

# Country Programme

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Republic of Botswana

Draft: 18 June 2020



Approved by NDA:

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## List of Acronyms

|                    |   |
|--------------------|---|
| AE                 | Accredited Entity   |
| AfDB               | African Development Bank  |
| AFD                | Agence Française de Développement                                   |
| AFOLU              | Agriculture, Forestry and Other Land Use                            |
| BDP                | Botswana Democratic Party   |
| BUR                | Biennial Update Report  |
| CBNRM              | Community-based natural resource management                         |
| CI                 | Conservation International  |
| CO <sub>2</sub> Eq | Carbon dioxide equivalent   |
| CSA                | Community-supported Agriculture                                     |
| CSO                | Civil Society Organization  |
| CN                 | Concept Note  |
| DMS                | Department of Meteorological Services                               |
| EbA                | Ecosystem-Based Adaptation  |
| EWS                | Early Warning System  |
| FAO                | Food and Agriculture Organization of the United Nations             |
| FP                 | Full Project Proposal   |
| FS                 | Feasibility Study   |
| GCF                | Green Climate Fund  |
| GCM                | Global Climate Model  |
| GDP                | Gross Domestic Product  |
| Gg                 | Giga grams  |
| GIS                | Geographic Information System                                       |
| GIZ                | Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH        |
| HCI                | Human Capital Index   |
| IAC                | Incremental Abatement Costs   |
| IFC                | International Finance Corporation                                   |
| IPPU               | Industrial Process and Product Use                                  |
| IUCN               | International Union for Conservation of Nature                      |
| IWERM              | Integrated Water and Energy Resource Management                     |
| JICA               | Japan International Cooperation Agency                              |
| KfW                | Kreditanstalt für Wiederaufbau                                      |
| LUCF               | Land Use Change and Forestry  |
| MENRCT             | Ministry of Environment, Natural Resources Conservation and Tourism |
| MFED               | Ministry of Finance and Economic Development                        |
| MMEWR              | Ministry of Minerals, Energy and Water Resources                    |
| MLGRD              | Ministry of Local Government and Rural Development                  |
| MOA                | Ministry of Agriculture   |
| MRV                | Monitoring Reporting and Verification                               |
| NAP                | National Adaptation Plan  |
| NC                 | National Communication  |
| NCCC               | National Climate Change Committee                                   |
| NCCU               | National Climate Change Unit  |
| NDA                | National Designated Authority                                       |
| NDC                | Nationally Determined Contribution                                  |
| NDP                | National Development Plan   |
| NDRMP              | National Disaster Risk Management Plan                              |
| NEP                | National Energy Policy  |
| NGO                | Non-governmental organization                                       |
| NIE                | National Implementing Entity  |
| NOP                | No-Objection Procedure'   |
| NSC                | North-South Carrier   |
| PES                | Payment of Ecosystem Services                                       |

|         |   |
|---------|---|
| PPF     | Project Preparation Facility  |
| RCM     | Regional Climate Model  |
| RCP     | Representative Concentration Pathways   |
| REDD+   | Reducing emissions from deforestation and forest degradation                            |
| SACU    | Southern African Customs Union  |
| SADC    | Southern African Development Community  |
| SAP     | Simplified Access Project   |
| SASSCAL | Southern African Science Service Centre for Climate Change and Adaptive Land Management |
| SDGs    | Sustainable Development Goals   |
| TEG     | Technical Expert Group  |
| ToR     | Terms of Reference  |
| UNDP    | United Nations Development Programme  |
| UNEP    | United Nations Environment Programme  |
| UNFCCC  | United Nations Framework Convention on Climate Change                                   |
| WMO     | World Meteorological Organization   |
| WWF     | World Wildlife Fund   |

# 1. Country Profile

## 1.1. Basic Information

| Botswana - basic information               |  |
|--|--|
| <b>Geographical location</b>               | Southern Africa  |
| <b>Area</b>                                | 581,730 km <sup>2</sup>  |
| <b>Population</b>                          | 2,254,068 (2018 estimate)  |
| <b>Types of Climate</b>                    | Botswana's climate is semi-arid. Though it is hot and dry for much of the year, there is a rainy season, which runs through the summer months. Rainfall tends to be erratic, unpredictable, and high spatially varied. Showers are often followed by strong sunshine so that a good deal of rainfall does not penetrate the ground but is lost to evaporation and transpiration. The day time air temperatures on average during summer months are generally warm to hot due to high insolation, which leads to the extent that the potential evapotranspiration far exceeding precipitation rates. <sup>1</sup> |
| <b>GHG emissions profile</b>               | Botswana's GHG emissions were 7,168.7Gg CO <sub>2</sub> eq in 2013 and removal by forests acting as carbon dioxide sinks was 42,941 Gg CO <sub>2</sub> eq. The net emissions after accounting for the removal were - 35,506.777 Gg CO <sub>2</sub> eq, thus indicating that Botswana was a net sink of GHGs. <sup>2</sup>  |
| <b>Main Emission Sector</b>                | In 2013, energy share accounted for 68% of all emissions followed by agriculture with 15%, the IPPU with 11%, and the waste with 5%. <sup>3</sup>  |
| <b>Main Climate Risks</b>                  | Intensification of droughts, rising temperatures, changes in precipitation patterns, reduced water availability, forest fires, an increase of extremely hot days, erosion of agricultural lands, and pastures. <sup>4</sup>  |
| <b>Vulnerable sectors</b>                  | Natural ecosystems, Human health, Water resources management, agriculture and forests, Energy, Human settlements and infrastructures, Tourism <sup>5</sup>   |
| <b>National Designated Authority (NDA)</b> | Ministry of Finance and Economic Development   |
| <b>Main International AEs</b>              | AfDB, World Bank, GIZ, UNDP  |
| <b>National AEs</b>                        | None   |

<sup>1</sup> Botswana's Third National Communication to the UNFCCC, 2019

<sup>2</sup> Third National Communication, 2019

<sup>3</sup> Third National Communication, 2019

<sup>4</sup> Third National Communication, 2019

<sup>5</sup> Third National Communication, 2019

## 1.2. Climate change profile

### 1.2.1 Overview

The landlocked Republic of Botswana in southern Africa is a semi-arid country, with a short rainy season. Botswana is affected by periodic droughts and winds, which carry dust and sand during the dry season. Desertification and limited freshwater resources are the main environmental threats facing Botswana.

Upon independence in 1966, Botswana was one of the poorest countries in the world, but its economy has since been one of the fastest growing in the world<sup>6</sup>. However, high rates of poverty in remote areas, income inequality, and a high HIV/AIDS adult prevalence rate are still issues impacting population health and wellbeing.<sup>7</sup>

Droughts and rainfall variability are predicted to increase with climate change. Slowed agricultural production, increasing food insecurity and increased water stress have already been witnessed, and are likely to continue. Extreme events associated with climate change are likely to lead to an increased incidence of vector-borne diseases such as malaria and Bilharzia.<sup>8</sup>

The government of Botswana is working to address such risks - Botswana has developed a Climate Change Policy and Institutional Framework, which will be supported by a Strategy and Action Plan to operationalize the Policy. Botswana aims to ensure the Policy is implementable by developing a comprehensive package of measures including a long-term low carbon strategy, a national adaptation plan, nationally appropriate mitigation actions, identification of key technologies, a plan for knowledge management capacity development, education and public awareness, and a financial mechanism.

