelihood development, and related training needs.<br><br>Participation in business plans development<br><br>Direct meetings with indigenous groups in Tutume could not take place during the PPG phase. |

**Indigenous Peoples, FPIC and Grievance Mechanism**

Confirmation of Presence of Indigenous Peoples and FPIC

16. The districts in which the proposed project will be implemented account with the presence of San communities locally known as Basarwa. In accordance with international consensus, the Basarwa are considered indigenous peoples with an estimated population at national level of approximately 66,000 people. Officially, the Government of Botswana considers them as **Remote Area Dwellers** (RADs). Only one settlement in the target districts has officially been gazetted as a RAD settlements. But there are communities of Basarwa living in settlements that are not so designated. Some live in cattle posts as herders of other people's livestock and others in wards of the main village settlements which are multi-ethnic. Typically, Basarwa have endured significant displacement and resettlement for various reasons: including to make way for protected areas like national parks and wildlife conservation areas such as those dominating the Chobe District. They have also been displaced by other dominant groups: leaving only the legacy of naming areas they were pushed from.

17. As a result of insufficient time available to locate and visit Basarwa communities concerned by the project, during the PPG consultation phase it was not possible to carry out the steps of the Free, Prior and Informed Consent (FPIC) process required to reach consent. Rushing the initial stages of the FPIC process would have resulted in a sub-optimal process not guaranteeing the principles enshrined in FPIC, in particular allowing sufficient time for the indigenous community to discuss in their own language and in a culturally appropriate way before reaching a decision. As such, as a first step during the implementation of the project, priority will be given to confirm the locations of indigenous peoples and to establish in a participatory manner, how the project activities might affected them while avoiding or minimizing any potential risks. In the sub-district of Tutume, local authorities provided a different information on where to locate indigenous communities within the village, however, upon arrival at the identified place the headmen provided different information about the ethnic composition of their ward. In view of this, a deeper analysis and field visit must take place in order to collect first-hand information. The execution of the first steps of the FPIC process will therefore take place during the implementation stage of the project and before enacting any activity that could have an effect on indigenous peoples. This will be in line with the 2015 FAO Environmental and Social Management Guidelines for which any FAO-implemented project affecting indigenous peoples must obtain the consent of the concerned indigenous peoples through the implementation of the process of FPIC.

18. At present, the project can draw lessons from the PPG strategy of other projects such as the Green Climate Fund for Bobirwa, Kgalagadi and Ngamiland and a 2013 GEF project review in Kgalagadi where consultations with RAD settlements as well as cattle posts with Basarwa herders were specifically budgeted for and the communities' views sought on the project solicited: thus enabling informed Indigenous Peoples Management Plans to be developed for purposes of both FPIC and social mitigation. Some key concerns regarding risks peculiar to their communities were:

- Perpetuation of historical marginalization and exclusion. The communities wanted reassurance that they will not be excluded from opportunities as in past experiences where government officials brought relatives into their settlements for jobs they could actually have benefitted from as community members. As members of this ethnic minority group, they are not represented in government institutions where development decisions are made by official employees, they felt their community interests are not well represented and voiced. In some RAD settlements they were distrustful of projects that meant working in conjunction with the dominant ethnic groups for fear they would be marginalized.

- The risk of inadequate and timely consultation was also highlighted among these and all other rural communities. They want to see more frequent consultations with other key stakeholders for joint decision making. In particular they want regular information and knowledge on policies that affect them and on the project as it unfolds. Often in the past, consultations have only happened initially and then no follow up and continuous updates.

- The risk of insufficient redress mechanism where they can meaningfully lodge complaints if they see government officials or other powerful interests side-lining their own interests.

- Communities that provide herding services for other groups worry that they do not have collective voice as they are based at the cattle posts where they are few and scattered. They want assistance to build collective voice as herders and herding communities.

- In some areas where land resources have been seriously fragmented but cattle and smallstock introduced to historically hunting-gathering communities, there is concern that projects requiring rotational grazing could bypass them as it is difficult for Government to entertain requests for additional land resources to small communities. A 2013 GEF project reviewing the situation in the RAD settlement of Zutshwa solicited that concern of land adequacy during a participatory rural appraisal exercise. The study observed as follows (Magole, 2013:page 20)

- "*The transect drive confirmed and detailed out many of the features referred to in the sketch mapping exercise. It emerged further that the area to the east of the village is also not available for expansion as it is grazing for Hukuntsi village. There are two main problems for this area and the residents; shortage or lack of land to which to expand and explore for water and salinity of water in almost the entire area. This has resulted in acute shortage of water for both the people and their livestock. The underlying issue appear to be the introduction of livestock in a small WMA area with no room for expansion resulting in both social and environmental problems"*

Risk Mitigation for Indigenous Peoples and indigenous Communities

19. To mitigate potential risks to indigenous peoples, the following measures will be employed. Such mitigating measures will be reviewed, substantiated and confirmed during the implementation process of FPIC:

| Indigenous People Mitigation Measures | | |
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| Mitigation Activities | Indicators and targets | Timing |

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| Participatory stakeholder mapping of indigenous people will be carried out to provide baseline information on spatial location of people, resources, demographic profiles, economic profile, and relations to other communities and resources users.<br><br>Reserve a least 10% quota for training of Basarwa in farmer facilitator teams.<br><br>Embed Free, prior and informed consent (FPIC) in all project training programmes.<br><br>Infuse awareness of human rights of minorities in training materials.<br><br>Reserve up to 10% quota for farmer communities in the RAD settlements in all phases of project implementation. | Stakeholder maps of indigenous people in target districts.<br><br>10% trained farmer facilitators will be Basarwa.<br><br>80% of Basarwa participating in both RAD settlements and cattle posts.<br><br>□ | Yeas 1 & 2 |
| Include sensitization to the demographic profiles of marginalized communities in inter-institutional coordination mechanisms.<br><br>Support the conduct of budget audits of key sectoral services in the target districts to facilitate RADS assistance through inter-institutional cooperation, and improved financial efficiency and impact on Basarwa beneficiaries. | Quantitative data available to monitor impact on Basarwa and other identity markers.<br><br>Budget audit reports available to monitor efficiency.<br><br>ADS funding and Ipelegeng job creation linked more effectively to benefit Basarwa. | Years 1 , 2 and 5 |

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| Village Development Committees (VDC) designed and established in the RAD settlements must be representative of the community.<br><br>Because grazing lands are often shared by communities from several neighbouring villages, inter-VDC collaboration and cooperation will be facilitated to ensure equitable representation of Basarwa communities.<br><br>Guidelines will be developed in a participatory manner to reflect the principle of inclusive participation and equal access to opportunities. | ALL RAD settlements must be included in the VDC.<br><br>RAD farmers will implement community based climate smart planned grazing. | Years 1-6 |
| Train an equal number of men and women in RADS settlements and other non RAD settlements in value chain opportunities. | 8,000 to 16,000 RAD community members will benefit.<br><br>4,000 to 8,000 women in RAD communities will benefit. | Years 1 to 6 |
| Embed human rights of indigenous people and women into project value chain activities to enhance participation of the marginalized.<br><br>Develop a code of ethics that embed human rights and explicitly ban practices that involve underage children and unpaid female members of male employees. The codes on conduct must be enshrined in the design and implementation of value chain agreements and instruments. | 20% of supported communal farmers should be Basarwa and RAD settlements.<br><br>Basarwa women will make up 53% of their community beneficiaries in the full value chains.<br><br>A code of ethics in doing business through the value chain activities will be available in the information portal. | Years 2-6 |

**Please provide the Stakeholder Engagement Plan or equivalent assessment.**

As noted in the main project document, the PPG was defined by extensive stakeholder engagement. This same approach will be applied, amplified, and strengthened throughout project inception and implementation.

Efficient and continuous stakeholder engagement is essential for the success of the project implementation, and its long-term sustainability. Therefore, the implementation strategy for the proposed project includes extensive stakeholder participation. The stakeholder engagement plan will ensure the effective participation of women, youth, and other vulnerable groups (e.g. indigenous people). Stakeholders will be consulted throughout the implementation phase to: i) promote community understanding of the project's outcomes; ii) promote local community ownership of the project through full engagement in planning, implementing and monitoring of the interventions; iii) communicate to the public in a consistent, supportive and effective manner; iv) ensure gender equality and social inclusion; and v) maximise complementarity with other ongoing projects.

Disclosure of project activities to key stakeholders will take place once the project starts and during and after conclusion. Shared information includes, but is not limited to, potential impacts mostly to participating communities; it includes also social and environmental assessments as well as safeguards plans related to access of natural resources, Gender, Stakeholder engagement, Indigenous Peoples and the Grievance Mechanism.

These efforts shall ensure that:

- Stakeholder's views and concerns are taken into account by the project and are known by key decision makers,
- Stakeholder groups of historically vulnerable or marginalized people (e.g., women, youth, elders, religious/ethnic minorities) are able to fully participate in this process.
- The public is involved in decision making and problem-solving,
- Stakeholders are informed regarding project activities, and,
- Consultations will be carried out throughout the project´s implementation, including monitoring, and evaluation as necessary, to ensure project adaptive management and proper implementation of environmental and social safeguards plans.

Botswana has a very strong track record with stakeholder engagement, particularly at the district and village level. Rural communities in Botswana follow several cultural norms that are designed for inclusivity and community-based decision making. Communities gather often and regularly to participate in decision-making and knowledge enhancement activities. Indeed, in Botswana, it is incumbent upon government staff and others entering communities to follow, engage, and respect these norms when working at the village level. This includes, for instance, the methodologies used to apply CBNRM principles and practices. The kgotla is a highly valued and respected traditional method for stakeholder engagement that will be used and prioritized during project implementation.

Reflecting Botswana's cultural respect for inclusivity, stakeholder engagement is integrated throughout the project's componentry. Under Component 1, a broad range of stakeholders will be fully engaged through the project's ILUP processes. Part of the component's efforts will include making certain that land use planning is inclusive and provides ample opportunity for input by all concerned stakeholders, including, but not limited to, community members, village councils, various government agencies and private enterprise (e.g., tourism operators, farmers, ranchers, forest users, etc.). This will include the creation of a process to be detailed during the project's beginning phases to ensure inclusivity occurs. Under Component 2, the FFS programming will serve as the lynchpin for stakeholder engagement. FFS are designed specifically to promote stakeholder involvement in decision-making, including cooperative and community level efforts to improve production, livelihoods, food security, and natural resource conservation. As noted, this will include specific female cohorts. Under Component 3, the communications strategy and associated KM, M&E and amplification work will specifically identify and target the engagement of critical stakeholders. This has been formulated within the component design and will be more fully elucidated and described in the project's communication strategy.

Likewise, financing for stakeholder engagement is reflected in the project budget, e.g., capacity enhancement, workshops, etc. This is further reflected in the project's results framework where indicators are focused upon tracking the number of persons engaged in project activities and benefiting from project investments. Where applicable, these impacts are disaggregated by gender. Stakeholder engagement requirements will be reflected in all TORs, LOA, contracts and other agreements to make certain all persons associated with the project understand and fully incorporate meaningful stakeholder engagement in their endeavours.

The table below summarizes the main stakeholders identified during PPG along with indicative methodologies for consultation or engagement.

| Stakeholder name | Stakeholder type | Key function within their mandate/activity related to the project | Consultation Methodology & date of consultations<br><br>(PPG) | Expected role in project implementation<br><br>(Implementation) | Comments |
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| MENT | Key<br><br>Lead Executing Agency | DEA: responsible for issues relating to environmental impact of land-use activities<br><br>DFRR: responsible for forest resources management and conservation<br><br>DWNP: responsible for conserving and managing fish and wildlife resources and their habitats including the management of national parks<br><br>DT: manages and promotes sustainable tourism development | Bilateral meetings with DFRR were undertaken throughout project design. They participated to all workshops (6 in total), and had multiple meetings with the PPG team members.<br><br>Representatives from DFRR and DWNP participated to the MSG workshop in Kasane on 14 and 15 October 2020.<br><br>Decentralised staff of DFRR was also consulted by the Stakeholders and Capacity consultant in Kasane on 12 November 2019 and in Tutume on 14 November 2019<br><br>Another meeting was held between Stakeholders and Capacity consultant and DFRR in Gaborone on 19 November 2019.<br><br>Bilateral and small group meetings with DFRR, DWNP and DEA also took place during the inception mission, the MSG missions and the gap feeling mission undertaken early March 2020. | MENT: overall project management, leads cross sectoral coordination for decision-making and policy strengthening<br><br>DEA: lead cross sectoral coordination of all relevant sectors on environmental issues, support integrated and cross sectoral landscape planning (together with DFRR, DCP, DAP, ODCs and OSDCs), lead the mainstreaming and monitoring LDN, undertake ecosystem assessments<br><br>DFRR: assist with cross-sectoral management planning, lead the implementation of interventions in forest land and establishment of woodlots, support the establishment of the FFS/APFS network and ToT programme (Mutare), support the establishment of local tree nurseries to complement the Community Nursery Programme, support policy review and enforcement<br><br>District Conservation Committee under DFRR: Support with the development of rangeland management interventions and improved fire prevention and management under Component 2<br><br>DWNP: cross-sectoral management planning, support implementation of interventions in and around National Parks and with the management of HWC, support policy review and enforcement<br><br>Department of Tourism (DT): cross-sectoral management planning, support with the development of Value Chains linked to nature-based tourism, support policy review and enforcement<br><br>National LDN Technical Working Group committee (to be established under the UTF project): oversee and discuss all technical assignments and tasks undertaken during the GEF7 project, and collaborate closely with | DFRR has been intensive involved in the project design process and will continue to central to the project during the implementation phase. The participation of DEA has been limited so far. Bilateral consultations will be organised at inception to identify more clearly the depth of involvement they can have in the project taking into account both their mandate and their capacity. |

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| ODCs and OSDCs<br><br>(under the Office of the President) | Primary | District Commissioner: Responsible for cross sectoral coordination at district level<br><br>DLUPU: collective of technical officers who advise the District Council and Land Board on land-use planning, helps to coordinate and integrate different technical land use managers<br><br>DCPPUs: planning authority at district level, responsible for physical planning and mapping | A representative from Chobe ODC participated to the MSG workshop in Kasane. | District Commissioner: lead cross-sectoral coordination for the design and implementation of ILUPs at the district level<br><br>District Land Use Planning Unit (DLUPU): support with the integration of SLM and SFM approaches in district-level planning processes<br><br>District Council Physical Planning Units (DCPPU): support with the coordination, linkages and complementarity of the interventions of the GEF7 project with other ongoing projects in the district, and support the development of the ILUPs. | The ODC in Chobe and the OSDC in Tutume are expected to play a key role in the project and currently have limited capacity. They will be consulted extensively at project inception to ensure that they are fully on board with all aspects of the project and with the expectations regarding their participation. The preferred means of communication and timing will be decided accordingly at inception. |
| TACs | Key | Technical reference groups (regroup technical staff from all sectors including government and parastatal institutions) | N/A | Role of Landscape LDN TWC through advising all relevant department at the district level on the adoption of the LDN approach to contribute to national LDN targets, in close collaboration with the National LDN TWG. | Small group discussions will be undertaken at project inception to assess the current knowledge on the TAC member on LDN and decide on the functioning of the Landscape LDN TWG and their linkages with the National LDN TWG in collaboration with the UTF team. |

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| Ministry of Land Management, Water and Sanitation Services (MLMWSS) | Key | Responsible for the management of land and water resources including physical planning and determining land utilization, management and development | A representative of the Department of Surveys and Mapping of MLMWSS participated to the Inception Workshop.<br><br>A representative of the Land Boards from Ngwato, Chobe and Tutume participated to the Inception Workshop in Gaborone, the MSG workshop in Chobe and the MSG workshop in Tutume respectively. | The responsibility for land allocation and custodianship is, however, mandated to the Ministry of Land Management, Water & Sanitation Services whose key thematic area of responsibility is Economy and Employment. It will therefore be a key institutional partner in the execution of the project. This ministry discharges its duties through land boards and sub-land boards (based in the districts and subdistricts) as well as some key departments such as Town and Country Planning, Surveys and Mapping, Deeds Registry, Land Tribunal and the Department of Lands. The Ministry is responsible for national physical planning and determining land utilization, management and development. It also provides services and information on cadastral surveying, mapping and remote sensing that inform physical planning. Its Department of Lands is responsible for allocating land in urban areas while the Land Boards are responsible for allocating tribal and communal land.<br><br>Land Boards and Sub-Land Boards: lead cross-sectoral management planning and oversee adequate budget and implementation of the ILUPs<br><br>Department of Water Affairs: PSC members, technical support on the management of surface water resources, rainwater harvesting, support policy review and enforcement | |

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| National Strategic Office | Key | Cross-sectoral collaboration relating to rural areas at national level | N/A | Support with the harmonisation and alignment of policies and programmes through facilitating greater multisectoral consultations at the central level<br><br>Support to ODCs and ODSCs to overcome any difficulties encountered with cross-sectoral collaboration during the course of the project | The national strategic office for not yet consulted but was identified as a key stakeholder during the consultation to support cross-sectoral planning at the central level and assist with overcoming any barriers that could be encountered during the implementation phase. |