### 1.2.2 Climate scenarios and Climate Change Projections

The climate scenarios were constructed for the Third National Communication (2019) to determine the impacts of climate change in Botswana. The following text is adopted from this document.<sup>9</sup>

Emphasis was placed on the eastern part of the country and the mining towns of Orapa and Letlhakane and Makgadikgadi Salts Pans. The eastern part of Botswana is where the majority of the country's population resides. Secondly, the capital city and the city of Francistown are also located along this corridor.

Climate scenarios were constructed for precipitation and temperature for the year 2050 and this was based on the RCP of 4.5 and 8.5. GCM/RCM ensemble was used with input from the University of Cape Town. The variables analysed included: seasonal and annual precipitation, mean, maximum, and minimum temperature, drought, extreme precipitation.

### 1.2.3 Temperature scenarios

The seasonal and annual mean, maximum, minimum temperatures for the selected sites were projected to increase faster than global temperatures, which were projected to increase 1.5°C in 2050 RCP4.5, and 2.1 in 2050 RCP8.5°C. Figure 1 depicts baseline and projected mean temperature for the country for 2050. It shows that by 2050, most of the country will experience a high average temperature of 25.9-26.9. Thus, by 2050 most of the country will be hotter relative to baseline temperatures.

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<sup>6</sup> World Bank Country Overview, <https://www.worldbank.org/en/country/botswana/overview>

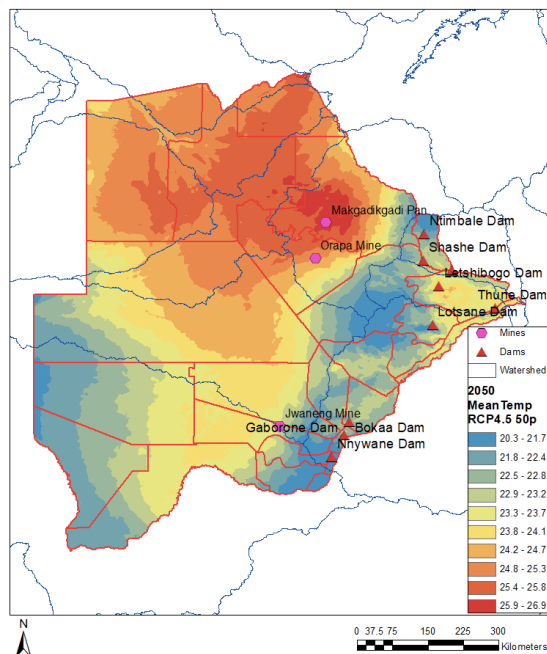
<sup>7</sup> *ibid.*

<sup>8</sup> Third National Communication, 2019

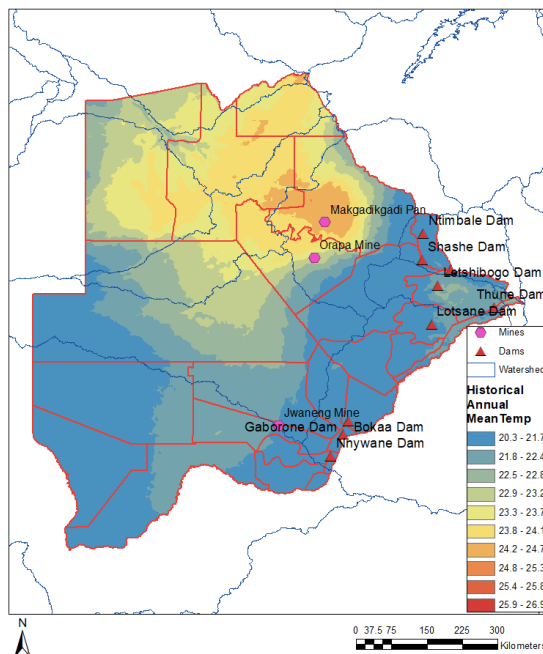
<sup>9</sup> Third National Communication (2019)

Figure 1: Botswana historical and future mean temperature

Botswana 2050 RCP4.5 Annual Mean Temperature (Celsius)  
GCM/RCM Ensemble Median



Botswana Historical Annual Mean Temperature (Celsius)



#### 1.2.4 Precipitation scenarios

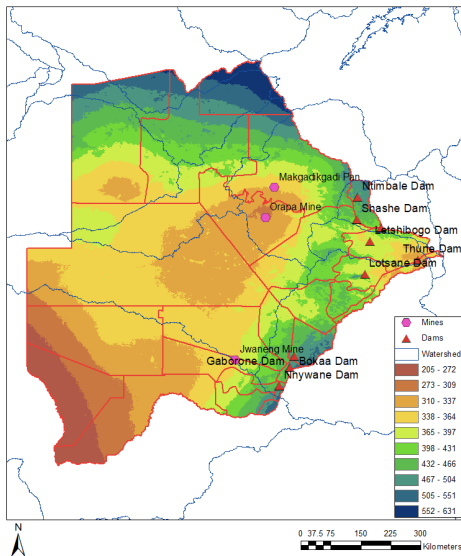
Precipitation scenarios were also constructed for 2050 for the dams' sites along the North-South carrier water pipeline (NSC), Jwaneng, Orapa and Makgadikgadi Salt Pans. The seasonal and annual mean precipitation over Botswana showed a general decrease trend by 2050. However, the ensemble median (50 percentile) was projected to increase by 1-2% in 2050. Figure 2 depicts precipitation projections for the whole country by 2050 based on RCP 4.5 and 8.5.<sup>10</sup>

<sup>10</sup> Third National Communication (2019)

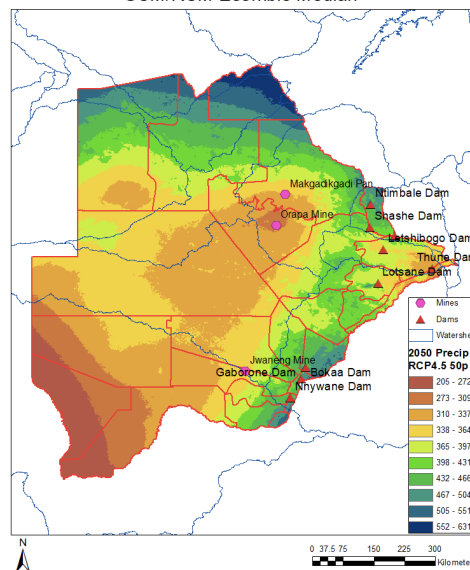


**Figure 2: Projected precipitation by 2050 based on RCP4.5 and 8.5**

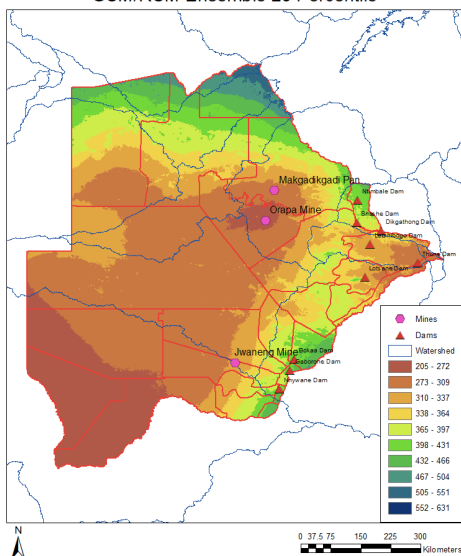
Botswana Historical Average Annual Precipitation (mm)



Botswana 2050 RCP4.5 Annual Precipitation (mm)  
GCM/RCM Ensemble Median



Botswana 2050 RCP8.5 Annual Precipitation (mm)  
GCM/RCM Ensemble 25 Percentile



### 1.2.5 Water Sector

The water sector and wetlands is one of the most important and possibly highly vulnerable sectors that will be affected by climate change. This sector is intricately linked to climatic variables (temperature and rainfall) making it highly vulnerable to climatic variability.

Given the possibly of high vulnerability of the water sector to climate change it is thus important that feasible and effective adaptation measures are identified and implemented. This would technically reduce the country's vulnerability to climate change not only in the water sector, but also in other sectors that are connected to this critical infrastructure.

### Climate change impact on water resources

Climate change will affect water resources through changes in precipitation and temperatures. Changes in precipitation will affect water flow into dams, pans, and also through groundwater recharge. Additionally, the temperature change will have a significant effect on evaporation from the water bodies. Currently, water loss from evaporation is extremely high and constitutes approximately 50% of outflows. Therefore, changes in evaporation would have a significant impact on open water resources.<sup>11</sup>

Another physical direct impact of climate change on water resources will be through evaporation rates. There is a general consensus amongst scientists that a decrease in rainfall and an increase in temperature will result in an increase in evapotranspiration. Consequently, Botswana is one of the countries that are projected to have an increase in temperature by as much as 2°C and a decrease in precipitation.<sup>12</sup>

Water resources in the country are highly driven by climatic variables, mainly temperature and rainfall. Temperature and rainfall act jointly to determine the water stocks and flows. Precipitation determines the inflows and recharge (positive flow), the temperature on the other hand affects outflow (negative flows) through evaporations. Therefore, this water-climate relationship was used to assess the vulnerability of the water sector to climate change in the country. Climate and socio-economic scenarios were constructed to determine the vulnerability of the water sector to climate change. Using the GCM/RCM ensemble and RCP 4.5 and 6.0 the results indicate that temperature could increase by between 1.5°C and 2°C.<sup>13</sup>

On the one hand, the model indicates a decrease of rainfall by as much as 15% though there are some insignificant rainfall increases for other percentiles. These changes will have a negative impact on water resources in the country. The model indicates that by 2050, climate change will result in a decrease in water inflow into dams by 3.5% to 19%, which represents an actual loss of 34 to 75 Mm<sup>3</sup> by 2050. Using the PET equation, it is projected that evaporation could increase by between 3.7% and 7% from the baseline.<sup>14</sup>

On the basis of the projected decline in rainfall, increase in temperature, and evaporation, it is projected that recharge would also decline. Lastly, the overall effect of climate change would be to encourage groundwater abstraction and hence water mining in the country. Thus, increase incidents of surface water scarcity will encourage water depletion by 2050. Overall, it is estimated that climate change will reduce the demand-supply ratio by 2050.<sup>15</sup>

#### 1.2.6 Impact of climate change on the livestock sector

The current climate in Botswana has a strong impact on livestock productivity, especially the recurrence of drought. Livestock populations in Botswana tend to increase during years of high precipitation and then decline during climatic shocks such as droughts. The national cattle herd peaked in 2002 and then immediately declined by approximately 33% and further declined to the lowest number in 2007. The vegetation condition index of 2001 indicates that the rangeland productivity was high, leading to increased forage supply and reduced mortality (4.9 %) of cattle. This pattern highlights the high vulnerability of the rangeland-based livestock industry of Botswana to climate shocks, which is likely to be exacerbated by climate change.<sup>16</sup>

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<sup>11</sup> Third National Communication (2019)

<sup>12</sup> Third National Communication (2019)

<sup>13</sup> Third National Communication (2019)

<sup>14</sup> Third National Communication (2019)

<sup>15</sup> Third National Communication (2019)

<sup>16</sup> Third National Communication (2019)

### 1.2.7 Climate change effects on biodiversity

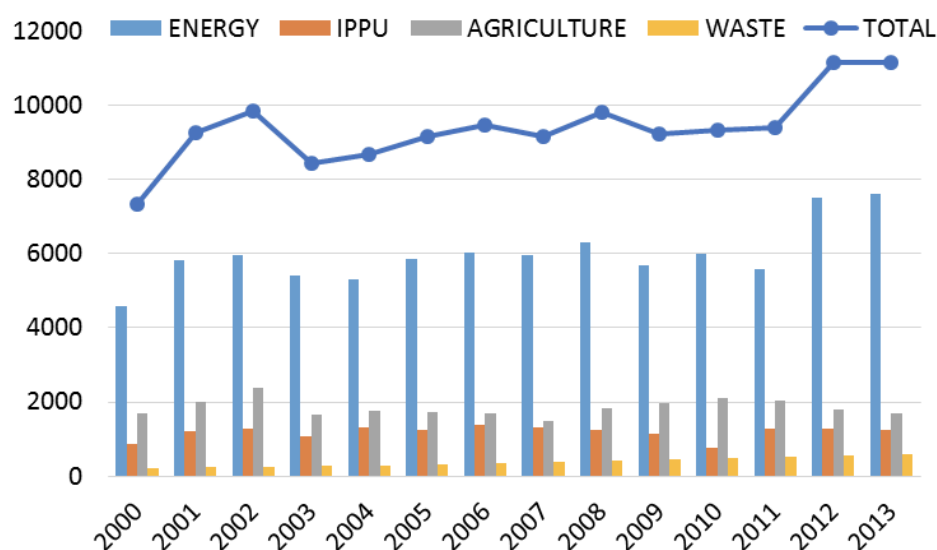
Climate change and its interactions with other stressors have an effect on biodiversity and those species with small distribution, low abundance, and specialized habitats are particularly vulnerable. Birdlife has been shown to be threatened by changes in rainfall distribution and temperatures partially due to a shift in the composition of natural resources in their habitat. The inflow in Okavango Delta is likely to be reduced due to a decline in rainfall in its catchment area. It was estimated that potential evapotranspiration in the Okavango Delta might increase by 15% by 2050 resulting in a decrease in a runoff of about 20%. The water situation will worsen with rising temperatures due to global warming elevating evapotranspiration leading to rapid losses, i.e. evapotranspiration rates increase by approximately 3% to 4% for every 1°C rise in temperature. This will result in reduced species richness in the area through either extinction or migration. The shift in the proportion of woody and grassy vegetation would be stimulated by a change in carbon dioxide concentration in the atmosphere and rainfall patterns. An increase in frequency, intensity, and extent of extreme events such as droughts and fires will place vegetation under stress and will contribute to population decline.<sup>17</sup>

Climate change will likely affect wildlife resources in Botswana through different stressors depending on the status and management of these resources. A 2011 aerial survey over the Okavango Delta established that wildlife species have shrunk in the past 15 years by as much as 95% for ostrich, 90% for wildebeest, 84% for antelope tsessebe and 81% for warthogs and kudus; although others, such as elephants and plains zebra, remained stable while hippos increased by 6%. Furthermore, wildlife survival options under the projected changes will be obstructed by the inability to migrate first within a country and worse for the case of between countries, due largely to human-made barriers.<sup>18</sup>

## 1.3 Key emitting sectors

Botswana emitted less than 12 million tons of CO<sub>2</sub>eq in 2013, the last year of a full inventory of GHG emissions in the country. Table x shows the breakdown in the total emissions by the four main emitting sectors: Energy, Agriculture, Industry, and Waste.

**Figure 3: GHG Emission Trends by Sector from 2000 to 2013 (Gt CO<sub>2</sub>eq)**



Source: Third National Communication

<sup>17</sup> Third National Communication (2019)

<sup>18</sup> Third National Communication (2019)

Energy share accounted for 68% of all emissions followed by agriculture with 15%, the IPPU with 11%, and the waste with 5%.