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| MoA | Key | Focuses on improving food security and championing agricultural development through local production, reduction of import bill, diversification of the sector, value addition, employment, promotion of consumption of local food products. | Representatives of MoA participated to the inception workshop in Gaborone on 17th September 2019<br><br>Representative of LIMID and Agribusiness consulted by the PPG consultants in Kasane on 07, 08 and 11 November 2019<br><br>The PPG consultant (VC) met with DCP (including with ISPAAD representatives) several time between 18 and 21 November 2019.<br><br>Small group meetings with DAP and DCP (including representatives of ISPADD and LIMID programmes) took place during the gap feeling mission undertaken early March 2020. | Department of Crop Production: technical support on crop production matters, development of conservation agricultural, participate actively in the development of the FFS/APFS and CSB networks, support policy review and enforcement, close collaboration on their ISPAAD project.<br><br>Department of Livestock production: technical support on animal production matters, rangeland management and small livestock production, participate actively in the development of the FFS/APFS and CSB networks support policy review and enforcement, close collaboration on their LIMID project.<br><br>Department of Agricultural Research: close collaboration on the development of local seed production and on improving the provision of resilient and locally adapted agricultural inputs under ISPAAD.<br><br>Department of Veterinary Services: monitoring of and support in addressing any disease outbreaks.<br><br>Department of Agribusiness: close collaboration with BirdLife Botswana on CBOs capacity assessment and strengthening, Business Plans development and implementation, and Value Chains development (this will strengthen their capacity and support the sustainability of the project interventions) | The relevant departments of MoA will be continuously involved in the project as they are both a major sector regarding the management of natural resources and they manage the subsidies programme targeted under the GEF7 project for increased efficiency, resilience and sustainability of their investments. |

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| Ministry of Local Government and Rural Development (MLGRD) | Key | Responsible for local community development in rural areas | Meeting with the Stakeholders and Capacity consultant on 11 November 2019 in Mabele<br><br>A representative from MLGRD participated to the project Inception Workshop in Gaborone on 17 September 2019.<br><br>A bilateral consultation with a School Feeding Programme representative was organised during the gap feeling mission early March 2020. | Close collaboration on their Community Development Programme, School Feeding Programme and other interventions to identify strengths and weaknesses of the programme, opportunities for linkages with the GEF7 project, and provision of targeted support to increase the long-term success of local government's investments through inter alia the strengthening and harmonisation of monitoring and evaluation approaches, supporting efficient cross-sectoral collaboration, and promoting SLM and SFM in alignment with LDN. | |
| Ministry of Finance and Economic Development | Key | Oversees the progress with achieving national goals (under NDPs) and SDGs among others, as well as budget allocation | N/A | Collaboration in reviewing budgeting processing and identifying ways to facilitate cross-sectoral management of natural resources<br><br>Analysis of the capacity of ODCs in fulfilling their roles and identification of means to address the capacity gaps | The MFED will be consulted at project inception to finetune the timing for discussion on the budgeting and policy processes as well as the preferred method of involvement and communication. |

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| Ministry of Gender, Women Empowerment (MGWE) | Key | Oversees the integration of the principles of gender equity across sectors and development plans | N/A | Support the integration of gender safeguards across the project interventions<br><br>Capacity building and awareness raising for decentralised government and CBOs on gender issues and gender sensitive interventions<br><br>Participate to cross-sectoral management planning with a particular focus on the integration of gender aspects<br><br>Assist in the identification of women CBOs and best approach for the active participation of women<br><br>Support the training interventions for CBOs | The MGWE will be consulted at inception to fine tune the identification of any additional opportunities to further increase gender integration in the interventions. |
| Ministry of Youth empowerment, sport and cultural development (MYESCD) | Key | Improve Livelihoods of Youth and create an enabling environment for youth empowerment | N/A | Participate to cross-sectoral management planning with a particular focus on the integration of youth<br><br>Assist in the identification of youth CBOs<br><br>Assist in identifying the best approach to business plan development and Value Chain strengthening under Component 2 to maximise the active involvement of youth<br><br>Support the training interventions for CBOs | A meeting with MYESCD and main youth associations within the targeted sub-basin will be undertaken at project inception to clarify the role of each institution in the mobilisation and support of youth particularly for the implementation of the interventions under Component 2. |

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| VDC and Village Chiefs | Primary | Responsible for land management at the village level and village development | Three representatives of the VDC of Mosetse were consulted on 14 November 2020.<br><br>Two VDCs were represented at the MSG workshop in Kasane and nine VDC were represented at the MSG workshop in Tutume.<br><br>The Village Chief of Mosetse was consulted on 14 November 2020.<br><br>Representative from the tribal administrative in Kasane and Parakarungu participated to the workshop in Kasane.<br><br>Tribal authorities from nine villages were represented at the MSG workshop in Tutume. | Actively involved in the development and implementation of the ILUPs. Major role in the downscaling of the plans at the village level. | |

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| Dikgosi and Kgotla | Primary (and key regarding their influence) | Traditional chiefs and head of the community committees (Kgotla) | ??? | Community mobilisation<br><br>Support in identifying and accessing all community groups including minority groups<br><br>Take ownership of the decision-making and planning processes at the local level<br><br>Take ownership of the implementation of the ILUPs and collaborate actively with local authorities on the monitoring activities for natural resources management | Dikgosi, Kgotla members (community representatives) and community members will be continuously involved in the project during the implementation phase. Kgotla assemblies will be gathered for each step of the decision-making process. In addition, annual reports on the project progress will be submitted to the Kgotla assembly to ensure that the official community consultation system is followed adequately. |

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| Community Trusts (CECT, Mantenge, Domboshaba), associations and cooperatives (Vuche-Vuche, Lwaavo Arts and Cultural Centre), Women groups and Youth groups | Primary | CBOs active in the targeted sub-basins and focusing on improving the livelihoods of their members<br><br>(CECT: has a tourism concession, and they support sorghum producers through ploughing and milling) | CECT: Discussion with the Stakeholders and Capacity consultant over the phone on 11 November 2019 and participation to the MSG workshop in Kasane<br><br>Vuche-Vuche: meeting with the PPG consultant on 11 November 2019 in Mabele<br><br>A representative from Lwaavo Arts and Cultural Centre participated to the MSG workshop in Kasane.<br><br>A meeting with Lwaavo Arts and Cultural Centre and Swizumboka group was also organised by the PPG consultant (VC) on 7 November 2019.<br><br>A representative from Pandamatenga Farmers Association participated to the MSG workshop in Kasane. | Participatory identification of their capacity and interests, and related training needs.<br><br>Experience sharing and support in identifying and accessing all community groups including minority groups<br><br>Participatory refinement of the identification of weaknesses and preferred approach to strengthen their Value Chains of interest<br><br>Participation in business plans development | The project approach under Component 2 is strongly based on communities organisation into CBNRM organisations, associations and cooperatives. This will build as much as possible on existing group and CBOs that will be strengthened. The involvement of existing CBOs in the project implementation phase will therefore be central and intensive as they will be selecting their livelihoods of interest as are expected to take ownership of the sustainable management of the corresponding resources. |

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| Community members | Primary | Land-users in the targeted sub-basins | Individual meetings with producers (honey, sorghum, lablab, small livestock, basket weaving) were organised by the PPG consultant (VC) between 7 and 14 November 2019. | Owners of the project<br><br>Active participation in the development of the ILUPs<br><br>Active participation in the capacity assessment work and training sessions<br><br>Active participation in the development of FFS/APFS network, CSB network and business plans | Extensive consultations with local communities (through the Kgotla assemblies and focus groups with targeted groups such as women and youth) will be undertaken at project inception to ensure the full support of the community groups on each aspect of the project. |
| Indigenous groups | Primary | San people leaving in Tutume-Mosetse sub-basin | The project will work with indigenous peoples groups and representatives to make certain all engagement respects cultural norms, uses traditional language, and provides ample opportunity for members of these communities to engage in and benefit from project decision-making | Participatory identification of their capacity and interests regarding livelihood development, and related training needs.<br><br>Participation in business plans development | Direct meetings with indigenous groups in Tutume could not take place during the PPG phase due to COVID19 concerns. However, key persons, organizations, and indigenous peoples representatives were engaged through national and district level government officials who work regularly with these indigenous communities. |
| Botswana University of Agriculture and Natural Resources (BUAN) | Key | Provide higher education and training in the field of agriculture, natural resources to produce market–ready graduates | A representative from BUAN participated to the project Inception Workshop in Gaborone on 17 September 2019. | Research of SLM and SFM technologies, climate resilience of crop, shrub and tree varieties<br><br>Promote the integration of SLM and SFM in the curricula for agricultural and natural resources management | BUAN is seen as a key partner for the mainstreaming of SLM and SFM. They will be involved at every stage of Component 2 and 3 to ensure that they have all required understanding and evidence-based information to integrate SLM and SFM principles in the curricula of their students. |

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| BIUST | Secondary | Research based University that specialises in Engineering, Science and Technology | A representative from BIUST participated to the project Inception Workshop in Gaborone on 17 September 2019.<br><br>A bilateral meeting was organised on 24 September 2019 Current research projects in Chobe and Makgadikgadi landscape. | Research of SLM and SFM technologies, climate resilience of crop, shrub and tree varieties<br><br>Promote the integration of SLM and SFM in the curricula for agricultural and natural resources management | BITRI is currently undertaking research project that are highly relevant to the GEF7 project (e.g. on carbon storage and land degradation). Strong collaboration will be maintained throughout the implementation phase to ensure timely information sharing between the GEF7 project and BITRI, and find synergies to fill in knowledge gaps in support for SLM, SFM and LDN. |

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| Botswana Agricultural Marketing Board (BAMB) (parastatal) | Key | Mandated to provide a market for locally grown scheduled crops such as cereals (e.g. sorghum), pulses/beans and oil seeds, and ensure that adequate supplies exist for sale to customers at affordable prices.<br><br>BAMB operates fourteen (14) branches and twenty three (23) sales offices countrywide where it buys, stores and sells produce and inputs. BAMB has storage capacity in excess of 100 000 metric, 85,000mt of which is of silo space at Pitsane, Francistown and Pandamatenga and the rest is made of warehouses. | A meeting with BAMB was held in Tutume on 5 November 2019 by the PPG consultant (VC). | Participatory identification of weaknesses of the grading system of price establishment, and identification of improvement opportunities.<br><br>Participate to the discussions to refine the identification of weaknesses and opportunities for improvement of seeds and NUUCs', and seeds and agricultural inputs Value Chains.<br><br>Support the promotion of the products targeted under the Value Chain strengthening interventions under Component 2 | |

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| Botswana Institute for Technology Research and Innovation (BITRI)<br><br>(under Ministry of Tertiary Education, Research, Science and Technology) | Key | Mandated to identify, develop and/or adapt appropriate technology solutions (including for Climate Change Adaptation) that provides sustainable innovative solutions through co-creation and collaboration in line with national priorities and needs of Batswana | A bilateral meeting was held with a BITRI representative during the Inception Mission (on 23 September 2020) to discuss ongoing research projects. | Support with maximising the climate resilience of the technologies selected and adopted under the GEF7 project (Climate Smart Agriculture, improved energy sources…). | BITRI is currently undertaking research project that are highly relevant to the GEF7 project (including on crops resilience and on climate change). Strong collaboration will be maintained throughout the implementation phase to ensure timely information sharing between the GEF7 project and BITRI, and find synergies to fill in knowledge gaps in support for SLM, SFM and LDN. |
| Botswana Tourism Organisation (BTO) | Secondary | Corporate body focused on developing Botswana into a preferred tourism destination | A representative from BTO participated to the project Inception Workshop in Gaborone on 17 September 2019. | Support CBOs in the development of tourism-based livelihoods and of partnerships with private sector actors, and in promoting the newly developed tourism activities | |
| Business Botswana | Key | Association of private sector companies focused on enhancing the business environment and building the vitality and competitiveness of the private sector in Botswana | N/A | Support in ensuring that all relevant private organizations are identified and engaged with timely to maximise private partnership contribution under the GEF7 project to support the out scaling and sustainability of the project outputs. | Business Botswana will be approached at project inception to refine the strategy for the involvement of the private sector in the project interventions particularly under Component 2. |

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| FAO | Key<br><br>GEF Lead Implementing Agency | | Led detailed project design.<br><br>Representatives from FAO HQ participated to the project Inception Workshop in Gaborone on 17 September 2019.<br><br>FAO HQ Capacity Development expert participated to the MSG workshop in Kasane and Tutume. | GEF Lead Implementing Agency. | |
| JICA | Key | Long experience in working in Botswana on forest resources management.<br><br>Lead agency for the development of the Master Plan for the Conservation Sustainable Use of Forest and Range Resources | A meeting with JICA was organised on 3 September 2019 to discuss their ongoing project and identify synergies. Further calls and email exchanges with JICA were undertaken to refine the opportunities for collaboration. | Work in close collaboration with GEF7 project to maximise synergy, harmony and complementarity between the GEF7 project and JICA projects particularly concerning the management of forest resources and fires. | |

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|---|---|---|---|---|---|
| UNDP | Key | UNDP has implemented the previous GEF projects in Chobe and Makgadikgadi landscapes. UNDP led the development of the three existing ILUPs in the country: Chobe, Makgadikgadi and Okavango Delta. | A bilateral meeting was organised on 3 September 2019 at UNDP Office in Gaborone. A second meeting (over skype) was organised on 12 March 2020.<br><br>A representative from UNDP participated to the Inception Workshop in Gaborone on 17 September 2020.<br><br>A skype meeting was organised with a representative of the GEF SGP on 13 March 2020 to discuss the Operational Plans 6 and 7. | Provide continuous support throughout the project implementation phase to ensure that the GEF7 project builds adequate on existing experience and lessons learned on cross-sectoral decision-making, integrated land-use planning and plans implementation. | |
| KAZA | Key | Focusing on the sustainable management of the Kavango Zambezi ecosystem | A representative from KAZA participated to the Inception Workshop in Gaborone on 17 September 2020.<br><br>A bilateral meeting was organised with the TFCAs Focal Point under MENT on 23 September 2019. | Close collaboration on tourism development and on mapping and addressing transboundary issues involving Chobe basin | |
| SADC | Key | Focusing on achieving development and economic growth in Southern Africa | SADC representative participated to the Inception Workshop and to the DSL IP Global Workshop in January 2020. In addition, a bilateral meeting was organised during the inception mission. | Close collaboration on increased knowledge sharing and the establishment of a harmonised M&E system across southern African countries involved in the GEF7 programme, and on mapping and addressing transboundary issues involving Chobe basin | |

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| CEDA | Key | CEDA provides loan services including microloans for businesses (Small and Medium Enterprises) operating in the services industry. | A meeting over the phone was undertaken at the end of January 2020 to discuss the current financing systems of CEDA and their support to small-scale farmers. | Promote SLM and SFM through support CBOs of farmers who have adopted improved practices. | |
| MTI | Secondary | Responsible for Value Chains enhancement and key stakeholder for the implementation of the NDP 11 | A meeting between LEA and the PPG consultant (VC) was organised on 8 November 2011 in Kasane. | The Division of Cooperatives and LEA will work in close collaboration with BirdLife Botswana on: CBOs capacity assessment and strengthening, Business Plans development and implementation, and Value Chains development. This will strengthen their capacity and support the sustainability of the project interventions. | |
| Tourism companies | Key | Operating tourism operators, lodges and hotels… in Chobe basin | N/A | Development of CSR or PES agreements with interested companies to support the development of sustainable livelihoods based on SLM and SFM in the communities surrounding their area where they are operating. | The best strategy for the involvement of tourism operators in Chobe will be determined at inception in a participatory manner with DFRR, DEA, DWNP, BTO, ODC, Land Board and CECT. |
| Mining companies | Secondary | Operating and prospecting companies in Chobe and Tutume-Mosetse | N/A | Development of CSR or PES agreements with interested companies to support the development of sustainable livelihoods based on SLM and SFM in the communities surrounding their area where they are operating. | The best strategy for the involvement of mining companies in Tutume will be determined at inception in a participatory manner with DEA, DFRR, BirdLife, UNDP, ODC, DFRR and Business Botswana. |

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|---|---|---|---|---|---|
| Large corporates<br><br>(telecommunication) | Secondary | National corporates interested in participating into a CSR scheme | Botswana Power Corporation participated to the Inception Workshop. | Support for the adoption of improved practices by land-users (SLM and SFM) using a CSR scheme. | Opportunities for the development of CSR with large corporates will be looked into by the Round Table during the course of the project. |
| Private milling companies<br><br>Private meat processors<br><br>Livestock feed company<br><br>Agricultural outlets<br><br>Chain stores | Key | Private sector companies operating the targeted basins | Milling Co Thini was consulted by the Stakeholder and Capacity consultant on 14 November 2019 in Thini. | Collaboration in the development of Value Chains under Component 2 through assisting in undertaking the diagnostic of existing value chains and collaborating in the development of more sustainable Value Chains. | The local companies to be engaged closely on the project will be selected based on the value chains targeted under the business plans to be developed under Component 2. |
| CARACAL NGO | Secondary | Focusing on land degradation causes, land-uses and environmental impacts<br><br>Also support a women association doing basket weaving (based on Kasane) | A representative of the NGO participated to the MSG workshop in Kasane. A bilateral meeting at Caracal NGO offices was also organised during the MSG mission. | Technical support for the design and implementation of the interventions in Chobe sub-basin<br><br>Support with the diagnostic of the basket weaving value chain | |

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|---|---|---|---|---|---|
| BirdLife Botswana | Key | Focusing on integrated land-use planning and development of sustainable livelihoods in different areas but especially in Makgadikgadi landscape (based in Gaborone) | A Skype meeting was held on 11 March 2020 to discuss BirdLife previous experience in the targeted sub-basins, capacity and ongoing projects. | Undertake CBOs capacity assessment and training (administrative and financial management, business plan development) under Component 2<br><br>Support the establishment of the FFS network and the CSB network<br><br>Support the development and implementation of Business Plans and Value Chains strengthening | As Operational Partner, BirdLife will take a leading role throughout the project implementation phase particularly for the work with CBOs and community members under Component 2. |

In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement.