### 1.3.1 Energy Sector

For the energy sector, specific sectorial inventory was carried out for the year 2014, when it accounted for approximately 70.3% of total national direct GHG emissions (without LUCF). The energy sector was a significant source of CO<sub>2</sub> and N<sub>2</sub>O emissions, accounting for approximately 85.1%, and 87.2%, respectively, of total CO<sub>2</sub> and N<sub>2</sub>O emissions registered at the national level. Methane emissions by the energy sector contributed 26.2% to the 2014 national methane emissions.<sup>19</sup>

The total emission in the energy sector in 2014 was 8351.60 Gg CO<sub>2</sub>eq. A large proportion of the GHG emissions within the energy sector arose from fuel consumption activities (8086.60 Gg CO<sub>2</sub>eq; 96.8% the total). Of this amount, energy industries (electricity and heat) accounted for 4199.91 Gg CO<sub>2</sub>eq, or 51.9% of the total.<sup>20</sup>

Emissions from transport were 2310.70 Gg CO<sub>2</sub>eq (28.6% contribution to the fuel consumption activities). A large proportion of emissions from the transport subsector come from road transportation, which accounted for 2241.25 Gg CO<sub>2</sub> eq (97.0%) while the rest was from civil aviation, with 69.44 Gg CO<sub>2</sub>eq (3.0%).<sup>21</sup>

Other sectors include; commercial/institutional (814.60 Gg CO<sub>2</sub>eq; 51.7% contribution to the “other sectors”), residential (713.51 Gg CO<sub>2</sub>eq; 45.3% contribution to the “other sectors”) and agriculture/forestry/fishing /fish farms specifically from Stationary subcategory (47.69 Gg CO<sub>2</sub>eq; 3.0% contribution to the “other sectors”) contributed about 1575.99 Gg CO<sub>2</sub>eq (which is 19.5% of the fuel consumption).<sup>22</sup>

## 1.4 Development Profile

Botswana is located at the centre of Southern Africa, positioned between South Africa, Namibia, Zambia, and Zimbabwe. One of the world’s poorest countries at independence in 1966, it rapidly became one of the world’s development success stories. Significant mineral (diamond) wealth, good governance, prudent economic management, and a relatively small population of slightly more than two million, have made it an upper middle-income country with a transformation agenda of becoming a high-income country by 2036.<sup>23</sup>

### 1.4.1 Political Context

Botswana’s stable political environment includes a multi-party democratic tradition, with general elections held every five years. The ruling Botswana Democratic Party (BDP) has been in power since 1966. On October 23, 2019, Botswana held its 11<sup>th</sup> general elections, with His Excellency President Mokgweetsi Eric Masisi assuming the presidency. The new cabinet was announced on Nov 6, 2019, and Honourable Dr. Thapelo Matsheka was appointed the Minister of Finance and Economic Development.<sup>24</sup>

### 1.4.2 Economic Overview

Botswana has enjoyed strong and stable growth since independence, with sizable fiscal buffers and prudent policies playing a key role in shielding the economy, despite diamond market weakness and

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<sup>19</sup> Third National Communication (2019)

<sup>20</sup> Third National Communication (2019)

<sup>21</sup> Third National Communication (2019)

<sup>22</sup> Third National Communication (2019)

<sup>23</sup> World Bank Country Overview

<sup>24</sup> [https://www.cia.gov/library/publications/the-world-factbook/geos/print\\_bc.html](https://www.cia.gov/library/publications/the-world-factbook/geos/print_bc.html)

volatility. More recently, however, the limitations of Botswana's diamond-led development model have become more apparent: growth is slower, inequality remains high and job creation is limited.<sup>25</sup>

Having achieved strong growth of 4.5% in 2018, growth is estimated to have slowed to 3.5% in 2019, reflecting the effects of weakened global demand for diamonds alongside severe droughts affecting the region.<sup>26</sup> The global slowdown in demand and increased trade restrictions in light of the COVID-19 (coronavirus) pandemic is expected to have a profound impact on Botswana's economy, particularly on the diamond industry and tourism.

The diamond industry is still an important driver of growth, and is the single largest contributor to government revenues and accounts for 80% of export earnings. The expected reduction in the diamond sector is estimated to result in a 1.2% growth contraction in 2020. Growth, however, is predicted to stabilize at just over 4% by 2022 as global demand recovers. This is expected to create conditions for a reduction in extreme poverty levels. The authorities' ability to implement a new growth model focusing on export diversification strategy as outlined in the National Development Plan 11 (NDP 11) and much needed business reforms will play a critical role in Botswana's economic performance.

### 1.4.3 Social Context

Living conditions have improved for the Botswana people, and poverty has fallen significantly. In fact, the share of the population living on less than \$1.90 a day at the 2011 Purchasing Power Parity declined steadily from 29.8% to 18.2% between 2002 and 2010, and to 16.1% in 2016. This rapid poverty reduction can be attributed mainly to a combination of increasing agricultural incomes, including subsidies, and demographic changes.<sup>27</sup>

Progress in reducing poverty has been accompanied by improvements in shared prosperity. The growth rate of consumption per capita between 2009 and 2016 for the bottom 40 percentile of the population was 0.42% annually, higher than the growth rate of the top 60 percentile. However, Botswana's performance was only in the middle of the worldwide shared-prosperity distribution.<sup>28</sup>

Inequality has fallen as well, albeit still being high. Between 2010 and 2015, inequality, measured by the Gini index, fell from 60.5% to 53.3%.<sup>29</sup> Among factors associated with Botswana's declining income inequality, the key one is regional convergence due to fast growth in rural areas and demographic changes. However, Botswana remains one of the world's most unequal countries.<sup>30</sup>

The recent 2019 3<sup>rd</sup> quarter Botswana Multi-Topic Survey: Labour Force Module Report indicates that the unemployment rate has gone up by 3.1 percentage points from 17.6% to 20.7% with youth unemployment posing a critical challenge. Addressing these challenges will require improving the quality of infrastructure (water and electricity), essential basic services (education, health, and social safety nets), as well as accelerating reforms of the business environment and effective support for entrepreneurship.<sup>31</sup>

The World Bank's Human Capital Index (HCI) scores Botswana at 0.42. The purpose of the HCI is to promote attention and action to improve the level and quality of government investments in child health, nutrition, and education given their strong links to labour productivity and economic competitiveness. Botswana's HCI score suggests that a Botswana child born today will only be 42% as productive when she grows up, as she could have been if she had enjoyed complete education and

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<sup>25</sup> World Bank Country Overview

<sup>26</sup> World Bank Country Overview

<sup>27</sup> World Bank Country Overview

<sup>28</sup> World Bank Country Overview

<sup>29</sup> Gini index is a [measure of statistical dispersion](#) representing [income](#) distribution of a nation's residents, and is the most commonly used measurement of [inequality](#).

<sup>30</sup> World Bank Country Overview

<sup>31</sup> World Bank Country Overview

health. Education expenditures are among the highest in the world and include the provision of nearly universal free primary education, however it has not created a skilled workforce.<sup>32</sup>

## 1.5 Climate change response

### 1.5.1 Theory of Change

Botswana's response to climate change is set within a broad governance landscape that reflects Botswana's national character and aspirations. For climate change response to be embedded or mainstreamed within all spheres in Botswana, it is essential that the pursuit of climate change resilience should not be disconnected from the pursuit of Botswana's socio-economic goals. It should, in fact, be complementary to and should support and enhance the country's many developmental commitments.<sup>33</sup>

Without integrating climate change resilience into sectorial development efforts and economic investments to support Botswana's growth and targets, there is a risk that the development gains will be nullified, and economic assets will suffer depreciation or obsolescence in the face of climate change. Aligning climate change considerations with development planning and implementation—and mainstreaming this integration through the sectorial strategies articulated herein—can help ensure that Botswana will be well positioned to pursue its development goals despite the expected climate change impacts.<sup>34</sup>

This strategy is therefore grounded in an understanding of the relationship between climate change resilience and socio-economic development. Consequently, the theory of change presented in the graphic below confirms the ambition of the country to ensure that climate change response dovetails the country's development aspirations.