Summary of stakeholder engagement during project development

1. Stakeholder consultations were carried out through workshops, individual interviews and focus group interviews to solicit views on capacity to manage the proposed project activities to achieve land degradation neutrality.

2. The PPG Inception Workshop was organised at the central level in Gaborone on 17th September 2019 (34 participant) with the following institutions: MoA, BIUST, BUAN, Botswana National Beef Producers Union (Public Relations), BTO, MENT (DFRR, DMS), Department of Surveys and Mapping under MLMWSS, FAO, FoodBank Botswana Trust, Hospitality and Tourism Association of Botswana (HATAB), International Livestock Centre for Africa, MLGRD, Ngwato Land Board, SADC, KAZA and UNDP. Two Multi-Stakeholders Consultation meetings were thereafter held over two days in Kasane (Chobe District) on 14 and 15 October with 45 participants and in Tutume (Tutume sub-district) on 17 and 18 October with 38 participants. In Kasane, the participants to these workshops included the following organisations: MENT (DFRR, DMS, DWNP), CECT, Botswana Power Corporation, Caracal NGO, Lwaavo Art and Culture association, Pandamatenga Farmers Association, Chobe Land Board, ODC, two VDCs, Tribal

Administration, FAO, Police, resource people and DAEWOO Engineering & Construction. In Tutume, representatives from MENT (DFRR), nine VDCs, Masunga Farmers Association, Land Board, Tribal Authorities from nine villages, FAO and NGBBPA participated to the workshop.

3. A participatory stakeholder mapping was conducted during each of these three workshops to identify key, secondary and primary stakeholders in the proposed project. The working groups were able to categorize their identified stakeholders into the three segments of government, private sector and civil society organisation. In addition, complementary individual and group consultations were undertaken in the baseline site between 11 and 19 November 2019 which enabled to further refine the analysis.

4. Bilateral meetings with DFRR were undertaken throughout project design. They participated to all workshops (6 in total), and had multiple meetings with the PPG team members. Representatives from DFRR and DWNP participated to the MSG workshop in Kasane on 14 and 15 October 2020. Decentralised staff of DFRR was also consulted by the Stakeholders and Capacity consultant in Kasane on 12 November 2019 and in Tutume on 14 November 2019. Another meeting was held between Stakeholders and Capacity consultant and DFRR in Gaborone on 19 November 2019. Bilateral and small group meetings with DFRR, DWNP and DEA also took place during the inception mission, the MSG missions and the gap feeling mission undertaken early March 2020.

5. Representatives of MoA participated to the inception workshop in Gaborone on 17th September 2019. Representative of LIMID and Agribusiness consulted by the PPG consultants in Kasane on 07, 08 and 11 November 2019. The PPG consultant (VC) met with DCP (including with ISPAAD representatives) several time between 18 and 21 November 2019. Small group meetings with DAP and DCP (including representatives of ISPADD and LIMID programmes) took place during the gap feeling mission undertaken early March 2020.

6. Meeting with the Stakeholders and Capacity consultant on 11 November 2019 in Mabele. A representative from MLGRD participated to the project Inception Workshop in Gaborone on 17 September 2019. A bilateral consultation with a School Feeding Programme representative was organised during the gap feeling mission early March 2020.

7. Three representatives of the VDC of Mosetse were consulted on 14 November 2020. Two VDCs were represented at the MSG workshop in Kasane and nine VDC were represented at the MSG workshop in Tutume. The Village Chief of Mosetse was consulted on 14 November 2020. Representative from the tribal administrative in Kasane and Parakarungu participated to the workshop in Kasane. Tribal authorities from nine villages were represented at the MSG workshop in Tutume.

8. CECT: Discussion with the Stakeholders and Capacity consultant over the phone on 11 November 2019 and participation to the MSG workshop in Kasane. Vuche-Vuche: meeting with the PPG consultant on 11 November 2019 in Mabele. A representative from Lwaavo Arts and Cultural Centre participated to the MSG workshop in Kasane. A meeting with Lwaavo Arts and Cultural Centre and Swizumboka group was also organised by the PPG consultant (VC) on 7 November 2019. A representative from Pandamatenga Farmers Association participated to the MSG workshop in Kasane.

9. Individual meetings with producers (honey, sorghum, lablab, small livestock, basket weaving) were organised by the PPG consultant (VC) between 7 and 14 November 2019. A representative from BIUST participated to the project Inception Workshop in Gaborone on 17 September 2019. A bilateral meeting was organised on 24 September 2019 Current research projects in Chobe and Makgadikgadi landscape. A meeting with BAMB was held in Tutume on 5 November 2019 by the PPG consultant (VC).

10. A bilateral meeting was held with a BITRI representative during the Inception Mission (on 23 September 2020) to discuss ongoing research projects. A representative from BTO participated to the project Inception Workshop in Gaborone on 17 September 2019. A meeting with JICA was organised on 3 September 2019 to discuss their ongoing project and identify synergies. Further calls and email exchanges with JICA were undertaken to refine the opportunities for collaboration. A bilateral meeting was organised on 3 September 2019 at UNDP Office in Gaborone. A second meeting (over skype) was organised on 12 March 2020. A representative from UNDP participated to the Inception Workshop in Gaborone on 17 September 2020 A skype meeting was organised with a representative of the GEF SGP on 13 March 2020 to discuss the Operational Plans 6 and 7. A representative from KAZA participated to the Inception Workshop in Gaborone on 17 September 2020.

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11. A bilateral meeting was organised with the TFCAs Focal Point under MENT on 23 September 2019. SADC representative participated to the Inception Workshop and to the DSL IP Global Workshop in January 2020. In addition, a bilateral meeting was organised during the inception mission. A meeting over the phone was undertaken at the end of January 2020 to discuss the current financing systems of CEDA and their support to small-scale farmers. A meeting between LEA and the PPG consultant (VC) was organised on 8 November 2011 in Kasane. Botswana Power Corporation participated to the Inception Workshop. Milling Co Thini was consulted by the Stakeholder and Capacity consultant

on 14 November 2019 in Thini. A representative of the NGO participated to the MSG workshop in Kasane. A bilateral meeting at Caracal NGO offices was also organised during the MSG mission. A Skype meeting was held on 11 March 2020 to discuss BirdLife previous experience in the targeted sub-basins, capacity and ongoing projects.

**Select what role civil society will play in the project:**

**Consulted only;** Yes

**Member of Advisory Body; Contractor;** Yes

**Co-financier;**

**Member of project steering committee or equivalent decision-making body;**

**Executor or co-executor;**

**Other (Please explain)**

**3. Gender Equality and Women's Empowerment**

**Provide the gender analysis or equivalent socio-economic assesment.**

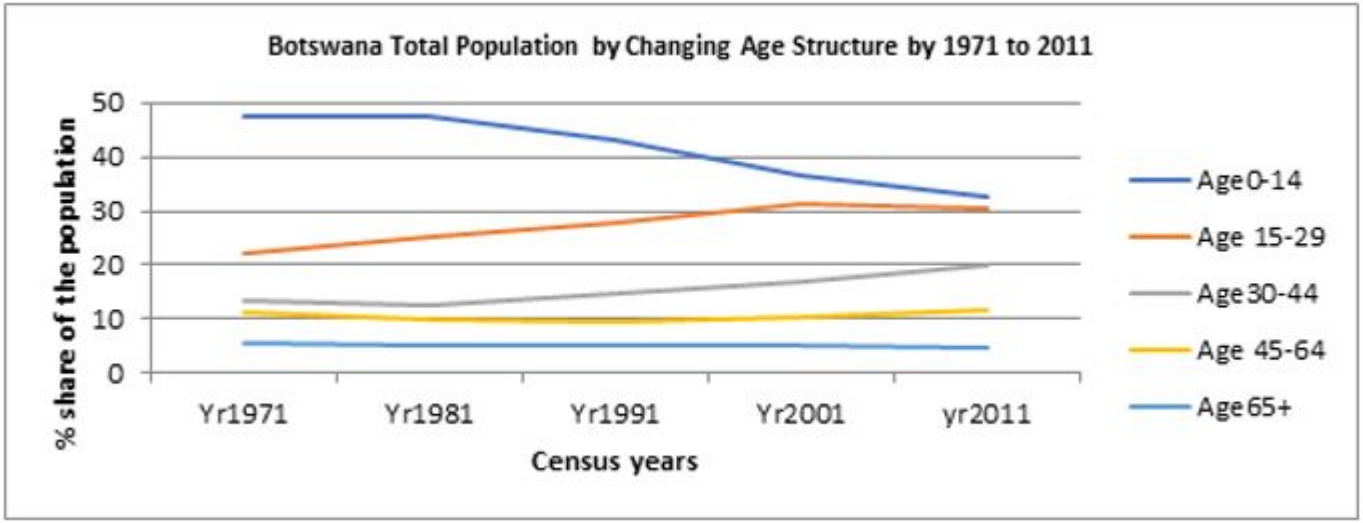
1. Women's empowerment and issues of gender equality are fully integrated within the project design. Women are critical stakeholders and target beneficiaries. Women are highly engaged in rural economic practices. The project will have specific avenues for women participation and benefits. This includes provisions reflect in Component 1 (planning), Component 2 (practice) and Component 3 (knowledge). The project, for instance, will establish FFS that specifically target women and issues of empowerment. This includes FFS designed for women cohorts. The project will also work with the Government of Botswana to increase the presence and role of women in extension services. This will greatly facilitate empowerment and engagement. The project will follow gender related guidelines of both GEF and FAO. The project's results framework has indicators that are designed to track positive impacts in terms of benefits and empowerment with indicators and associated monitoring disaggregated by gender.

2. Demographic data indicate that women generally outnumber men in terms of total populations, but mobility, migration and livelihood strategies impact on differences in the settlement patterns that women and men exhibit: therefore produce different gender structures of various settlements. Overall, as illustrated on table 6.1 below, women's share of the national population has reduced from 54% in 1971 to 51% in 2011. This trend is most pronounced in the younger age cohorts (0 to 44). But among the elderly, women's share of the population has increased to 60%: suggesting that they increasingly bear the brunt of vulnerability of old age under both decreasing family support systems and inadequately packaged government social safety networks that assume thriving traditional family supportThe scourge of AIDS which hit Botswana in the 1990s has also contributed to exacerbating the situation: as will the impact of climate change and its effects on natural resource dependent communities.

Trends in %Female Share of the National Population x Age Cohorts x5 Censuses

| Year | Age0-14 | Age 15-29 | Age30-44 | Age 45-64 | Age65+ | Total |
|---|---|---|---|---|---|---|
| Yr1971 | 51 | 60 | 58 | 54 | 56 | 54 |
| Yr1981 | 50 | 56 | 55 | 53 | 56 | 53 |
| Yr1991 | 50 | 53 | 54 | 53 | 55 | 52 |
| Yr2001 | 50 | 52 | 53 | 53 | 59 | 52 |
| Yr2011 | 50 | 51 | 50 | 54 | 60 | 51 |

***Trends in age structure of the Botswana National Population x 5 Censuses***




3. Demographic trends also suggest dividends that might be harnessed for gender equity. The age structure has increasingly shifted from a large proportion of children in favour of working age groups as reflected in Figure 1. The share of children under 15 has dropped from 48% in 1971 to 31% in 2011 from where it is expected to drop even further by 2026. On the other hand, the most dramatic shift has been within the male population (i.e. a 17 percent point drop from 51% in 1971 to 34% of under 15 year olds in 2011), while the female population under 15 girls now only account for 31% of the female population (drop from 44%). The working age women now make up 64% of the female population compared to men where that age cohort accounts for 62% of the male population (table The significance of this shift in age structure is that the burden of childcare on women has eased: allowing women more freedom to participate in the labour force: a situation whose significance is further underlined by the fact that Botswana fathers have generally been missing in action in relation to child maintenance.

Male and Female Population Trends by Age Cohorts x Five Censuses

| Male population | Age Groups x Percent share | | | | | |
|---|---|---|---|---|---|---|
| Census Year | Age0-14 | Age 15-29 | Age30-44 | Age 45-64 | Age65+ | Total |
| Yr1971 | 51 | 20 | 12 | 12 | 5 | 100 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Yr1981 | 50 | 23 | 12 | 10 | 5 | 100 |
| Yr1991 | 45 | 27 | 14 | 9 | 5 | 100 |
| Yr2001 | 38 | 31 | 17 | 10 | 4 | 100 |
| Yr2011 | 34 | 31 | 20 | 11 | 4 | 100 |
| | | | | | | |
| Female population | Age Groups x Percent share | | | | | |
| Census Year | Age0-14 | Age 15-29 | Age30-44 | Age 45-64 | Age65+ | Total |
| Yr1971 | 44 | 25 | 14 | 11 | 6 | 100 |
| Yr1981 | 45 | 27 | 13 | 10 | 5 | 100 |
| Yr1991 | 42 | 28 | 15 | 9 | 5 | 100 |
| Yr2001 | 35 | 31 | 17 | 10 | 6 | 100 |
| Yr2011 | 31 | 31 | 20 | 13 | 5 | 100 |

4. Another significant demographic shift that has a bearing on the search for gender equity is the rate of urbanization. Generally Botswana has seen an increasing share of the population by urban districts as well as increasing urbanization within rural districts. Urban districts have increased their share from 9% to 22% over the past five censuses due to rural urban migration. But within rural districts some villages have grown from predominantly agro-pastoral sites where the overwhelming majority of residents rely essentially on natural resources and ecosystem services for their livelihoods to where more than 75% of the residents have non-farm related incomes and the population exceeds more than 5,000 people per settlement. This rural urbanization has brought more diversity of incomes sources for women who were historically the predominant rural population from the advent of male migration to South African Mines in the 1940s.

5. Within the project landscape of Chobe and the Tutume sub-district demographic where data are not sufficiently disaggregated, trends in gender distribution are similar to national trends and other rural districts. In 2011 women accounted for 52% of the total population of Chobe and Tutume districts. However, Chobe reflected a lower proportion of women (49%) and had only one settlement qualifying for an urban village in 2011 and this was Kasane. Another fast growing and diversifying settlement was Kazungula which is likely to be given urban village status by 2021. The Tutume sub-district had eight urbanizing villages in 2011 and these accounted for 45% of the sub-district population. The urban villages here had a higher than average female population at 55% compared to the district structure of 52%. The non-urbanized settlements were essentially gender balanced (50% female) except for the fact that cattle posts tend to be dominated by men while women precipitate towards the larger agro-village settlements and lands areas. The

significance of this gendered settlement pattern is that project activities are more likely to reach women in the more settled rural and urbanizing areas which are also in closer proximity to browsing areas for small stock.

**Enumerated Population of Men and Women and Projected Population in the Proposed Project Landscape**

| | Enumerated Population x 2011 census | | | | | Projected population up to 2026 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| District | Male | Female | Total | %fem | Col% | ***2020*** | ***2021*** | ***2022*** | ***2023*** | ***2024*** | ***2025*** | ***2026*** |
| Tutume | 70,330 | 77,047 | 147,377 | 52 | 86 | 171339 | 173742 | 176121 | 178476 | 180806 | 183114 | 185401 |
| Chobe | 12,023 | 11,324 | 23,347 | 49 | 14 | 31024 | 31566 | 32107 | 33007 | 33186 | 33723 | 32389 |
| Total | 82,353 | 88,371 | 170,724 | 52 | 100 | 202363 | 205308 | 208228 | 211483 | 213992 | 216837 | 217790 |

***Summary of Significant Characteristics in Gender, Resource Management and Livelihoods***

6. *Agricultural Resources*: Gender disparities in agricultural resources suggest that there is a greater chance of benefits for women in small stock value chains than in cattle at production level. According to the 2017 Agricultural statistics gender disparities are highest in cattle ownership where women owners account for 29% of the farmers and only 19% of the cattle in the Tutume landscape while in the Chobe the ratio of cattle owners is 82% men controlling 92% of the district cattle (table 6.4). This, as illustrated on table 6.5, translates into an average cattle herd sizes of 36 animals per male owner against 22 animals for female owners in the Tutume landscape. In the Chobe landscape male owned holdings average 50 cattle compared to women owned average of 20 animals. With regards to small stock ownership, women have some advantage over men in terms of sheep herd size in Tutume, but lower average herd size in terms of goats. In the Chobe landscape average goat herd size for male and female farmers is equal. But in terms of rate of participation in small stock ownership women account for 33% of Tutume sheep owners and 36% of the animals, as well as 35% of goat farmers and 27% of the goats. In the Chobe landscape where sheep were not captured by the 2017 Agriculture Survey, women's small stock advantage is in goats where they account for 38% of the goat owners and 36% of the goats owned in the district.

7. With regards to arable land, women account for 40% of the land holders and 34% of the hectorage in Tutume, compared to 34% women in Chobe controlling 30% of the hectorage. This is due the smaller fields that women hold. In Tutume the average land size for women is 3 ha compared to 4ha by men (table 6.5) while Chobe women average 7 ha against 8 ha by men. A contributing factor to smaller hectorage by women has historically been that: 1) they command fewer drought power resources (cattle) and; 2) they are

often short of male labour for their land preparation. Although Botswana laws have formally accorded women equal rights to land and other resources, there are still powerful conventions acting against that opportunity: including practices of and assumptions made by officials, family members and land tenure systems that rely overly on customary beliefs that privilege men.

Gender and Ownership of Selected Agricultural Resources by Percent Share of Resources in the Project Landscapes

| | Resource Owners Gender structure% | | | Resources Owned (% share) | | |
|---|---|---|---|---|---|---|
| **Tutume Landscape** | males | females | All | by men | by women | by all |
| Cattle ownership | 71 | 29 | 100 | 81 | 19 | 100 |
| Sheep ownership | 67 | 33 | 100 | 64 | 36 | 100 |
| Goat ownership | 65 | 35 | 100 | 73 | 27 | 100 |
| Land ownership | 60 | 40 | 100 | 66 | 34 | 100 |
| | | | | | | |
| **Chobe landscape** | **males** | **females** | **All** | **by men** | **by women** | **by all** |
| Cattle ownership | 82 | 18 | 100 | 92 | 8 | 100 |
| Sheep ownership | 0 | 0 | 0 | 0 | 0 | 0 |
| Goat ownership | 62 | 38 | 100 | 64 | 36 | 100 |
| Land ownership | 66 | 34 | 100 | 70 | 30 | 100 |

Gender and Ownership of Selected Agricultural Resources by Average Quantities in the Project Landscapes

| | Average Quantities of Agric Resources per Farmholder by TUTUME Landscape | | | Average Quantities of Agric Resources per Farmholder by Chobe Landscape | | |
|---|---|---|---|---|---|---|
| Agric Resource | male owned | Female owned | All owners | male owned | Female owned | All owners |
| Cattle (Number) | 36 | 22 | 32 | 50 | 20 | 45 |
| Sheep (number) | 11 | 13 | 12 | 0 | 0 | 0 |
| Goat (number) | 22 | 15 | 19 | 6 | 6 | 6 |
| land size (Hectares) | 4 | 3 | 3 | 8 | 7 | 8 |

8. *Ecosystem Resources and Services* There is very little gender disaggregated data for landscape level use of ecosystem resources and services. However, significant insights can be drawn from various sources and patterns of livelihood. Agricultural activities, for instance rely on water and grazing resources in communal rangelands. Livestock keeping takes place on communal landscapes, where there is no exclusive ownership of the range resources, farmers who are allowed to sink boreholes to water their livestock invariably also have de facto control of some six to eight kilometre radius of rangeland around the borehole. The 2018 FAO national Gender Profile on Agriculture and Rural Livelihoods indicated a huge disparity in borehole ownership that is consistent with other gender inequalities in resources: with women owning 27% of boreholes and men owning 73%. Ownership of a borehole on customary land gives the owner de jure rights to groundwater and de facto rights to the surrounding land. This therefore has gender implications for access to grazing lands. It is mostly around boreholes that land is most degraded: forcing livestock to trek long distances between watering points and available scarce grazing resources made even scarcer by the impact of climate change. The 2013 plan for water resource management also noted that women's negligible control over water resources for productive use makes them vulnerable to reduced access when there are water shortages.

9. Most rural households rely on natural resources to meet their energy needs (cooking and heating), home construction/maintenance (thatch, poles, sand, soil, reeds, etc), food (game meat, fisheries, veld fruit and vegetables), raw material for crafts and commercial use. The 2018 FAO report on gender profiles in Agriculture and rural development highlighted the following points on gender and resources.

10. The Chobe river provides fishing opportunities for men and women: particularly during the rainy season when river banks are flooded and fishing by women reaches its peak as they can use hand woven baskets. And while both men and women are involved in fishing in the Chobe River and Okavango Delta, women are the ones involved mostly in the small business of selling fish.

11. The forests of Chobe provide significant benefits in terms of timber and wood as well as non-wood forest products and an array of ecosystem services, in addition to supporting of livelihoods across the sub-region. However the forestry sector suffers from low investment, limited capacity and lack of data especially those disaggregated by sex, while gender mainstreaming in forestry farming and in the National Forestry Policy are lacking. But the Forestry and Range Resources Department manages public awareness activities that help to guard against unsustainable utilization of forestry resources and encourage tree planting to reduce pressure of overutilization. It was noted that the forestry activities are limited in Botswana, compared to neighbouring countries.

12. Employment and Poverty: Although Botswana women have historically gone to school in larger numbers than men, this has never translated into an advantage in terms of employment. As table 6.6 illustrates, at the Tutume landscape women account for 44% of the employed while Chobe landscape accounts for 42%; reflecting a persistent problem of job market inequalities. In the Chobe, women dominate the market of job seekers: accounting for 55% of the district job seekers. Due to lack of recent and sufficiently gender disaggregated data on quality of employment by industry at district level, qualitative indicators can be used at national levels to provide insights.

13. The data suggest that Women are grossly underrepresented in professional and managerial jobs, artisanal jobs and general sectors most likely to offer job security and higher benefits. Women are more likely to find jobs with low remuneration, low security of tenure and low chances of upward mobility. These include, clerical jobs, the service sector, and elementary occupations as well as assistants in technical and professional job markets. In rural villages women are most likely to be found in clerical jobs which contribute less than 5% of jobs in these landscapes. In fact women are mostly found in industries making up less than 5% of the rural job market while their male counterparts will be mostly found in industries that account for more than 5% of available jobs per sector. These include, for instance, agricultural labour, elementary occupations, crafts, plant & machine operations.

Gender and Labour Force Participation in 2011

| Districts | Employed | | | | Job seekers | | | | Labour Force | | | | %Unemployed | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| District | Male | Fem | Total | %F | Male | Fem | Total | % | Male | Fem | Total | %f | M | F |
| Tutume | 19600 | 15161 | 34761 | 44 | 5,507 | 5,092 | 10599 | 48 | 37,816 | 43,180 | 80,996 | 53 | 12 | 11 |
| Chobe | 7,042 | 5,070 | 12112 | 42 | 549 | 682 | 1231 | 55 | 7,591 | 5,752 | 13,343 | 43 | 7 | 12 |

14. The lack of employment in the job market thus sees the majority of rural women engaged in public works schemes like the Ipelegeng program where they dominate in numbers. But Ipelegeng programs offer short term engagements (half a day, usually for a month) on a rotational basis in order to reach the largest number of target beneficiaries possible in any given year in a locality. Women account for between 70% to 80% of registered Ipelegeng workers. Lack of access to resources and employment results in rural women being the major victims of poverty and intermittent income. Government poverty alleviation programs therefore largely target women. The beneficiaries of the Integrated Support Programme for Arable Agriculture Development (ISPAAD, started in 2008), for instance, comprise of 60% women and these are predominantly aged over 50 and with educational attainment mostly of primary school (50%) or lower secondary school (18%). The Community-Based Natural Resource Management (CBNRM) programme is another initiative that government has used to encourage rural communities to engage in both environmental resource protection and livelihood enhancement. The potential for the

CBRNM to reduce poverty, particularly for women, has however been limited due largely to governance issues and lack of meaningful community ownership of process and outcome: relying as it did mostly on distant government officials for intermittent monitoring and evaluation. However, the programme has been adjudged to have potential to make a significant impact if the governance, capacity of communities and the incentives structure are prioritized.

**Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment?**

Yes
**Closing gender gaps in access to and control over natural resources;** Yes

**Improving women's participation and decision making** Yes

**Generating socio-economic benefits or services or women** Yes

**Does the project's results framework or logical framework include gender-sensitive indicators?**

Yes
**4. Private sector engagement**

**Elaborate on the private sector's engagement in the project, if any.**

1. As discussed in Section G, Components 1 and 2, successful engagement with the private sector is critical to the project achieving desired SLM, SFM and LDN impacts. The project targets private sector agriculture and livestock producers. The project also targets forest product users. The project will integrate a variety of private sector players across value chains. This includes suppliers of inputs, purchasers of commodities, and end users. The project will work with private tourism operations, particularly in the Chobe region. The project will engage these private sector actors through a variety of actions. The private sector will be consulted with and expected to provide insights and directions to the development and implementation of Component 1 land use planning. The private sector will be the target beneficiary of Component 2 practice improvements. The private sector will also be a target beneficiary of Component 3's knowledge management platforms. This includes making certain knowledge management tools are designed and operated so that the private sector accesses these tools, provides inputs to these tools and gains knowledge from this tools that results directly in the uptake of sustainable management practices that result in positive SFM, SLM, and LDN impacts along with increased profitability, food security, and climate change resilience. Engagement will be facilitated through existing coordination bodies, including organizations representing agriculture and livestock producers and tourism interests as detailed in the stakeholder analysis.

**5. Risks to Achieving Project Objectives**

**Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.(table format acceptable):**

**5. Risks**

*Risk management is a structured, methodical approach to identifying and managing risks for the achievement of project objectives. The risk management plan will allows stakeholders to manage risks by specifying and monitoring mitigation actions throughout implementation. Part A of this section focuses on external risks to the project and Part B on the identified environmental and social risks from the project.*

**Section A: Risks to the Project**

| Risk | Impact/Probability Rating (Low: 1 to High: 5) | Management Strategy |
|---|---|---|

| | | |
|---|---|---|
| The Government of Botswana does not maintain the momentum and support required to accomplish project interventions within the time-frame. | Impact: 4<br><br>Probability: 3 | The project relies upon the Government of Botswana to take action and decisions within a set period of time. Past projects in Botswana have struggled with making adequate progress in a timely manner. The project responds to this risk by providing firm time-frames for the completion of activities. This includes requirements for the completion of fundamental tasks such as the elucidation of a land use plan (Component 1) within a set time period. If this land use plan is not completed in a timely manner, the foundations upon which much of the remaining project activities will not be well-aligned and/or directed towards the realization of intended GEBs. The project also requires the creation of a strategic implementation plan during the initial phases of implementation. This strategic implementation plan is designed specifically to guide the process and benchmarks required to be achieved throughout the entire project period. The project will report on progress towards these benchmarks throughout the implementation period. This makes certain that project implementation planning and reporting goes beyond the normal one-year planning process window. This approach ensures that actions are prioritized to make certain fundamentally important – but challenging – actions are taken in a timely manner for project success. |
| Private party stakeholders fail to engage with capacity building efforts related to the uptake of sustainable practices. | Impact: 4<br><br>Probability: 3 | The project relies upon private enterprises and particularly rural farmers, ranchers and forest uses to engage in capacity building programs (e.g., FFS) to identify practice improvements. This project will only be able to deliver GEB objectives if these private enterprises engage in capacity building and adopt improved practices. The project has addressed this risk in the design and will continue to address this risk during implementation by taking an approach that is responsive to private enterprise needs and generates incentives for private enterprise engagement. This includes making certain that private enterprise is able to visualize and realize tangible economic, environmental and social benefits stemming from the adoption of improved practices. |

| | | |
|---|---|---|
| The project is not able to stimulate a shift from "open-access" grazing regimes to more strategic community-based management rangeland management. | Impact: 4<br><br>Probability: 3 | One of the key drivers of degradation across Botswana and particularly in the target areas is unsustainable grazing and rangeland management practices. The project is proposing an innovative approach to address "open access" grazing which is a root cause of this degradation. This innovative approach although critical to realizing GEBS, may be challenging for herding communities to adopt. The project is designed to reduce this risk by starting with a collaborative process that coordinates diverse government agencies along with target stakeholders to identify grazing management challenge and issues and integrate improved practices in a strategic land use management strategy. Engagement and improved practice will be further incentivized through the application of FFS program designed to provide private enterprise with tangible proof that improved livestock management results in enduring economic, social, and environmental benefits. |
| The project is not able to catalyse coordination and cooperative approaches between divergent Government Agencies. | Impact: 4<br><br>Probability: 3 | Botswana has a large and varied baseline. There are numerous stakeholders that need to be engaged on the government levels. This demands an approach that generates coordinated responses in order to direct the baseline along with incremental GEF financing to consolidate and strategically align actions to deliver GEBs. This will be challenging. However, the project benefits from the existence of relatively new and progressive laws (e.g., Town and Country Planning Act) and policies that direct these agencies to cooperate and coordinate. In addition, the project will benefit from existing institutional structures at the District level (e.g., DLUPU) which are designed specifically to enhance coordinated responses. In addition, the project's design approach targets the use of engagement and capacity tools to build coordinated action. |

| | | |
|---|---|---|
| Economic, social and food security hardships challenge stakeholder participation. | Impact: 4<br><br>Probability: 3 | The project will be working with some of Botswana's most poor and vulnerable communities. Although levels of income are different, many of these community members live at subsistence levels. The project must be careful to not exacerbate this situation and at the same time be sure that financial and other incentives are in place to help bridge the period between continuation of unsustainable practices and the realization of sustainable practices. Risk management in this regard is reflected in the project design and will carry through with implementation. For instance, the FFS program will involve the creation of model farms and advance and support community members who are willing to serve as early adopters. These persons will be provided with the security required to adopt improved practices through the project as well as through the re-alignment of existing support programs that are part of the Government of Botswana's portfolio of approaches to support at-risk communities. The advantage of the project and part of the incrementality of the project is that these existing support programs will be re-aligned and directed towards the delivery of GEBs. |
| The project's short duration will limit the extent of impacts due to covering only a few growing seasons. | Impact: 4<br><br>Probability: 3 | The project will have a duration of five years. The first years will be needed to ramp up interventions, including land use planning, extension capacity, and the establishment of FFS. This will likely shorten the period that allows for the adoption and monitoring of results stemming from improved practices. The project has addressed this risk by providing very clear benchmarks for the development of foundational work. If the project does not advance efficiently and quickly to reach these benchmark in a timely manner, the mid-term review will flag issues and allow for modifications. However, the risk will still persist if the Government of Botswana does not quickly support the adoption of foundational work and adequate numbers of producers are not engaged. |

| | | |
|---|---|---|
| Natural resource constraints – including climate change, drought, and food security - impact project ability to achieve intended results. | Impact: 3<br><br>Probability: 3 | The project is designed to address and alleviate the current exposure of rural people to natural resource risks, including those related to climate change, drought and food insecurity. Each of the project activities is directed to take an integrated approach to these issues, shifting current unsustainable management/production regimes to sustainable management/production. This includes enhancing the ability of producers to move away from current unsustainable crops to more integrated cropping patterns the provide cash and food security through farmstead diversification. This will directly alleviate impacts related to climate change. Likewise, similar approaches will be applied to forestry and livestock sectors. The project will assist producers to approach these sectors using practices designed to improve SLM and SFM and enhance CC resilience, reduce drought exposure, and improve long-term food security. The project's results framework integrates these specific natural resource risks. This includes monitoring progress against improvements to CC resilience/adaptation, exposure to drought risks, and improvements to food security and nutrition. |

**COVID-19**

1. The country has approximately 6,000 confirmed cases and fewer than 30 mortalities. The Botswana parliament voted to extend the current state of emergency until March 2021. This includes restrictions on travel to/from Botswana and travel within Botswana (see, zones description below). The country has banned gatherings of more than 50 persons, does not allow international visitors, and requires returning citizens to quarantine for 14 days. Face masks are required outside of the home.

2. There are periodic closures of businesses based upon positive COVID tests. The capital, Gabarone, was under a two week lockdown in August 2020 that has since ended. However, schools resumed in June 2020. The government continues to operate. For instance, during the PPG phase, remote "zoom" based workshops were conducted between international and national project development teams and government staff.