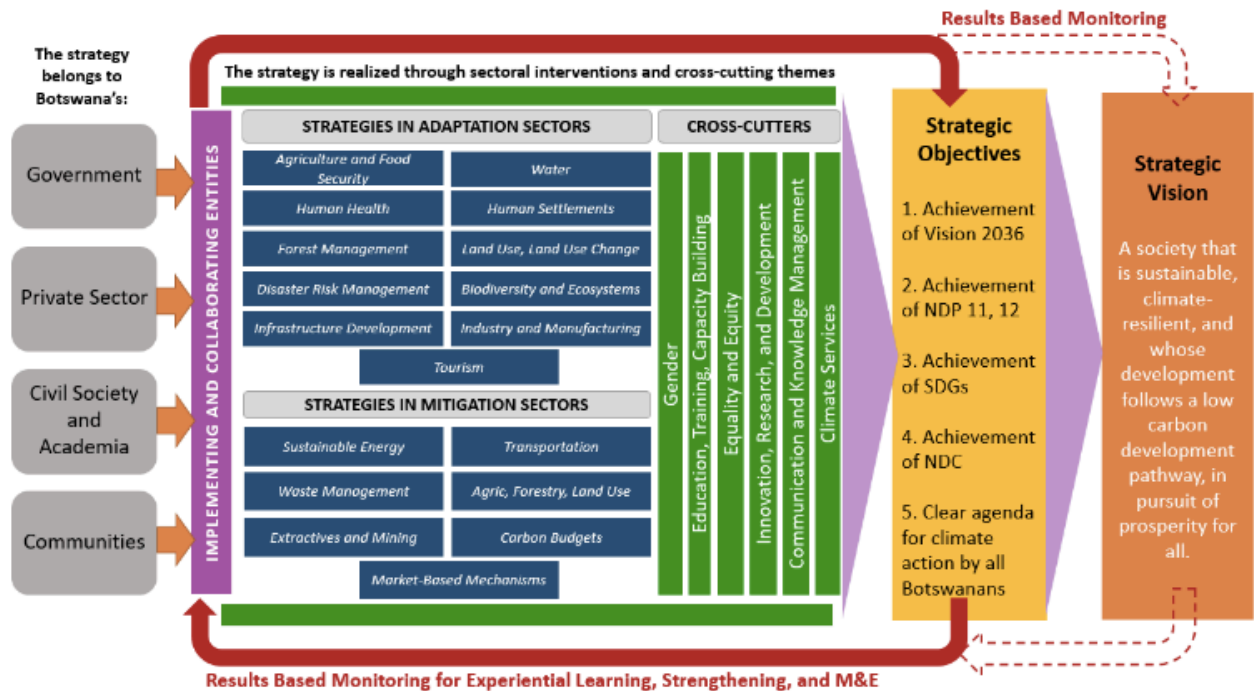
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<sup>32</sup> World Bank Country Overview

<sup>33</sup> Botswana National Climate Change Strategy 2018

<sup>34</sup> *ibid.*

Figure 4: Theory of Change



Source: Botswana National Climate Change Strategy, 2018

## 1.5.2 National frameworks

### 1.5.2.1 Vision 2036

The Botswana Vision 2036 is a successor of Vision 2016 directed towards achieving sustainable development. In this regard, Vision 2036 clearly states that: “the two global frameworks underpinning the sustainable development paradigm are Agenda 2030 on Sustainable Development and its associated SDGs and the Paris Agreement on Climate Change. The implementation of these frameworks will transform the world’s markets, technologies, and economic and social systems to enable them to serve the needs of the people, the environment, and economies.”<sup>35</sup> Furthermore, Vision 2036 identifies several areas that have a bearing on climate change that requires urgent attention. These areas include:

- Rangeland degradation;
- Deforestation;
- Water scarcity; and
- Energy demand - need to harness and utilize solar energy.

This provides a long-term strategic approach to mainstreaming climate change considerations and SDGs into the national development planning priorities and budgets.

Another very important aspect that Botswana Vision 2036 also deals with is the issue of deepening regional integration, especially within the SADC region, to take advantage of a huge market with a combined population of over 250 million people. This is a recognition that regional cooperation is vital in addressing development challenges that cannot be solved at a national level, could enable

<sup>35</sup> Botswana Vision 2036, accessed April 2020 at <https://vision2036.org.bw/>



Botswana to tap into her underdeveloped energy potential, and provide a regional market for her surplus electricity. Several domestic policy and plans are being implemented in Botswana within the Vision 2036 agenda, including:

— The Eleventh National Development Plan (NDP11)

The Eleventh National Development Plan (NDP11) for the period 2017 – 2023 acknowledges that climate change will have implications for economic growth and employment creation. It proceeds to propose that “... need to identify areas for intervention through mitigation and adaptation.”<sup>36</sup> Moreover, the theme for NDP 11 is “Inclusive Growth for Realisation of Employment Creation and Poverty Eradication”.<sup>37</sup> This theme is premised on the fact that, though concerted efforts were made during NDP 10 to achieve the goals and aspirations of Vision 2016, Botswana continues to grapple with the three main development challenges of poverty, unemployment and income inequalities. Specifically, this theme challenges everyone involved in the development of the country to continue striving towards improving the livelihoods of Botswana by ensuring sustainable economic development. The NDP11 is a clear testimony that climate change has been mainstreamed in the country’s national development planning and budgeting. This is important in the country’s quest to transition to a low carbon and climate resilient development pathway.

— National Energy Policy, 2015

The National Energy Policy was adopted by the Cabinet in 2015 and highlights the importance of developing renewable energy sources (e.g. solar, biogas) for improved security of energy supply. The NEP further promotes energy efficiency measures throughout all sectors of the economy.

— Botswana Energy Master Plan

The Botswana Energy Master Plan sets out various goals for rural electrification involving the use of renewable energy. Various programmes are set out as follows:

1. Promotion of solar energy by the Botswana Government.
2. Integration of grid and non-grid technologies.
3. Encouragement of research and development with regard to RE sources.
4. Identification of an appropriate institutional framework for rural electricity using renewable energy.
5. Development of strategies for removing the barriers to the widespread use of renewable energies.
6. Promotion of women's and children’s welfare through the provision of PV power generation (lighting).

— Integrated Water and Energy Resource Management (IWERM) Strategy

While the country continues to experience drought years (progressively intensified by climate change), it also faces increased pressure for fresh-water supply due to rapidly increasing urbanization and climate change requiring a series of measures to remediate the situation. These measures include drilling of more boreholes, construction of the North-South Carrier Phase, development of dams to augment the water resources and desalination of saline underground water.

The goal of this plan is to “Improve people’s livelihoods and welfare and contribute to sustained economic growth, economic diversification, social justice, and poverty eradication through efficient, equitable and sustainable water resources development and management.”

— National disaster risk management plan

The National Disaster Risk Management Plan (NDRMP) will be the basis to establish policies, strategies, and procedures that will guide all levels of society in disaster preparedness, response, and

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<sup>36</sup> Botswana National Development Plan 11: Volume 1, April 2017 – March 2023, accessed [http://www.finance.gov.bw/index.php?option=com\\_content&view=category&id=28&Itemid=126](http://www.finance.gov.bw/index.php?option=com_content&view=category&id=28&Itemid=126)

<sup>37</sup> *ibid.*



risk reduction. The NDRMP envisages and identifies risks, and reduces vulnerability in the contexts of various hazards likely to occur in Botswana. The NDRMP identifies the roles and responsibilities of all the leading national government and non-government actors for disaster risk assessment, preparation, and response.