3. There are no international flights to/from Botswana at this time. Public transportation is operating. The country has a zoning strategy (9 zones nationally) with check points between zones. Residents are free to travel within these zones. Permits for inter-zone travel are required and are fairly restrictive (e.g., may require negative CV-19 test, etc.). At this

time, target site 1 (Chobe) continues to be accessible from the District Capital of Kasane. Target site 2 (Tutume) is accessible from Francistown. However, travel from the national capital, Gabarone, to both project sites will be difficult until the state of emergency is lifted as planned in March 2020.

4. The economic impacts of COVID restrictions have been heavy, particularly for the country's highly important international tourism industry. The busiest tourism season is from April – October, during the dry season. This entire season was lost in 2020 and may again be forfeited in 2021. The diamond industry has also been impacted with restrictions upon international travel.

5. The Government maintains an active portal dedicated to COVID-19 information: https://COVID19portal.gov.org.bw

6. The COVID-19 situation is on-going and fluid. COVID will likely impact program implementation. However, the extent of this impact is unknown and will depend in part upon global events (e.g., progress with treatment, testing, and inoculation) and decisions made by the Government of Botswana during the first half of 2021 (e.g., lifting or extending the current state of emergency).

7. FAO and Government partners are constantly monitoring the situation will determine the best approaches to mitigate potential issues as things move forward. The PPG phase has allowed us to consider potential COVID-19 restrictions within the design phase. This includes front-loading the project's components with activities that can more easily be accomplished through remote technical support and/or by locally placed government staff able to move freely within identified zones. These partners are following the guidance and input of GEF as it evolves. As noted, the use of remote support has been quite effective to date linking international, regional, and national technical staff together.

8. If COVID-19 challenges continue and/or expand into late 2021 along with an extended state of emergency beyond March 2021, the situation will become more complicated if. For instance, if the internal travel restrictions continue, the project will need to continue with capacity building and other efforts remotely. However, as noted, government staff and particularly district level staff are able to move within the required zones. If restrictions continue, national level staff will have more challenges accessing project areas.

9. The project will continue to follow the established programming direction and strategies. The project's inception phase will likely be in early 2021. At this time, much more clarity will be in place regarding the COVID-19 situation and associated restrictions. The project at inception will integrate COVID-19 considerations within the implementation strategy and action framework. This will include prioritizing implementation activities and adjusting the timing of these activities to address existing and potential COVID-19 considerations and concerns. This will include an elucidation of such concerns and a well-reasoned strategic response. The approach will integrate these concerns within associated risk analysis, taking into consideration issues such as availability of technical expertise, impacts to stakeholder engagement, effects upon enabling environments, and financing issues.

10. At the same time, the project will consider opportunities for this GEF investment to "make a difference". This may include opportunities to lower environmental impacts and associated health risk exposures to limit the potential impacts of COVID-19. This is particularly pertinent to this project since it is designed to focus upon improving sustainable agriculture across productive landscapes with a direct linkage to improving environmental and human health. The project will also consider and integrate methodologies to monitor and evaluate COVID-19 related impacts to project design and implementation. In this way, the program will contribute to overall GEF capacity to innovate pro-active and effective responses to COVID-19 issues within existing and future programming.

**6. Institutional Arrangement and Coordination**

**Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.**

## 6. Institutional Arrangements and Coordination

### 6.a Institutional arrangements for project implementation

Executing Agency

1. The Ministry of Environment, Natural Resources Conservation and Tourism (MENT) will have the overall executing and technical responsibility for the project, with MoA as a co-executing agency. FAO will provide oversight as GEF Agency as described below. MENT will act as the lead executing agency and will be responsible for the day-to-day management of project results entrusted to it in full compliance with all terms and conditions of the Operational Partnership Agreement signed with FAO. As the executing/co-executing agencies of the project, MENT and MoA are responsible and accountable to FAO for the timely implementation of the agreed project results, operational oversight of implementation activities, timely reporting, and for effective use of GEF resources for the intended purposes and in line with FAO and GEF policy requirements.

| **Component/Outputs** | **Lead Responsible Agency** | **Supporting Entities** |
|---|---|---|
| Component 1: Strengthening the enabling environment for the sustainable management of the targeted Mopane/Miombo ecoregion | | |

| | | |
|---|---|---|
| Output 1.1:<br>Capacity of national and district level stakeholders to design, adopt, and implement strategic land use management planning built. | MENT - DFRR | Ministry of Presidential Affairs, Governance & Public Administration – Office of the District Commissioner<br><br>Ministry of Land Management, Water and Sanitation Services – Department of Lands, Department of Surveys & Mapping<br><br>Ministry of Local Government & Rural Development – Department of Community Development<br><br>Ministry of Nationality, Immigration & Gender Affairs – Department of Gender Affairs<br><br>Ministry of Environment, Natural Resources Conservation & Tourism – Department of Wildlife & National Parks<br><br>Community Based Organisations<br><br>Farmers' committees<br><br>Community Trusts |
| Output 1.2:<br>Land use management plans operational at both target sites and effectively addressing SLM and SFM issues. | MENT - DFRR | Ministry of Presidential Affairs, Governance & Public Administration – Office of the District Commissioner<br><br>Ministry of Land Management, Water and Sanitation Services – Department of Lands, Department of Surveys & Mapping<br><br>Ministry of Local Government & Rural Development – Department of Community Development, District Councils<br><br>Ministry of Nationality, Immigration & Gender Affairs – Department of Gender Affairs<br><br>Ministry of Agricultural Development & Food Security – Department of Crop Production, Department of Animal Production<br><br>Community Based Organisations<br><br>Farmers' committees<br><br>Community Trusts |

| | | |
|---|---|---|
| Output 1.3:<br>Strategic land use management plans rigorously monitored with reporting informing decision-making and adaptive management. | MENT – DFRR/ DEA | Ministry of Presidential Affairs, Governance & Public Administration – Office of the District Commissioner<br><br>Ministry of Land Management, Water and Sanitation Services – Department of Lands, Department of Surveys & Mapping<br><br>Ministry of Local Government & Rural Development – Department of Community Development, District Councils<br><br>Ministry of Nationality, Immigration & Gender Affairs – Department of Gender Affairs<br><br>Ministry of Agricultural Development & Food Security – Department of Crop Production, Department of Animal Production<br><br>National Strategy Office<br><br>Statistics Botswana<br><br>Community Based Organisations<br><br>Farmers' committees |
| Component 2: Scaling up SLM and SFM best practices at landscape level and with a transboundary focus to benefit people and ecosystems | | |

| | | |
|---|---|---|
| Output 2.1:<br>Capacity of extension services to deliver sustainable production options strengthened through effective Farmer Field School Program | MOA - DCP | Ministry of Presidential Affairs, Governance & Public Administration – Office of the District Commissioner<br><br>Ministry of Land Management, Water and Sanitation Services – Department of Lands, Department of Surveys & Mapping<br><br>Ministry of Local Government & Rural Development – Department of Community Development, District Councils<br><br>Ministry of Nationality, Immigration & Gender Affairs – Department of Gender Affairs<br><br>Ministry of Agricultural Development & Food Security – Department of Animal Production<br><br>Ministry of Environment, Natural Resources Conservation & Tourism – Department of Forestry & Range Resources, Department of Wildlife & National Parks<br><br>University of Botswana<br><br>Botswana University of Agriculture & Natural Resources<br><br>Botswana International University of Science & Technology<br><br>Botswana Open University<br><br>National Strategy Office<br><br>Statistics Botswana<br><br>Community Based Organisations<br><br>Farmers' Committees |

| | | |
|---|---|---|
| Output 2.2:<br>Private producers implement sustainable production practices that deliver SLM, SFM and LDN benefits. | MOA - DCP | Ministry of Presidential Affairs, Governance & Public Administration – Office of the District Commissioner<br><br>Ministry of Nationality, Immigration & Gender Affairs – Department of Gender Affairs<br><br>Ministry of Agricultural Development & Food Security – Department of Animal Production, Department of Agribusiness Promotion<br><br>Ministry of Environment, Natural Resources Conservation & Tourism – Department of Forestry & Range Resources<br><br>University of Botswana<br><br>Botswana University of Agriculture & Natural Resources<br><br>Botswana International University of Science & Technology<br><br>Botswana Institute for Technology Research & Innovation<br><br>Business Botswana<br><br>National Strategy Office<br><br>Statistics Botswana<br><br>Community Based Organisations<br><br>Farmers' Committees |
| Component 3: Effective knowledge management, monitoring and evaluation, and south-south (SADC) cooperation | | |

| | | |
|---|---|---|
| | MENT - DEA | Ministry of Presidential Affairs, Governance & Public Administration – Office of the District Commissioner<br><br>Ministry of Nationality, Immigration & Gender Affairs – Department of Gender Affairs<br><br>Ministry of Agricultural Development & Food Security – Department of Animal Production, Department of Agribusiness Promotion, Corporate Services (Division of Agricultural information & Public relations, IT Unit), Department of Agricultural Research, Statistics & Policy Development<br><br>Ministry of Environment, Natural Resources Conservation & Tourism – Department of Forestry & Range Resources<br><br>University of Botswana<br><br>Botswana University of Agriculture & Natural Resources<br><br>Botswana International University of Science & Technology<br><br>Botswana Institute for Technology Research & Innovation<br><br>Business Botswana<br><br>National Strategy Office<br><br>Statistics Botswana<br><br>Community Based Organisations<br><br>Farmers' Committees |

| | | |
|---|---|---|
| Output 3.2:<br>District and national level monitoring and reporting successfully inform government decision-making to support SLM, SFM and LDN targets. | MENT - DEA | Ministry of Presidential Affairs, Governance & Public Administration – Office of the District Commissioner<br><br>Ministry of Nationality, immigration & Gender Affairs – Department of Gender Affairs<br><br>Ministry of Local Government & Rural Development – Department of Community Development, District Councils<br><br>Ministry of Agricultural Development & Food Security – Department of Animal Production, Department of Crop Production, Department of Agricultural Research, Statistics & Policy Development<br><br>Ministry of Environment, Natural Resources Conservation & Tourism – Department of Forestry & Range Resources<br><br>National Strategy Office<br><br>Statistics Botswana |

| | | |
|---|---|---|
| Output 3.3:<br>Linkages established with regional and global knowledge management hubs to increase decision-making capacity at all levels. | MENT - DEA | Ministry of International Affairs & Cooperation<br><br>Ministry of Nationality, immigration & Gender<br>Affairs – Department of Gender Affairs<br><br>Ministry of Agricultural Development & Food Security – Department of Animal Production, Department of Crop Production, Department of Agribusiness Promotion, Corporate Services (Division of Agricultural information & Public relations, IT Unit), Department of Agricultural Research, Statistics & Policy Development<br><br>Ministry of Environment, Natural Resources Conservation & Tourism – Department of Forestry & Range Resources<br><br>University of Botswana<br><br>Botswana University of Agriculture & Natural Resources<br><br>Botswana International University of Science & Technology<br><br>Botswana Institute for Technology Research & Innovation<br><br>National Strategy Office<br><br>Statistics Botswana<br><br>Botswana Council of Non-Governmental Organisations |

National Project Director

2. The government will designate a National Project Director (NPD). Located in MENT offices in Gaborone, the NPD will be responsible for coordinating the activities with all the national bodies related to the different project components, as well as with the project partners. S/he will also be responsible for supervising and guiding the Project Coordinator (see below) on the government policies and priorities.

Project Steering Committee

3. MENT PS or his designate will chair the Project Steering Committee which will be the main governing body of the project, while PS-MoA or his designate serves as co-chair. The PSC will approve Annual Work Plans and Budgets on a yearly basis and will provide strategic guidance to the Project Management Team and to all executing partners. The PSC will be comprised of representatives from MENT (DFRR, DEA, DWNP, DT), MoA (DCP, DAP), Botswana Agricultural Marketing Board (BAMB), Business Botswana, MLMWSS, MLGRD, Ministry of Trade and Investment (MTI), Botswana University of Agriculture and Natural Resources (BUAN), FAO, SADC, KAZA, BIURST, and FAO. The members of the PSC will each assure the role of a Focal Point for the project in their respective agencies. Hence, the project will have a Focal Point in each key institution. As Focal Points in their agency, the concerned PSC members will: (i) technically oversee activities in their sector; (ii) ensure a fluid two-way exchange of information and knowledge between their agency and the project; (iii) facilitate coordination and links between the project activities and the work plan of their agency; and (iv) facilitate the provision of co-financing to the project.

4. The National Project Coordinator (see below) will be the Secretary to the PSC. The PSC will meet at least twice per year to ensure: i) Oversight and assurance of technical quality of outputs; ii) Close linkages between the project and other ongoing projects and programmes relevant to the project; iii) Timely availability and effectiveness of co-financing support; iv) Sustainability of key project outcomes, including up-scaling and replication; v) Effective coordination of government partner work under this project; vi) Approval of the six-monthly Project Progress and Financial Reports, the Annual Work Plan and Budget; vii) Making by consensus, management decisions when guidance is required by the National Project Coordinator.

| **Proposed Steering Committee membership** | |
|---|---|
| Organization Represented | Position within Organization |
| MENT | PS (Chair) |

| | |
|---|---|
| MoA | PS (Co-Chair) |
| Department of Forestry and Range Resources | Director |
| FAO | FAO Representative |
| FAO | NPC (Secretary) |
| Department of Crop Production | Director |
| Department of Animal Production | Director |
| Botswana Agricultural Marketing Board | CEO |
| DWNP Department of Wildlife National Parks | Director |
| DEA Department of Environmental Affairs | Director |
| FAO | Head of Environment Portfolio |
| BUAN | Dean (Faculty of Natural Resources) |
| BIUST | Dean (Faculty of Earth Sciences) |
| Department of Lands | Director |
| Department Community Development | Director |
| Department of Trade and Consumer Affairs | Director |
| Department of Gender Affairs | Director |
| Business Botswana | CEO |

| | |
|---|---|
| SADC | Regional Agricultural Policy |

Technical Working Group

5. A national LDN Technical Working Group (LDN TWG) will support PSC actions. The LDN TWG will oversee and discuss all technical assignments and tasks undertaken during this child project.

| **Proposed Technical Working Group Membership** | |
|---|---|
| Organization Represented | Position within Organization |
| FAO | NPC |
| FAO | Head of Environment Portfolio |
| FAO | National Technical Assistant |
| FAO | Chief Technical Advisor |
| Department of Meteorological Services | Technical Officer |
| Department of Tourism | Technical Officer |
| Department of Wildlife National Parks | Technical Officer |

| | |
|---|---|
| Department of Surveys and Mapping | Technical Officer |
| Department of Agribusiness Promotions | Technical Officer |
| Department of Agricultural Research, Statistics and Policy Development | Technical Officer |
| Department of Forestry and Range Resources | Technical Officer |
| Department of Environmental Affairs | Technical Officer |
| National Strategy Office | Technical Officer |
| Department of Crop Production | Technical Officer |
| Department of Animal Production | Technical Officer |
| Department of Water and Sanitation | Technical Officer |
| BITRI | Climate Change Specialist |
| Statistics Botswana | Environmental Statistics Officer |

National Project Coordinator

6. The National Project Coordinator (NPC) will be in charge of daily implementation, management, administration and technical supervision of the project, on behalf of MENT and within the framework delineated by the PSC.

7. The NPC will generally be responsible for:

- coordinating the project with relevant baseline initiatives;
- ensuring a high level of collaboration among participating institutions and organizations at the national and local levels;
- ensuring compliance with all OPA provisions during the implementation, including on timely reporting and financial management;
- coordinating and monitoring closely the implementation of project activities;
- tracking the project's progress and ensuring timely delivery of inputs and outputs;
- providing technical support and assessing the outputs of the project national consultants hired with GEF funds, as well as the products generated in the implementation of the project;
- approve and manage requests for provision of financial resources using provided format in OPA annexes;
- monitoring financial resources and accounting to ensure accuracy and reliability of financial reports;
- ensuring timely preparation and submission of requests for funds, financial and progress reports to FAO as per OPA reporting requirements;
- maintaining documentation and evidence that describes the proper and prudent use of project resources as per OPA provisions, including making available this supporting documentation to FAO and designated auditors when requested;
- implementing and managing the project's monitoring and communications plans;
- organizing project workshops and meetings to monitor progress and preparing the Annual Budget and Work Plan;
- submitting the six-monthly Project Progress Reports (PPRs) with the AWP/B to the PSC and FAO;
- preparing the first draft of the Project Implementation Review (PIR);
- supporting the organization of the mid-term and final evaluations in close coordination with the FAO Budget Holder and the FAO Independent Office of Evaluation (OED);

- submitting the OP six-monthly technical and financial reports to FAO and facilitate the information exchange between the OP and FAO, if needed;
- inform the PSC and FAO of any delays and difficulties as they arise during the implementation to ensure timely corrective measure and support.

Project Management Unit

8. A Project Management Unit (PMU) will be co-funded by the GEF and established within MENT's central office in Gaborone. The main functions of the PMU, following the guidance of the Project Steering Committee, are to ensure overall efficient management, coordination, implementation and monitoring of the project through the effective implementation of the annual work plans and budgets (AWP/Bs). The PMU will support technical aspects of the project including Knowledge Management, Stakeholder Engagement, system-wide capacity development and M&E Specialist. The PMU will be composed of a National Project Coordinator (NPC) who will work full-time for the project lifetime.

| **Proposed PMU** | | |
|---|---|---|
| Position | Qualifications & Experience | Responsibilities |
| National Project Coordinator | Minimum of 10 years of technical and managerial experience dealing with applied natural resource issues in Botswana.<br><br>Minimum of MSc in Environmental or Biological Sciences (Rangeland Ecology & Management Natural Resources Management, Conservation Ecology) | Daily implementation, management, administration and technical supervision of the project, on behalf of MENT and within the framework delineated by the PSC |

| | | |
|---|---|---|
| National Technical Assistant | Minimum of 10 years of technical and managerial experience dealing with applied natural resource issues in Botswana.<br><br>Minimum of MSc in Environmental or Biological Sciences (Rangeland Ecology & Management Natural Resources Management, Conservation Ecology)with a NTFP development background | Provides technical back-stopping to the project to ensure smooth functioning of the project and<br>fulfilment of the results and outputs indicated in the project document. |
| Chief Technical Advisor (CTA) | part-time shared between all Child projects in Miombo and Mopane ecoregion with a LD background Minimum of 10 years work experience in project design and implementation and/or project cycle management.<br><br>Minimum of Masters Degree in Economics, Environmental Law, Project / Strategic Management or other Social Sciences related field. | Provides technical advice to the project and facilitation of knowledge building and management for strengthening environmental governance, resource mobilization and strategic partnerships. |
| Monitoring and Evaluation expert | Part-time shared between all Child projects in Miombo and Mopane ecoregion with a LD background Minimum of 7 years work experience in project design and project cycle management.<br><br>Minimum of Masters Degree in Economics, Project Management or other Social Sciences. | Design monitoring and reporting tools, support implementation of project's M&E system and ensuring that indicators are monitored and reported.<br><br>Will support Knowledge Management, Stakeholder Engagement, system-wide capacity development. |
| Financial Manager | Minimum of 10 years in Financial Management in Botswana.<br><br>Minimum of Degree in Finance & Accounting or any other related field. | Responsible for the budget planning, and supports the project management unit by offering insights and financial advice that will allow them to avoid over expenditure. |
| Two Field Assistants | to the National Project Coordinator, one based in Kasane and one based in Tutume. Minimum of 10 years of technical experience dealing with applied natural resource issues in Botswana.<br><br>Minimum of Degree in Environmental or Biological Sciences (Rangeland Ecology & Management Natural Resources Management, Conservation Ecology) | To work closely with the NPC to ensure smooth functioning of the project field work and fulfilment of the results and outputs indicated in the project document. |

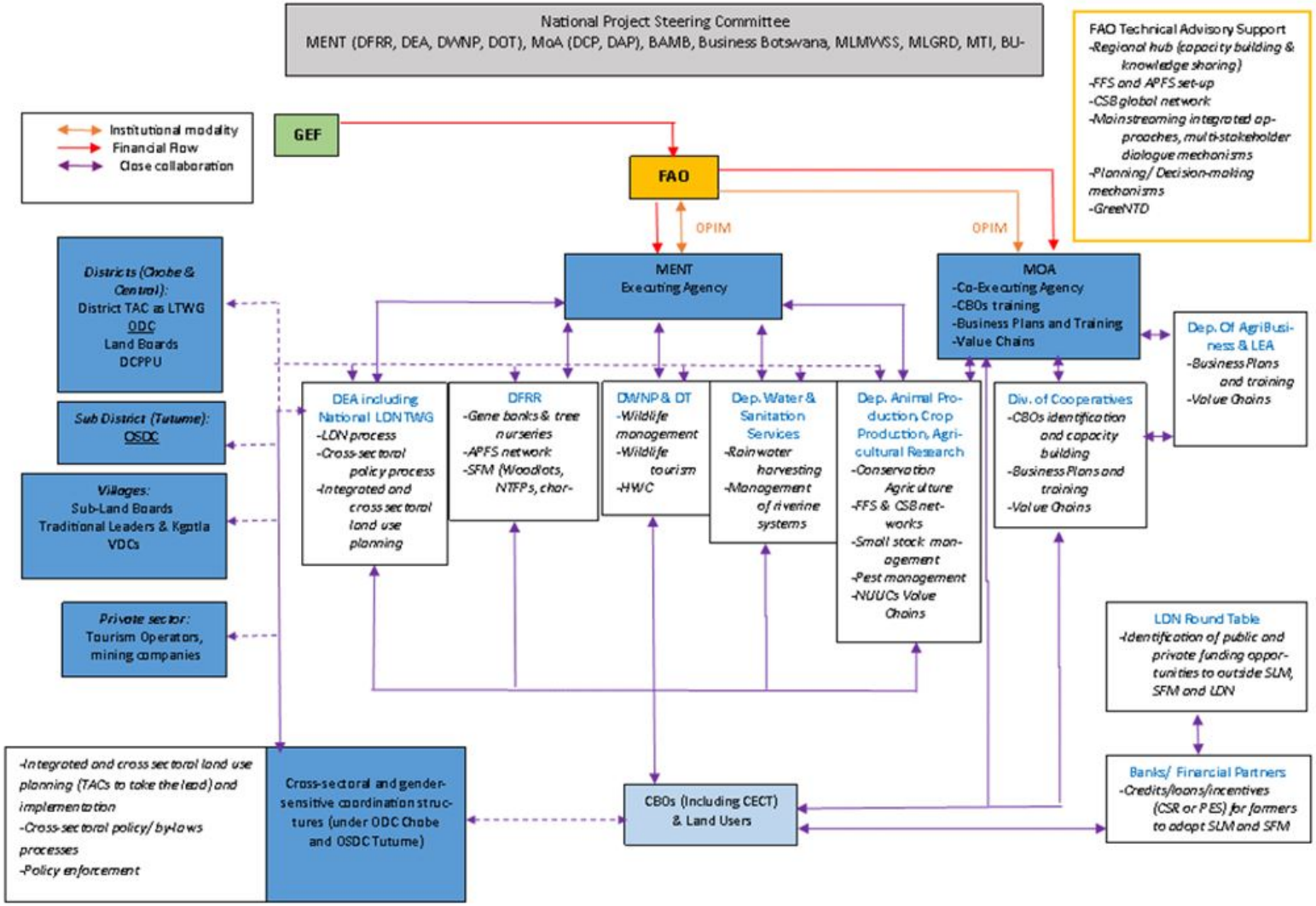
Implementing Agency: FAO

9. The Food and Agriculture Organization (FAO) will be the GEF Implementing Agency (IA) for the Project, providing project cycle management and support services as established in the GEF Policy. As the GEF IA, FAO holds overall accountability and responsibility to the GEF for delivery of the results. In the IA role, FAO will utilise the GEF fees to deploy three different actors within the organization to support the project (see Annex J for details):

| Position | Description | Contact Information |
|---|---|---|
| Budget Holder | Usually the most decentralised FAO office, will provide oversight of day to day project execution. | FAO Representative Botswana<br>Czudek, Rene (RAFTD) |
| Lead Technical Officer(s) | Drawn from across FAO will provide oversight/support to the projects technical work in coordination with government representatives participating in the Project Steering Committee. | Kilawe, Edward (SFSMD) |
| Funding Liaison Officer(s) | Within FAO will monitor and support the project cycle to ensure that the project is being carried out and reporting done in accordance with agreed standards and requirements. | Turner, Kempshia (CBCDD)<br>Boerstler, Fritjof (OCBDD)<br>Dottori, Arianna (CBCDD) |

10. As the GEF agency FAO responsibilities will generally include:

- Administrate funds from GEF in accordance with the rules and procedures of FAO;
- Oversee project implementation in accordance with the project document, work plans, budgets, agreements with co-financiers, Operational Partners Agreement(s) and other rules and procedures of FAO;
- Provide technical guidance to ensure that appropriate technical quality is applied to all activities concerned;
- Conduct at least one supervision mission per year;
- Report to the GEF Secretariat and Evaluation Office, through the annual Project Implementation Review, the Mid Term Review, the Terminal Evaluation and the Project Closure Report on project progress; and
- Ensure financial reporting to the GEF Trustee.


National Project Steering Committee
MENT (DFRR, DEA, DWNP, DOT), MoA (DCP, DAP), BAMB, Business Botswana, MLMWSS, MLGRD, MTI, BU-
FAO Technical Advisory Support
-Regional hub (capacity building & knowledge sharing)
-FFS and APFS set-up
-CSB global network
-Mainstreaming integrated approaches, multi-stakeholder dialogue mechanisms
-Planning/ Decision-making mechanisms
-GreeNTD
Institutional modality
Financial Flow
Close collaboration
GEF
FAO
OPIM
OPIM
MENT
Executing Agency
MOA
-Co-Executing Agency
-CBOs training
-Business Plans and Training
-Value Chains
Districts (Chobe & Central):
District TAC as LTWG
ODC
Land Boards
DCPPU
Sub District (Tutume):
OSDC
Villages:
Sub-Land Boards
Traditional Leaders & Kgotla
VDCs
Private sector:
Tourism Operators, mining companies
DEA including National LDN TWG
-LDN process
-Cross-sectoral policy process
-Integrated and cross sectoral land use planning
DFRR
-Gene banks & tree nurseries
-APFS network
-SFM (Woodlots, NTFPs, char-
DWNP & DT
-Wildlife management
-Wildlife tourism
-HWC
Dep. Water & Sanitation Services
-Rainwater harvesting
-Management of riverine systems
Dep. Animal Production, Crop Production, Agricultural Research
-Conservation Agriculture
-FFS & CSB networks
-Small stock management
-Pest management
-NUUCs Value Chains
Div. of Cooperatives
-CBOs identification and capacity building
-Business Plans and training
-Value Chains
Dep. Of AgriBusiness & LEA
-Business Plans and training
-Value Chains
LDN Round Table
-Identification of public and private funding opportunities to outside SLM, SFM and LDN
Banks/ Financial Partners
-Credits/loans/incentives (CSR or PES) for farmers to adopt SLM and SFM
-Integrated and cross sectoral land use planning (TACs to take the lead) and implementation
-Cross-sectoral policy/ by-laws processes
-Policy enforcement
Cross-sectoral and gender-sensitive coordination structures (under ODC Chobe and OSDC Tutume)
CBOs (Including CECT) & Land Users

**6.b Coordination with other relevant GEF-financed projects and other initiatives.**

11. Relevant GEF Programming: As tabulated under the baseline analysis, there are a number of on-going and recently completed GEF investments that are relevant to this proposed project. This include the Ngamiland SLM Project, Dryland Ecosystem Project, and BioChobe Project. The lessons learned from these projects are integrated and reflected in this project's design. In terms of coordination, MENT has served as executing agency and UNDP has served as implementing agency for most GEF projects in Botswana to date.

12. Quarterly GEF Portfolio Manager Meetings: To make certain that the proposed project is well-aligned with recently completed and on-going GEF investments, FAO will propose that quarterly meetings take place that involve the project managers and coordinators for each of the relevant GEF projects. This will serve as an opportunity for these parties to exchange information and updates and to build additional synergies across the GEF platform.

13. Project Engagement: In addition, the FAO/GEF project will invite representatives from each of the relevant GEF projects to engage as appropriate in workshops, meetings, and other activities associated with the on-going FAO/GEF project. The FAO/GEF project will also add relevant stakeholders associated with the on-going GEF portfolio to mailing lists (e.g., monthly reports) and provide access to knowledge management and communications platforms. This will include encouraging other projects within Botswana's GEF project portfolio to actively contribute to relevant knowledge management and communications tools. This will help to ensure alignment, reduced duplication of efforts, efficient use of GEF resources, and build amplification of responses to degradation across higher levels.

**7. Consistency with National Priorities**

Describe the consistency of the project with national strategies and plans or reports and assesments under relevant conventions from below:

NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

1. The project is consistent with the following national strategies and plans, and reports to relevant international conventions.

| Relevant National Strategy, Plan, Report and/or Assessment | Description of Consistency |
|---|---|
| *National Action Plan for Adaptation (NAPA) under LDCF/UNFCCC* | The country intends to achieve an overall emissions reduction of 15% by 2030, taking 2010 as the base year. The emission reduction target was estimated based on the baseline inventory for the three GHGs being carbon dioxide (CO2), methane (CH4) and nitrous oxide (N2O). The reductions will be realised from the energy sources which is categorised as the stationary and mobile sources. The country will also continuously implement mitigation measures for the livestock sector to reduce CH4 emissions mainly from enteric fermentation though these initiatives are not estimated in the 15%. Initiatives for emission reductions will be developed from long term low carbon strategy.<br><br>National Adaptation Plan (NAP) and Action Plan highlight all the priority areas including Climate Smart Agriculture which include techniques such as low to zero tillage, multi-cropping to increase mulching which reduce evapotranspiration and soil erosion. |
| *National Action Program (NAP) under UNCCD* | The National Action Programme (NAP) is a key instrument in implementing the United Nations Convention to Combat Desertification (UNCCD) obligations, to which the nation is a signatory. The NAP spells out the practical steps and measures that are to be taken to combat desertification, land degradation and drought in our semi-arid ecosystems, which are or have been adversely affected, resulting in productivity declines and reduced ecosystem services. This NAP was developed through local communities' participation, policymakers, civil society and academia; and covered the entire country.<br><br>Following ratification of the UNCCD in 1996, Botswana developed its first National Action Programme (NAP) in 2006, which was aligned to the UNCCD strategy, Vision 2016 as well as the Millennium Development Goals. Since then, both national and international priorities have changed, hence the need to review the 2006 NAP to align it to the current emerging issues encapsulated in Vision 2036 and the National Development Plan11. Further, this was to align with the Agenda 2030 - Sustainable Development Goals (SDGs). In addition, the NAP has initiated resource mobilisation plans, to enable meaningful implementation; and to create synergies with other RIO Conventions. The NAP monitoring and evaluation has aligned with the National Monitoring & Evaluation System of the National Strategy Office, to enhance national delivery through coordination, which is based on targets and indicators. In addition, data protocols have been included, for enabling monitoring/evaluation of the NAP for impact. |

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| *National Biodiversity Strategies and Action Plan (NBSAP) under UNCBD* | The GEF7 project interventions will contribute to four of the NBSAP targets:<br><br>5. By 2025, the rate of natural land conversion is at least halved, and degradation and fragmentation are significantly reduced.<br><br>7. By 2025, wetlands, woodlands and savannas, particularly where used for range or crops, are managed sustainably, ensuring conservation of biodiversity.<br><br>11. By 2025, at least 25% of all Botswana's ecoregions, particularly the wetlands (rivers, deltas, pans) are effectively conserved through an ecosystem approach that integrates their management with that of the surrounding landscape and involves resident communities.<br><br>13. By 2025, the genetic resources of traditional agricultural species and their wild relatives are protected, including the implementation of strategies to minimize genetic erosion as well as safeguarding their genetic diversity. |
| *National Communications (NC) under UNFCCC* | The report describes a wide variety of activities concerning mitigation, adaptation, technology transfer, finance, research, education and training and public awareness. It is informed by information widely gathered from all stakeholders including National Climate Change Committee, Academic, government institutions, Civil Society, Community Based Organisations and the general public. |
| *Technology Needs Assessment (TNA) under UNFCCC* | XX The report identifies and assesses environmentally sound technologies which will reduce the rate of greenhouse gas emissions and climate change in Botswana, and which are in synergy with national development objectives. |
| *National Implementation Plan (NIP) under POPs* | XXNIP provides information to the relevant institutions on what actions need to be undertaken in dealing with Persistent Organic Pollutants (POPs) related issues. NIP was prepared to guide the implementation process and inform the government and its partners of the national priorities for action at determined times as per the action plans. This process/concept also fits well within the national development process of Botswana as is defined in the country's National Development Plan (NDP), District Development Plans (DDPs) and Urban Development Plans (UDPs). |
| *Poverty Reduction Strategy Paper (PRSP)* | XX The Botswana government has placed a high priority on achieving high rates of economic growth through the application of sound macroeconomic policies and good governance. Botswana's strategy towards poverty was generally to increase growth through a number of initiatives that included programs that increase the participation of the private sector. The second set of programmes were meant to enhance productivity and employment creation in the rural areas. The third set were in term of social safety nets. The government of Botswana recognized much early in development that not all Batswana could benefit from employment and other productive endeavours. |
| *Biennial Update Report (BUR) under UNFCCC (October 2019)* | This report provides an update on information contained in Botswana's Third National Communication (NC3) that will be submitted to the UNFCCC in 2019. The BUR contains information on national greenhouse gas inventory for 2015, ongoing and planned Nationally Appropriate Mitigation Measures (NAMAs); as well as on support received and required. The Report presents projections of the climate change mitigation measures and their impact assessment up to 2030 taking into account the country's development priorities, objectives and capacities. |