— **National policy on disaster management**

Botswana's disaster risks and natural hazards, such as flood, drought, and wildfire, and discusses the country's institutional and legal framework for disaster reduction. It provides directives on the elaboration of the effective national disaster management programme and outlines key definitions, measures, and responsibilities for the preparation of disaster management plans at all levels.

— **Botswana Agriculture Sector Policy Brief 2012**

This policy brief aims to raise awareness on the status, challenges, and opportunities of the agriculture sector in Botswana. The policy brief captures progress to-date in improving production on the various sub-sectors of agriculture. It reflects on the challenges of the sector in light of climate change and the crises of food and energy prices, especially against the backdrop of a global outcry to (i) reduce the numbers of people living in poverty and extreme hunger, and (ii) to reduce the rate at which the earth is losing its biodiversity and their habitats.

**1.5.2.2 Nationally Determined Contribution (NDC)**

Botswana intends to achieve an overall emissions reduction of 15% by 2030, taking 2010 as the base year. Base year emissions are estimated at 8307 Gg of CO<sub>2</sub>e. In its NDC, Botswana commented, "Achieving such targets is a function of resource availability and appropriate legal frameworks."<sup>38</sup> Botswana's NDC is very ambitious and commendable, given that many other developing countries at similar income levels opt for reducing carbon intensity of GDP, rather than for absolute reductions of emissions.

This NDC emissions reduction target was estimated based on baseline GHGs inventory for the three GHGs being CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O, and covers the energy, waste, and agriculture sectors. To achieve its NDC target, Botswana will use market mechanisms as defined under the convention.

Concerning adaptation provisions in the NDC, as semi-arid country, Botswana is vulnerable to the impacts of climate change and places a high priority on adaptation to reduce its climate change vulnerability. The country is developing a National Adaptation Plan (NAP) and Action Plan, which will highlight priority areas. The development of the NAP has been slowed down in 2020 due to the COVID-19 lockdown and social distancing in the country. The National Adaptation Plan Expo 2020 was to take place from 30 March to 3 April 2020, however, it was postponed indefinitely.

Prior to the NAP, the National Adaptation Plan (NAP) Framework Inception Report in September 2019 incorporates 16 recommendations collected from the participants of the workshop hosted by the Botswana Ministry of Environment, Natural Resources, Conservation, and Tourism, through the Department of Meteorological Services. The recommendations covered transformations across a range of elements of the adaptation process, from adaptation planning to climate risk analysis to delivery of support.

When the NAP process is completed, the outcome of this process will be significant in guiding how the country responds to the development challenges across all sectors that are attributed to climate change. This will be informed by exiting climate change information, socio-economic and development indicators, local experiences, as well as existing policies, plans, and institutional frameworks. The development of the NAP is coordinated by the Ministry of Environment Wildlife and Tourism, with support from the National Committee on Climate Change.

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<sup>38</sup> BOTSWANA INTENDED NATIONALLY DETERMINED CONTRIBUTION, <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Botswana%20First/BOTSWANA.pdf>

### 1.5.2.3 National Climate Change Policy

Botswana is developing a Climate Change Policy and Institutional Framework, which will be supported by a Strategy and Action Plan to operationalize the Policy. In the draft Climate Change Policy presented in 2019, the country has promulgated six guiding principles for its climate policy. They are:<sup>39</sup>

- **Sustainable Development.** Botswana's climate change response shall contribute towards the realization of the goal of sustainable development. This contribution shall be achieved through development activities including adaptation and mitigation response measures as well as building national resilience that balances social, economic, and environmental objectives so as to meet the needs of current and future generations.
- **Precautionary Principle.** Botswana shall adopt a risk averse and cautionary approach in its decisions and actions required to address climate change resilience and sustainability in recognition of the risks posed by climate change, the scientific uncertainties in the available climate information, as well as in the effects of adaptation and mitigation response measures.
- **Public Participation.** The broad participation of all interested parties in climate change actions shall be promoted across all levels and sectors in order to ensure that adaptation and mitigation decisions and response measures are in the best interest of the general public and that their desired output is achieved.
- **Vulnerability.** Resources for mitigating and adapting to climate change and sustainability shall be fairly distributed across all sectors and population groups taking into consideration their vulnerabilities, responsibilities, and associated costs and benefits.
- **Polluter Pay Principle.** Botswana intends in principle that the costs of remedying pollution and environmental degradation leading to climate change shall be borne by those responsible for harming the environment including the costs of consequent adaptation and mitigation actions.
- **Common but Differentiated Responsibilities and Respective Capabilities.** The response measures shall be implemented bearing in mind Botswana's specific ecological circumstances, stage of development, and capability to reduce GHG emissions and in line with her sustainable development goals.

The country's Climate Change Policy takes into account Botswana's specific ecological circumstance, vulnerability, needs, and contribution to GHG emissions, and prioritizes adaptation actions. Mitigation actions are to be undertaken within the framework of building national resilience with priority being given to those mitigation measures that have adaptation and development co-benefits.

The climate change response mechanisms include ecosystem, market, and community based actions, which involve actors and all sectors. The specific adaptation and mitigation measures in the National Climate Change Policy are:<sup>40</sup>

#### i. Adaptation

Adaptation to climate change will involve specific and dedicated measures, which must be integrated into existing development processes and activities. This integration will be achieved through the

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<sup>39</sup> Republic of Botswana, THE BOTSWANA CLIMATE CHANGE POLICY, Ministry of Environment, Natural Resources Conservation & Tourism, 2019

<sup>40</sup> Republic of Botswana, THE BOTSWANA CLIMATE CHANGE POLICY, Ministry of Environment, Natural Resources Conservation & Tourism, 2019

formulation of strategies, programs, and regulatory frameworks that will create an enabling environment for wide-stakeholder participation in implementation. The priorities in the adaption policy are:

- **Agriculture and Food Security.** The production of food in Botswana depends on agricultural activities, which largely rely on rainfall. The unpredictability of rainfall in Botswana is viewed with most concerns as the majority of rural communities derive their livelihoods from rain-fed, small-scale agriculture. In order to cushion agriculture from climate change impacts, the policy will promote sustainable and climate smart agriculture through:
  - Enhancement of food production and agricultural sustainability. Exploration and development of innovative agricultural initiatives that can enhance income generation such as agro-tourism thereby significantly contributing to the improvement of individual and community livelihoods;
  - Adoption of strategies that will enhance the application of water and nutrient conservation technologies and create an enabling environment for investments in the use of renewable energy for agricultural activities;
  - Enhancement of the country's competitiveness and access to existing and new markets for green initiatives through low carbon production systems;
  - Enhancement of resilience in the livestock sector through an acceleration of sustainability measures such as rangeland efficiency and management practices; and
  - Promotion of access to existing and new information and use of the early warning system for agricultural planning and management purposes.
- **Water.** The country's development and growth potential depends on the availability of water for domestic and economic purposes. The varied and low rainfalls have largely affected most sectors of the economy especially major economic drivers such as agriculture, mining, and wildlife. There is, therefore, a need to reduce the vulnerability on the economy and communities to water related climate change impacts and enhance the country's resilience to such impacts through water efficiency. The government also recognizes that food production is closely linked to water availability and will face increased stress in districts where water stress is exacerbated. The government will commit to adopting water management strategies that would achieve sustainable water conservation and use efficiency including:
  - Utilization of shared watercourses for the benefit of Botswana;
  - Integrating climate change response measures in the water planning processes across all economic sectors;
  - Consideration of defining potential water aquifers and adopting appropriate measures of protection for water security and sustainability;
  - Promotion of rainwater harvesting, water re-use, and recycling for domestic, agriculture, industrial and commercial purposes;
  - Promotion of integrated watering systems for livestock particularly in rural areas; and
  - Employing accounting and valuation tools to support water management decision systems.
- **Human Health.** Climate change is likely to negatively affect human health directly through increased temperatures, drought and floods, and indirectly through its effect on the spread

of waterborne, water related and vector borne diseases, malnutrition among others in order to increase the country's vulnerability and resilience to such impacts, there shall be:

- Climate change related research on the impacts of extreme weather events such as increased temperatures, droughts, and floods on human health so as to ensure that informed decisions and necessary health sector reforms are made;
  - Acceleration of development and implementation of programs and plans that will increase the countries resilience to nutrition-related, respiratory and communicable diseases; and
  - Acceleration of the community's involvement in building resilience to climate change related to public health concerns.
- **Human settlements.** In an effort to increase the country's resilience to adverse impacts of climate change and achieve a low carbon development objective without compromising the living conditions of Botswana in rural and urban areas, and recognizing the role of urban settlements in both adaptation and mitigation, the policy will promote:
    - The incorporation of water conservation planning as part of development approval processes;
    - Adoption of conservation agriculture practices that would contribute to increasing both the resilience of rural settlements and the country's food production potential;
    - Conduct of research on the development and use of relevant technologies for water use irrigation systems and improved roll-out of rainwater harvesting strategies at both rural and urban areas;
    - Provision of finance targeted at increasing the adaptive capacity and capability of rural livelihoods; and
    - Harmonization of relevant human settlement related policies to enhance resilience and sustainability.
  - **Forest Management.** The government recognizes the value of forests and its dual role for adaptation and mitigation to adverse impacts of climate change. Land rehabilitation and forest management are instrumental in maintaining the integrity of forests as providers of ecosystem services and carbon sinks. In order to increase the integrity and sustainability of our forest and ensure that the threats of human and induced interventions are minimized, the policy will:
    - Strengthen the implementation of the forest policy with the view to ensuring that best practices based on available climate information and technology are adopted;
    - Prioritize climate research and feasibility studies on forest conservation, restoration of ecosystems and the use of modern technologies for controlling invasive species and wildfires;
    - Promote the use of indigenous knowledge and traditional forest management practices that contributes to increased forest cover and land rehabilitation;
    - Empower communities to monitor the implementation of forest climate related interventions with the view to minimize contravention to the identified adaptation and mitigation measures including illegal logging and uncontrolled fire wood collection that can lead to deforestation and land degradation; and

- Promote alternative livelihood and REDD+ mechanisms that can reduce pressure on forests.
- **Land use and Land Use Allocation.** Climate change related conflicts are likely to ensue because of competing interests in the use of land and land allocation. This anticipated conflict stems from climate variability and extreme weather events that result in migration of human settlements, livestock, and wildlife in search of suitable land and environment for socio-economic purposes. In order to enhance the sustainability and resilience of this sector, the land use and land use allocation will be:
  - Ecosystem land use planning; not only to minimize the location of residential, farming and industrial plots on sensitive ecosystems such as wetlands and watersheds but also to avoid places vulnerable to climate change disasters such as floodplains;
  - Aligned and guidelines will be developed for the mainstreaming and implementation of climate change development measures in rural development, wildlife, and land use planning policies made to achieve an integrated approach to land allocation and land use management; and
  - Supported by the establishment of climate decision-making systems that balance the interest between food production, climate smart agriculture, and development needs, and ensures appropriate allocation of land within the balanced environment.
- **Disaster Risk Reduction.** Climate change impacts are likely to increase vulnerability to disaster risk factors such as heatwaves, wildfires, floods, and droughts caused by extreme weather events, and will also increase pressure on resource allocation towards disaster risk management. These impacts call for comprehensive approaches to disaster risk reduction programs and plans to enhance societal adaptive capacity and capability through:
  - Continued research and promotion of the use of information on climate change, early warning systems for extreme weather and climate to inform disaster risk reduction plans and allocation of resources.
  - Strengthening collaboration with the regional and international forecasting centres to share early warning systems for national application and benefit.
  - Strengthening and monitoring the implementation of disaster reduction plans through guidelines on climate change induced disasters.
  - Continued interaction with communities, NGO's and other institutions committed to raising awareness on adaptation, technology transfer, and capacity building so as to enhance the communities' adaptation capacity and reduce vulnerability to natural disasters.
  - Building the country's resilience and coping mechanisms to disasters, through interventions of key actors.
- **Biodiversity and Ecosystems.** The integrity of Botswana's biodiversity and ecosystems continues to contribute significantly to the country's GDP particularly from wildlife and tourism activities. Any increased pressure on the adaptive capacity of the ecosystems is likely to have a significant negative impact on the economy and human livelihoods. The government, therefore, commits to promoting conservation and sustainable use of biodiversity and effective management of ecosystems, as well as the promotion of equitable sharing of benefits from natural resources. In order to enhance sustainability and adaptation capability of biodiversity, the policy will:

- Accelerate the prioritization of climate change related research on species richness changes, migration, pests, and diseases;
- Support the coordinated implementation and integration of climate change into existing biodiversity and ecosystem related policies and community based programs;
- Promote the use of ecosystem based adaptation approaches in order to take into consideration the full range of possible climate outcomes;
- Adopt climate change guidelines for designing and monitoring of development activities within and adjacent to sensitive ecosystems in order to enhance their resilience under changing climates;
- Where possible avoid human settlements adjacent to sensitive ecosystems that may interfere with the natural rehabilitation cycles of such ecosystems especially large water bodies; and
- Promote the implementation of natural capital accounting measures.
- **Infrastructure Development.** The impacts of climate change on infrastructure are magnified in places where housing and settlements are improperly planned and developed. The economic costs of impacts on infrastructure are likely to be high especially on repairs and reconstruction of infrastructure drivers including buildings, roads, dams, water reticulation systems, and electricity connection. The policy intends to achieve sustainable development and climate resilient infrastructure through:
  - Integration of climate change considerations into infrastructure planning, designing and development processes;
  - Providing incentives for the use of clean climate technologies for water supply and electricity in domestic, industrial, and commercial buildings;
  - Supporting climate related research on infrastructure that could guide development plans and priority actions;
  - Promoting private public partnerships on the development and transfer of clean climate technologies required for supporting climate resilient infrastructure and energy saving innovations; and
  - Strengthening education and awareness on efficient, cost effective, easily accessible, and implementable infrastructure development and management methods.
- **Gender.** The government recognizes the need to mainstream gender into development planning and intends to ensure that climate change response measures are gender sensitive, particularly with respect to the recognition that youth, women, children, and people living with disability have particular vulnerability to climate change impacts. This shall be achieved through:
  - Empowering communities, especially women, youth and people living with disability to actively participate in the implementation of climate change response measures at both rural and urban areas;
  - Adoption of strategies that are targeted at increasing resilience of most vulnerable groups such as women, youth, children, and people living with disability to climate change impacts through the provision of means of implementation such as technologies, finance, and capacity building; and
  - Including gender and climate change into an academic curriculum at all levels.