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| LDN Target Setting Programme | Botswana is committed to the LDN Target Setting Programme and has produced a LDN country profile42 in 2018. The government has requested the UNCCD Global Mechanism (GM) and FAO to support in the finalization of the LDN target setting and has allocated USD 1,000,000 from the national budget for this process to be realised under the UTF project. The GEF7 project will leverage on this development as well as the country's commitment to the SADC's Action Plan to Combat Desertification, which will promote joint actions on transboundary natural resources protection.<br><br>The LDN country profile was produced in 201843. Botswana did not define the national LDN targets yet. This is one of the main objectives of the "Technical Support for Land Degradation Assessment, Monitoring and Development of Restoration Strategy" running from 2019 to 2022 under the lead of MENT, particularly DFRR.<br><br>The following targets from the 2016 National Biodiversity Action Plan that are aligned with the LDN approach are:<br><br>1) By 2025: the rate of natural land conversion is at least halved, and degradation and fragmentation are significantly reduced.<br>2) By 2025: wetlands, woodlands and savannas, particularly where used for range or crops, are managed sustainably, ensuring conservation of biodiversity.<br>3) By 2025: at least 25% of all Botswana's ecoregions, particularly the wetlands (rivers, deltas, pans) are effectively conserved through an ecosystem approach that integrates their management with that of the surrounding landscape and involves resident communities.<br>4) By 2025: the genetic resources of traditional agricultural species and their wild relatives are protected, including the implementation of strategies to minimize genetic erosion as well as safeguarding their genetic diversity.<br>5) By 2030: Reduce the GHG by 15 %.<br>These targets will be further refined to include specific land degradation neutrality aspects of reversal, restorations and rehabilitation the productive potential and ecological services of degraded land by actively assisting recovery of ecosystem functions. Additionally, there will be more emphasis on people and their livelihoods in target setting: particularly the most vulnerable and marginalised. |

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| Eleventh National Development Plan (April 2017 to March 2023) | NDP 11 identifies strategic interventions for sustainable environmental, economic and social development. The following strategic interventions are strongly aligned with the GEF7 project:<br>Enhancing the market value of ecosystem services and their contribution to the economy to reflect in the production system as natural capital.<br>Adopting a systematic and coordinated cross-sectoral approach towards integration of resource management and recognition of their economic value.<br>Develop, review and implement relevant environmental legislations and regulatory frameworks that enhance efficient integrated environmental management<br>Strengthening data requirement, technical capacity, knowledge and skills for creating and harnessing opportunities for sustainable job creation from ecosystem resources.<br>Realign cross sectoral policies to systems and processes for all key players in the environmental management sector for purposes of environmental sustenance.<br><br>The Eleventh National Development Plan (April 2017 to March 2023) identifies strategic interventions for sustainable environmental, economic and social development that address a number of challenges constraining success. With regards to sustainable environment where emphasis is on protection and sustainable resource management to support economic and social development, the Plan has highlighted the following strategic interventions:<br>Enhancing the market value of ecosystem services and their contribution to the economy to reflect in the production system as natural capital. This will incentivise communities and other ecosystem users to protect the environment for sustainable use.<br>Adopting a systematic and coordinated cross-sectoral approach towards integration of resource management and recognition of their economic value. This will encourage consideration of linkages between natural resource utilization and ensure that sectoral mandates are approached in a cohesive and complementary manner.<br>Develop, review and implement relevant environmental legislations and regulatory frameworks that enhance efficient integrated environmental management<br>Provide adequate infrastructural support for waste management and, systematic cost benefit analysis (including socio-economic and impact assessment) of development projects<br>Strengthening data requirement, technical capacity, knowledge and skills for creating and harnessing opportunities for sustainable job creation from ecosystem resources.<br>Realign cross sectoral policies to systems and processes for all key players in the environmental management sector for purposes of environmental sustenance. |

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| National Development Plan 11 (2017 – 2023) | In relation to sustainable economic growth NDP 11 strategically emphasizes diversification as the key driver towards "Inclusive growth for the realisation of sustainable employment creation and poverty eradication." But it recognizes considerable uphill challenges in declining growth rates and low levels of employment creation that have characterised recent times due to the twin impacts of down turn in revenues from the international diamond trade and the reduction in ecosystem resources due to climate change. At macroeconomic level the strategic interventions include inter alia: i) taking advantage of local natural resources and indigenous knowledge to provide new sources of growth for the economy and employment creation; ii) promote Public Private Partnerships in the provision of the necessary infrastructure; iii) expand and diversify the tourism industry from wildlife and the agricultural sector; iv) creating an enabling environment to grow the small, medium and micro enterprises; v) climate change mitigation and adaptation across all major economic sectors that are most vulnerable due to dependency on ecosystems. The planned interventions focus on creating synergies between sustainable use of national resources and protecting the natural environmental and its biodiversity while providing for economic growth, employment creation and social upliftment. A sustainable development approach will therefore be mainstreamed more deeply than in previous development plans whose evaluation shows that the journey towards achieving integration is still some way off. This includes the provision of incentives for transition in areas such as clean energy.<br><br>The NDP 11 document recognizes that policy initiatives are required in order to locate and operationalise sustainable development in major programmes and projects in key sectors such as mining, agriculture, energy, water, manufacturing and tourism. Midway through this Plan, a lot of these policies still need to be developed and harmonised. The following policies that are not necessarily sustainable development compliant are still providing operational guidelines to government institutions and non-governmental actors, and are awaiting review, harmonization (across those with overlapping mandates as well as with social and economic mandates from non-environmental policies) and revitalization |
| SDGs | The GEF7 project interventions are well aligned with several SDGs including SDG 1 No poverty, SDG 2 Zero hunger, SDG 5 Gender equality, SDG 8 Decent work and economic growth, SDG 11 Sustainable Cities and Communities, SDG 13 Climate action, SDG 15 life on land, and SDG 17 partnerships for goals. |
| Vision 2036 | The GEF7 project will contribute to several targets under the Vision 2036, particularly for the Pillars 3 "Sustainable Development": increasing food security, and reducing green-house gas emission. |
| INDC | The project interventions particularly under Component 2 will contribute to the following INDC target: reduce greenhouse emission by 15% by 2030 (half of the emissions generated by the AFOLU sector).<br>Sustainable Land Management is part of the key adaptation priorities mentioned by the Government of Botswana in its Intended Nationally Determined Contribution (INDC) document. |
| CBNRM Strategic and Action Plan (2019-2023) | Strategic Goal 1, To expand and diversify the tourism product.<br>Goal 3 To intensify and improve economic benefits and related distribution. Goal 4 To ensure natural resource conservation. Goal 6 To enhance capacity and skills development. |

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|---|---|
| Forest Policy (2011) | The Forest Policy is a framework that provides guidance and facilitation in the management of forests and range resources of the country through conservation, development, and sustainable use. The Policy defines basic principles, objectives, strategies and action plans for management of forests and range resources through conservation, development, and sustainable utilisation to meet social, cultural, economic, environmental and ecological needs of present and future generations. It represents statements of intent that the government sets out as part of its overall vision for forestry.<br><br>The Policy emphasizes the maintenance of natural diversity, protective and productive capacity, scientific, cultural and aesthetic values of forest resources. The Forest Policy is thus concerned with the manner in which forests should be managed to serve societal demands for goods and the non-material values that are inherent in forests. It also recognizes the diversity of interests related to forests conservation and utilization, and the need to involve all stakeholders in forest management and decision making. Accordingly, the Policy will direct, facilitate and regulate the actions of all players in the sector. |
| Forest Conservation Strategy (2013-2020) | The Strategy was developed to balance forest conservation and improvements of rural livelihoods through the direct and indirect use of forest resources. This was in line with sustainable development applied to the country's forest resources harmonized with the goals of Vision 2016 and NDP10 and more recently with the 2012 Gaborone Declaration on Sustainability in Africa. It focused on forest conservation through improved forest management and livelihood improvements, which was to reduce pressure on forest resources and lead to greater appreciation of forests. |
| Botswana Climate-Smart Agricultural Program (2015-2025) | to build resilience in agro-ecosystems<br>Botswana has embarked on a Climate Smart Agriculture project "Climate Variability and Change Risk and Management, Development of Decision support systems for Dryland Small Scale Arable Farmers.<br><br>The purpose of this project was to determine risk factors to the attainment of food security by smallholder dryland arable farmers and subsequently co-develop with farmers promote the use of climate smart technologies to increase productivity and farmers' resilience. The project benefitted 29 female and 16 male smallholder farmers (45) and 43 district agricultures managers and extension officers directly and more than 500 farmers indirectly through farm walks and field days. |
| Botswana Climate Change Policy (Draft) | to promote ecosystem-based adaptation The policy promotes low carbon development pathways and approaches that significantly contribute to socio economic development, environmental protection, poverty eradication and reduction of Green-house-Gases (GHG) from the atmosphere. |
| National Ecotourism Strategy (2002) | It creates an environment in which all elements of tourism development planning and management facilitate; promote and reward adherence to the key principles of ecotourism by all of those involved in the tourism industry. It also facilitates development and marketing of economically valuable enterprises related to natural resources and increase involvement and benefits by locals. |

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|---|---|
| CBNRM Policy (2007) | CBNRM policy intended to create an enabling environment for the operation of Community Based Organisations involved for sustainable use of natural and cultural resources. A legislation on CBNRM currently being developed to further provide a framework within which Community Based Organisations operate, while keeping regulatory requirements in check and providing clarity on standards and accountability. to improve livelihoods of local communities |

**8. Knowledge Management**

**Elaborate the "Knowledge Management Approach" for the project, including a budget, key deliverables and a timeline, and explain how it will contribute to the project's overall impact.**

**Knowledge Management**

Knowledge Management Approach

1. Knowledge generation and management will be an essential component of the project The project integrates a number of tools designed to build and manage knowledge in line with GEF Knowledge Management Guidelines[1]. Knowledge will be created, documented and shared systematically throughout the project closely aligned to the global IP DSL coordination project. This includes gathering, collating and distributing knowledge from the results of project activities as well as capturing best international principles and practices linked to the capacity enhancement and monitoring efforts promoted by the project.

2. Building on the indicators developed during PPG and in coordination with the global IP Program, the project will establish systems for M&E, knowledge management and knowledge sharing including a methodology to capture good practices and lessons learned contributing to national, regional and global IP implementation. The project will develop a knowledge management and communications strategy to support implementation, replication and scaling of project activities. Under Component 1, the land use planning process will generate information and provide a platform for monitoring and adaptive management that will contribute to knowledge management improvements relatives to the achievement of

SFM, SLM and associated LDN objectives. Much of Component 2 is designed around the FFS approach. Knowledge generation, distribution and management are each fundamental to FFS. Component 3 is nearly entirely dedicated to knowledge management. This includes conduits for information flow at and between district, national, regional and global partners.

3. Part of this knowledge management approach includes working to integrate lessons learned from past and on-going projects. As detailed in the baseline, the project design took a very inclusive and broad look at on-going investments and programs by the Government, donors, and other stakeholders. This was done to not only make certain the proposed project is aligned with this on-going baseline and will provide incremental improvements, but also to make certain lessons learned are reflected and pathways are in place to bring new knowledge and lessons within this proposed project's actions and innovations to build synergy and scale.

4. Knowledge will be created, documented and shared systematically throughout the project closely aligned to the global IP DSL coordination project. More specifically, the GCP will facilitate global level knowledge exchange in two ways: the child project will actively "feed" knowledge to the global and regional platforms while benefiting from recent scientific knowledge and global evidence-based good practices provided by the platforms/exchange mechanisms in return through the Regional Exchange Mechanism (REM). Finally, the PMU will include a dedicated national expert to follow the knowledge management components to assure that the KMCS is implemented.

Communication Strategy

*Describe the project's communication strategy.*

5. The project under Component 3 will design a full communications strategy, in conjunction with the Global Coordination Project and the REM. As described in the Component, this strategy will integrate innovative tools, including web-based and smartphone-based technologies designed to engage and inform stakeholders at many levels. The communications strategy will incorporate within it specific monitoring tools to make certain that target audiences are reached, that target audiences are engaged and contributing, and that communications are actually resulting in improved practices and positive SLM, SFM and SFM impacts. Progress on this communication strategy and the aligned knowledge

management approach will be monitored and reported upon throughout the project period. As with all project investments, the project will make certain through the handover strategy that advances made in terms of knowledge management and communication are sustained and enduring. The project strives to assist Botswana to build the initial framework required and to then provide this framework in a form and function so that it can be perpetually maintained and improved to drive forward on-going improvements.

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[1] See GEF Approach on Knowledge Management https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.C.48.07.Rev_.01_KM_Approach_Paper.pdf

**9. Monitoring and Evaluation**

**Describe the budgeted M and E plan**

**Monitoring and Evaluation.**

1. Project supervision will be carried out by the Project Steering Committee (PSC) and FAO.

2. Supervision will ensure that: (a) project products are produced in accordance with the project results framework and lead to the achievement of project results; (b) the results of the project lead to the achievement of the project objective; (c) the risks are continuously identified and monitored, and appropriate mitigation strategies are applied; and (d) the agreed global environmental benefits of the project are being delivered.

3. FAO will monitor the activities, products and results financed by the GEF to a large extent through annual project implementation reports (PIR), and periodic support and supervision missions.

4. The daily monitoring of the project will be carried out by the Project Management Unit (PMU) and the person responsible for the FAO budget.

5. Project performance will be monitored using the project results matrix, including indicators (baseline and goals), and annual work plans and budgets. At the beginning, the results matrix will be reviewed to finalize the identification of: i) products ii) indicators; and iii) lack of baseline information and goals.

6. A Monitoring and Evaluation (M&E) specialist will develop a detailed M&E plan, which is based on the results matrix and defines the specific requirements for each indicator (data collection methods, frequency, responsibilities for data collection and analysis, etc.).

7. The project will design a strategic implementation strategy detailing steps and benchmarks for deliverables covering the entire project period. This implementation strategy will be completed prior to the inception workshop and will be used to guide and monitor implementation progress in parallel with project impact monitoring and evaluation. The implementation strategy will prioritize and detail implementation actions. This will include firm timelines for the professional completion of deliverables required to realize the intended project objective and associated GEBs.

**Budgeted M&E Plan**

| M&E activities | Responsible | Time frame | Budget, USD |
|---|---|---|---|
| Initial Workshop | NPC with NFP support<br><br>FAO Representation in Botswana | Within three (3) months after the signature of the project document by the country | 10,000 |
| Initial Workshop report | NPC with NFP support | Within two (2) weeks following the Initial Workshop | NPC and NFP |

| M&E activities | Responsible | Time frame | Budget, USD |
|---|---|---|---|
| Annual Work Plan and Budget (AWP/B) | Prepares NPC with support from the LTO, and the BH with support from the National Budget and Operations Officer<br><br>PMU and Inter-institutional Technical Team contributions<br><br>PSC approval | Annual; at the beginning of the project and subsequently, every calendar year | National counterpart, NPC and Agency Fee |
| Support and supervision visits | LTO, PMU | At least once a year | PMU, Agency Fee and specific activities |
| Project Progress Report (PPR) | NPC, LTO, BH | Every six (6) months (June and December) | NPC y Agency Fee |
| Project Implementation Report (PIR) | Prepares NPC with PMU inputs<br><br>LTO and BH supervision<br><br>Approval and submission to the GEF by PSC | Annual | National counterpart, NPC and Agency Fee |
| Co-financing Report | PMU | Annual (with the PIR) | PMU |
| Final Evaluation | External consultants<br><br>PMU and Inter-institutional Technical Team | At least three (3) months before project closure | 45,000 |

| M&E activities | Responsible | Time frame | Budget, USD |
|---|---|---|---|
| Final Project Report | Consultant with PMU support<br><br>LTO and BH supervision<br><br>Approval and submission to the GEF by PSC | Within two months after project closure | 6,000 |
| Specific project budget for M&E activities | | | 61,000 |

**10. Benefits**

**Describe the socioeconomic benefits to be delivered by the project at the national and local levels, as appropriate. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?**

1. The project will directly benefit approximately 17,000 rural producers in two districts. The livelihoods of these producers are currently challenged due in large part to the inability to address degradation challenges. The project will reverse this trend by providing producers with the opportunities to access knowledge, information, capacity and experience to adopt improved practices. These practices will result in GEBs, but also increased the standards of living, food security, and climate change resiliency of these at-risk rural dwellers. This will include providing residents to access to greater profitability through sustained production methods and ability to better realize gains from existing and new markets.

2. Employment is an on-going challenge in rural Botswana. By improving these practices, increased livelihoods, and income the project is expected to have knock-on impacts in terms of economic development and associated increases in employment opportunity.

3. At the governance level, national benefits will accrue to a variety of agencies. This will include the ability to more efficiently and effectively address degradation issues. The results of more strategic and collaborative approaches to degradation will also increase the cost-effectiveness of current divergent investments. These investments and associated human resources will be harmonized to directly address degradation and increase synergistic responses. This will include capacity building, limited supply of better equipment, and access to knowledge and capacity based upon best international and regional principles and practices.

4. As noted, the project will pay special attention to these issues with regards to women empowerment and gender equity.

## 11. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

**Overall Project/Program Risk Classification***

| PIF | CEO Endorsement/Approval | MTR | TE |
|---|---|---|---|
| | Medium/Moderate | | |

**Measures to address identified risks and impacts**

Elaborate on the types and risk classifications/ratings of any identified environmental and social risks and impacts (considering the GEF ESS Minimum Standards) and any measures undertaken as well as planned management measures to address these risks during implementation.

**Environmental and Social risks from the project – ESM Plan**

11. The project is reclassified from low to moderate risk mostly due to the fact that although the foreseen environmental and social impacts of project are likely to be positive considering the nature of the interventions, the project includes the following risks factors under the Environmental and Social Risk Identification Screening Checklist:

1. **ESS 1 - Natural resources management**: The project will work to improve land tenure security and access rights through policy dialogue and multi-stakeholder policy and support implementation of participatory land use planning. This may result in changes to existing tenure rights (formal and informal) of individuals, communities or others to land, fishery and forest resources which triggers ESS 1.

2. **ESS 3 - Plant and Genetic Resources for Food and Agriculture**: The project interventions on crop diversification and community seed banks will involve the provision and transfer of seeds and planting material for cultivation which triggers ESS 3.

3. **ESS 9 – Indigenous People**: The project interventions will be in sites where some indigenous groups reside, which triggers ESS 3.

12. The identified risks are mostly temporal, localized and reversible. Considering the impact, appropriate mitigation measures have been developed to address and mitigate the identified risks above. The developed risk management plan in the table below will allow managing risks by monitoring mitigation actions throughout implementation.

13. The risks to the project have been identified and analysed during the project preparation phase and mitigation measures have been incorporated into the project design (see Table below). With the support and oversight of FAO, the Project's National Steering Committee (NSC) will be responsible for managing these risks as well as the effective implementation of mitigation measures. The Monitoring and Evaluation (M&E) system will serve to monitor outcome and output indicators, risks to the project and mitigation measures. The National Project Steering Committee will also be responsible for monitoring the effectiveness of mitigation measures and adjusting mitigation strategies accordingly, as well as identifying and managing any new risks that have not been identified during Project preparation, in collaboration with Project partners.

14. The six-monthly Project Progress Reports (PPR) are the main tool for risk monitoring and management. The PPRs include a section covering the systematic monitoring of risks and mitigation actions that were identified in the previous PPRs. The PPRs also include a section for the identification of possible new risks or risks that still need to be addressed, risk rating and mitigation actions, as well as those responsible for monitoring such actions and estimated timeframes. FAO will closely monitor project risk management and will support the adjustment and implementation of mitigation strategies. The preparation of risk monitoring reports and their rating will also be part of the Annual Project Implementation Review Report (PIR) prepared by FAO and submitted to the GEF Secretariat.

**Environment and Social Risks**

| Risk identified | Risk Classification | Mitigation Action (s) | Indicators | Progress on mitigation action |
|---|---|---|---|---|

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|---|---|---|---|---|
| SAFEGUARD 1 NATURAL RESOURCES MANAGEMENT<br><br>Tenure | Moderate | During implementation, the project activities will address tenure rights by applying an integrated landscape/territorial approach resolving insecure or inequitable tenure (right to use and benefits of ecosystem services), weak common property regimes, and natural resources management institutions. Conflict resolution measures to address land conflicts and boundary disputes will be applied as part of an inclusive engagement of all relevant stakeholders in this process. For this purpose, the project will follow the stakeholder engagement plan (as well as core elements of the Integrated Landscape Assessment and Management Methodology (ILAM)) in particular the multi-stakeholder workshop approach which was successfully applied during the project's preparation.<br><br>The project will apply and adhere to the principles/framework of the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT) and stakeholders will be trained in its use. | # of beneficiaries trained on the implementation of the VGGT<br><br>Level of influence and engagement with government around the principles enshrined in the VGGT<br><br># of land use plans in place and regulations effectively implemented<br><br># of communities with secure tenure<br><br>rights to land, with legally<br><br>recognized documentation(CCROs) and<br><br>who perceive their rights to land<br><br>as secure, by sex and by type of<br><br>tenure<br><br># of land based conflicts resolved and # of people that have actively participated in the conflict resolution activities (disaggregated by gender) | N/A |

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|---|---|---|---|---|
| ESS 3 Plant and Genetic Resources for Food and Agriculture | Moderate | As part of the integrated landscape management approach the project will promote sustainable agricultural intensification through the diversification of the agricultural production. The focus will be on drought tolerant, nitrogen fixing and soil stabilizing pulses (and other neglected and underutilized species/NUS) to increase resilience and productivity, strengthening sustainable local food systems and mitigating the negative effects of land degradation and climate change.<br><br>Community Seed Banks (CSB) will serve as hubs where local communities can conserve and exchange seeds that can be used for diversifying the agricultural systems locally. The selected seeds and planting material will be largely derived from locally adapted crops and varieties and will be suitable to local conditions and preferences of farmers and consumers.<br><br>The CSB and associated trainings will enable the targeted farmers and their families to conserve local varieties of their preference, multiply seeds, and distribute them both within and across farming communities. The CSB management will ensure that the seeds and planting materials are free from pests and diseases according to agreed norms, especially the IPPC. The transfer of seeds across borders will take place, if needed, following international regulations on plant health (IPPC) and access and benefit-sharing, for example through a Standard Material Transfer Agreement (SMTA).<br><br>The project (with support of the Regional Exchange Mechanism) will further support communities' increased access to genetic diversity and greater knowledge of their own national programmes, other countries and international organizations.<br><br>Moreover, the project will be aligned to the ongoing efforts to develop and strengthen national ABS frameworks, human resources, and administrative capabilities to implement the Nagoya Protocol. For example, the Department of Environmental Affairs is already implementing a pilot project under the Global ABS initiative entitled 'Strengthening Human Resources, Legal Frameworks, and Institutional Capacities to Implement the Nagoya Protocol' which will further support CSBs activities. As such, guidance will be provided within the context of the ITPGRFA and capacity development activities on Farmers' Rights are key planned activities. | # of smallholder farming households who are applying sustainable agricultural intensification and diversifying their production.<br><br># of farmers involved in CSB activities and benefiting in resources.<br><br># of crops and varieties per crops conserved and exchanged through the CSB.<br><br># of training beneficiaries (management of CSB and seed conservation, Participatory Plant Breeding (PPB), small-scale seed production and climate change adaptation strategies)<br><br>National level analysis and recommendations produced on policy and legal environment in relation to access and benefit-sharing, conservation, use and exchange of germplasm.<br><br># of training beneficiaries on the mutual implementation of ITPGRFA and Nagoya Protocol and national implementation of Farmers' Rights | N/A |

| | | | | |
|---|---|---|---|---|
| Safeguard 9 Indigenous People | Moderate | The project districts in which the proposed project will be implemented account with the presence of indigenous peoples belonging to the San, locally known as Basarwa.<br><br>Due to the travel restrictions associated with the COVID-19 pandemic, during the PPG consultation phase it was not possible to initiate the process of Free, Prior and Informed Consent (FPIC) at community level. However, a desk review of the presence of indigenous peoples was carried out in order to determine their potential presence in the project areas. Rushing the initial stages of the FPIC process would have resulted in a sub-optimal process not guaranteeing the principles enshrined in the FPIC, in particular allowing sufficient time for the indigenous community to discuss in their own language and in a culturally appropriate way before reaching a decision. As such, as a first step during the implementation of the project, priority will be given to confirm the locations of indigenous peoples and to establish in a participatory manner, how the project activities might affect them while avoiding or minimizing any potential risks. The execution of the first steps of the FPIC process will therefore take place during the implementation stage of the project and before enacting any activity that could have an effect on indigenous peoples. | # of beneficiaries belonging to indigenous peoples<br><br># of consultations sessions held with indigenous peoples' communities<br><br># of FPIC agreements endorsed by the concerned communities | Step 1 of FPIC conducted during the PPG |

**Climate risks summary - Dryland Sustainable Landscape Impact Program (DSL IP)[1]**

Climate baseline

15. The child projects of the Dryland Sustainable Landscape Impact Program will be implemented in East and Southern African countries (Angola, Botswana, Malawi, Namibia, Tanzania and Zimbabwe). The climate of Southern Africa varies from arid to humid subtropical regions. It is influenced by topography and large-scale seasonal atmospheric patterns, such as sea surface temperatures in the Indian Ocean and the South Atlantic Ocean. Rainfall is driven mainly by the migration of the Intertropical Convergence Zone

(ITCZ). The majority of the region's rainfall comes during the summer months (November–March). Temperatures vary significantly, with the highest temperatures recorded in the Kalahari Desert (>40°C). The lowest temperatures are found in the Lesotho, South Africa and Zimbabwe highlands. Rainfall is highly variable across the region, with a clear east-to-west gradient ranging from very dry conditions along the western Namibian coast to much higher rainfall in the coast of Mozambique. This dynamic is highly variable from wet to dry years. Longer-term variability is closely associated with the El Niño Southern Oscillation phenomenon, with El Niño events linked to warmer and drier conditions and La Niña events linked to cooler and wetter conditions (USAID, 2016).

Past and future climate trends: temperature and precipitation

16. Historical temperature trends across the region since the 1960s indicate increased mean, maximum and minimum temperatures, with more rapid increases in minimum temperatures (1–1.5°C on average). Past temperature trends since the 1960s show reduced late summer precipitation (November–March) in Botswana, Namibia and Zimbabwe, increased summer rainfall in Namibia and increased rainfall variability in Angola. In Tanzania, precipitation has remained relatively constant annually with a slight decrease from March to June (USAID, 2016; USAID 2018). Climate trends also show changes in the onset, duration, and intensity of rainfall, including increased frequency of dry spells and an increase in number of warm days/nights and subsequent decreases in cold days/nights across the region (USAID, 2016).

17. Climate change projections in the region estimate that temperatures could rise in Southern Africa between 2°C and 5°C by 2050 with more pronounced increases in the summer (November–March) (UNECA, 2012). Rainfall is expected to be slightly drier on average, particularly from April to September. The frequency of intense rainfall events, droughts and dry spells is expected to increase. (USAID, 2016). At the national level, temperature projections by 2050 in the RCP 8.5 scenario indicate an increase in mean annual temperature of 2.04°C in Angola, 2.47°C in Botswana, 1.99°C in Malawi, 2.14°C in Namibia, 1.85°C in Tanzania and 2.16°C in Zimbabwe. Rainfall projections indicate a decrease of 13.69mm in Angola, 63.92mm in Botswana, 63.59mm in Malawi, 40.85mm in Namibia and 61.68mm in Zimbabwe. On the other hand, a slight increase of 3.63mm is expected in Tanzania by 2050 in the RCP 8.5 scenario (WBCKP, 2020).

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Natural hazards, exposure, and vulnerability

18. The countries where the DSL IP child projects will be implemented are highly exposed and vulnerable to climate change. The region is vulnerable to a wide range of natural disasters including floods, droughts and cyclones (USAID, 2016). There are signs that drought is becoming more common and more prolonged in the dry lands of Southern Africa and drought incidence is expected to increase as a result of higher temperatures and reduced rainfall (IFAD, 2011). Southern African countries were struck by multiple major droughts in the past decades (UNECA, 2012). Since 2012, the region has only seen two favorable agriculture seasons, with many areas yet to fully recover from the devastating impact of the 2015/16 El Niño event. The 2018-2019 drought also had significant impacts on the affected farming households and communities in the region and seriously eroded their capacity to produce in the 2019/20 season. Poor harvests due to drought and plant pests and diseases led to production deficits throughout the region. The greatest deficits were seen in Botswana and Namibia, with outputs estimated to have fallen by 50 percent on a yearly basis, and Zimbabwe where the maize harvest was around 40 percent lower than the five-year average. Cereal production is estimated to be about 7 percent below 2018 levels, which were already below the five-year regional average. Livestock have also been impacted by limited water availability and increases in transboundary animal diseases, particularly foot and mouth disease (FAO, 2019).

The DSL IP cluster will follow the same approach and recommendations in addressing identified climate risks

19. The Dryland Sustainable Landscape Impact Program seeks to avoid, reduce, and reverse further degradation, desertification, and deforestation of land and ecosystems in drylands, through the sustainable management of production landscapes. The child projects will support countries in the implementation of their Land Degradation Neutrality (LDN) Strategies under the United Nations Convention to Combat Desertification (UNCCD) and promote and scale up SLM and SFM good practices.

20. In order to integrate adaptation and mitigation actions into the DSL IP, child projects will follow a programmatic approach that takes into account climate risks, vulnerabilities and corresponding management actions.

*Component 1:*

21. Climate risks will be systematically incorporated in the integrated land use planning process to anticipate future extreme weather events and plan positive actions of sustainable land management. This joint planning process will benefit from climate change related assessments conducted during the PPG (SHARP) as well as available climate change analysis (e.g. IFAD/ACDI climate analysis) and other available data sets.

22. The National Meteorological Authorities (NMA) and other institutions leading the collection, analysis and use of climate data should be engaged in the development and implementation of LDN strategies. Trainings and capacity building of relevant stakeholders should include activities on the use of climate information for informing strategies and planning, certain activities can be led by the NMAs.

*Component 2:*

23. The selection of evidence-based climate smart SLM/SFM practices will follow the results of the joint planning process (component 1) to ensure they are adapted to local contexts and supported by scientific evidence of project climate conditions. The identified practices should be integrated in the forest and farm producers' training manuals and be part of the Famers Field Schools curricula. The newly developed global note for FFS facilitators on integrating climate change adaptation into farmer field schools can inform this process as well as lessons learned from participatory engagement approaches such a PICSA. Climate field schools can link to demonstration plots of sustainable intensification practices and resilience measures post-harvest.

24. The selection of dryland value chains should also consider climate related risks. Their selection should be based on (i) their viability under climate change in the mid to long term; (ii) their contribution to drivers of climate-related impacts; and (iii) their ability to increase the resilience of the most vulnerable populations. Development of green value chains, including appropriate infrastructure or technologies to climate proof food value chains, should be based on results of climate impact assessments. Planning around drying, storage and transport can be informed by climate impacts at each stage.

Additional information:

https://drive.google.com/file/d/1Ng-VWBnviBbLVHTxccbN4msvHWUSnrOy/view?usp=sharing

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[1] Supporting documents:

FAO (2019). Southern Africa – Emergency Response Plan 2019-2020. Available at: http://www.fao.org/3/ca6741en/ca6741en.pdf

IFAD (2011). Climate-smart smallholder agriculture: What's different? IFAD Occasional Paper No. 3. Rome, Italy. Available at: http://www.ifad.org/pub/op/3.pdf

IFAD (2020). Climate Risk Analysis in East and Southern Africa. Available at: https://www.ifad.org/en/web/knowledge/publication/asset/42164786

National Communications Under the United Nations Framework Convention on Climate Change. Available at: https://unfccc.int/non-annex-I-NCs

UNECA (2012). Climate Change and the Rural Economy in Southern Africa: Issues, Challenges and Opportunities. Available at: https://www.uneca.org/sites/default/files/PublicationFiles/climate-change-and-the-rural-economy-in-southern-africa.pdf

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USAID (2016). Climate Change Risk Profile – Southern Africa. Available at: https://www.climatelinks.org/sites/default/files/asset/document/2016%20CRM%20Fact%20Sheet%20-%20Southern%20Africa.pdf

USAID. (2018). Climate risk profile: Tanzania. Available at: https://www.climatelinks.org/sites/default/files/asset/document/20180629_USAID-ATLAS_Climate-Risk-Profile-Tanzania.pdf

World Bank Climate Knowledge Portal: https://climateknowledgeportal.worldbank.org/

**Supporting Documents**

Upload available ESS supporting documents.

| Title | Module | Submitted |
|---|---|---|
| **ES Screening _Botswana DSL IP** | **CEO Endorsement ESS** | |
| **Climate Risk** | **CEO Endorsement ESS** | |

**ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).**

Reference to Annex A1 of the Project Document - pg. 150

**ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).**

Reference to Annex B of the Project Document - pg. 163

**ANNEX C: Status of Utilization of Project Preparation Grant (PPG). (Provide detailed funding amount of the PPG activities financing status in the table below:**

Reference to Annex C of the Project Document - pg.166

**ANNEX D: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used)**

**Provide a calendar of expected reflows to the GEF/LDCF/SCCF/CBIT Trust Funds or to your Agency (and/or revolving fund that will be set up)**

Reference to Annex D of the Project Document - not applicable

**ANNEX E: Project Map(s) and Coordinates**

**Please attach the geographical location of the project area, if possible.**

Reference to Annex E of the Project Document - pg. 91

**ANNEX F: Project Budget Table**

**Please attach a project budget table.**

Reference to Annex A2 of the Project Document - pg. 162