## ii. Mitigation

- **Mitigation Plans.** The government shall require its sectors, institutions, parastatals, companies, and NGOs for which emission potentials have been established to prepare and submit mitigation plans that outline how they intend to reduce their carbon footprint, and sustainably achieve the desired emission reductions. A broad approach to implementation of mitigation plans shall be promoted in order to achieve the desired emission reductions in each identified company, institution, sector and sub-sector of the economy by ensuring that required actions are relevant and adhere to best practices, taking into consideration the best available technology and solutions.
- **Carbon Budgets.** The formulation of carbon budgets is instrumental in ensuring that sectorial and sustainability mitigation plans are implemented within allocated resources, based on the capacity and capability of individual sectors to mitigate their carbon emissions. The carbon budgets will set into motion the implementation of cooperation agreements on climate change within the country as good governance practice. In order to achieve this, the government will:
  - Establish and implement short-term and long-term carbon budgets which are sector driven, including implementation and reporting guidelines for major economic sectors; and
  - Adopt and integrate carbon budgets into existing resource deployment planning processes to avoid duplication of efforts.
- **Carbon Markets.** The government will explore the feasibility of developing a wide range of enabling instruments to support mitigation plans and carbon budgets that would assist in the realization of desired emission reductions to ensure that Botswana participates in carbon markets. In order to establish sufficient carbon markets, the government will:
  - Adopt and enforce carbon taxes and their compounded effect on the standard of living on ordinary citizens;
  - Use carbon emission offsets and emission trading scheme for all major economic sectors where a carbon approach and cooperation agreements have been selected and adopted; and
  - Develop a legal framework for emission trading and access to new and existing markets at national, regional, and international levels including the establishment of carbon cap on trade, where possible.
- **Sustainable Energy.** Effective mitigation requires a robust approach to the reduction of GHG from development activities in a manner that would not compromise development and food production. This compromise must be achieved through integration of environmental protection, social and economic development into the decision-making processes, including investments in green technologies, to facilitate the realization of low carbon development. Green technologies, particularly in the energy sector, must be explored, developed and their transfer facilitated to ensure that energy uses to meet the needs of a future generation.

To achieve sustainable energy and low carbon development in Botswana as a means of sustainable development, the policy will:

- Promote and facilitate access to appropriate technologies for GHG emission reductions across major economic sectors such as transport, industry, and mining;
  - Promote the development of low-carbon economic development pathways, market-based strategies and cooperation agreements across all major economic sectors, outlining plans and programs relevant to each sector on their mitigation pathway;
  - Facilitate investment and access to clean technologies such as solar energy and wind power for domestic, industrial, and commercial purposes; and
  - Promote the development of guidelines, including reporting mechanisms, for a transition of a society to green economy, sustainable energy consumptions, and production patterns.
- **Transport Emissions.** The growth of the transport sector is likely to increase its carbon emissions due to the growth of motor vehicles on public roads. Considering that transport is one of the leading sectors in carbon emissions, there is a need for a robust approach towards reforming the transport sector with the view to mitigating its carbon emissions, whilst improving its performance. With the view to instituting climate related transport reforms, the policy will promote:
    - Development of a public transport network that is reliable and can advocate for GHG emission reductions;
    - Enhancement of the safety and operational standards for public transport and roads to attract commuters into using public transport;
    - Setting guidelines for the contribution of the aviation sector towards the reduction of GHG emissions;
    - Establishment of legal frameworks for the transformation and regulation of climate related transport elements; and formulation, implementation, and enforcement of emission standards for motor vehicle emissions.
  - **Waste Management.** The available information suggests that waste contributes to global warming through the emissions of methane and other anthropogenic gases that have a global warming potential, especially those released from the decomposition of waste. Waste management must, therefore, be an integral part of development planning in order to ensure that an integrated and sustainable approach to waste disposal planning is achieved. Environmental impact assessments will be used to identify the potential impacts of waste on the environment and climate. The policy will:
    - Promote integrated approaches and best practices in the management of waste with the view to reducing GHG emissions; and
    - Promote and support the recycling of waste for economic benefits.
  - **Procurement.** The manual procurement processes have the propensity to increase carbon footprints, especially from paper. The government is therefore committed to taking a lead in reducing carbon footprint and in so doing, enjoins all stakeholders to:
    - Re-engineer procurement processes to ensure that low carbon footprint is achieved and this includes minimal use of paper;
    - Streamline procurement processes into accounting budgeting systems that facilitates implementation and realization of the green economy; and



- Promote and incentivize the procurement of environmentally friendly products, including clean technologies.

#### **1.5.2.4 Resources and Institutional Arrangements for the National Climate Policy**

The government is committed to mobilizing support necessary for the realization of climate change response measures. Such support includes financial resources, technical cooperation, and technology transfer at local, national, bilateral, regional, and international levels. Further efforts shall be made to accelerate access to international financial resources facilitated by UNFCCC, including the GCF, and other funding mechanisms to complement national resources for financing the cost of achieving a low carbon development and sustainable climate resilient economy.<sup>41</sup>

##### **— National Climate Change Coordinating Structure**

The central government shall take the lead in the implementation of climate change response policy. There shall be a legal framework that establishes a National Climate Change Coordinating Organisational Structure responsible for implementation, monitoring, evaluation, and compliance with climate change response measures as defined by the policy.

The Organisational Structure shall be strategically placed under a ministerial portfolio responsible for coordinating cross-sectorial national business. This shall be supported by human and other resources that would enable it to achieve its mandate.

##### **— National Climate Change Committee**

The National Climate Change Committee (NCCC) has been established as an inter-ministerial and advisory body to the government.

The committee advises on matters relating to national responsibilities with respect to climate change, and international obligations and implementation of response measures. The National Climate Change Unit (NCCU) shall develop guidelines and methods of engagement for the facilitation of NCCC's work.

##### **— Parliamentary Portfolio Committee on Wildlife, Tourism, Natural Resources, and Climate Change**

Parliament shall provide an oversight role for the realization of the policy response measures. A Parliamentary Portfolio Committee on Wildlife, Tourism, Natural Resources, and Climate Change shall take the lead in promoting the establishment of an enabling environment that would facilitate the implementation of the policy. Primarily, the committee shall review existing legislation to determine legal requirements to support institutional and regulatory requirements.

##### **— Focal Points**

All the major sectors of the economy, government, and private sector are required to appoint focal persons that would monitor and report on the implementation of the sustainability response measures especially adaptation and mitigation plans as well as carbon budgets. The focal points will take the lead and provide guidance to their sectors on socio-economic and environmental reforms required for efficient adaptation and mitigation of climate change impacts. The Climate Change Unit shall facilitate the effective functioning of Focal Points through capacity building initiatives and other related resources needs that could create an enabling environment for the execution of their mandate.

##### **— District Climate Change Committees**

The District Climate Change Committees will be established to support the implementation of sustainable climate change response measures at the village, sub-district, urban, and district levels. The committee will be responsible for integrating climate change issues into a village, urban and

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<sup>41</sup> Republic of Botswana, THE BOTSWANA CLIMATE CHANGE POLICY, Ministry of Environment, Natural Resources Conservation & Tourism, 2019

district development plans, and assisting in building climate resilient development planning at local levels.

The committee will be accountable to local authorities and indirectly linked and supported by the National Climate Change Organisational Structure on strategy development, resource mobilization, capacity building, education, and awareness.

#### — **Monitoring and evaluation**

The Climate Change Strategy and Action Plan were developed alongside this policy. The Action Plan shall serve as an implementation framework within which cross-sectorial response measures shall be based and evaluated. There shall be continuous evaluation of climate change response measures and development plans to adjust to the dynamic nature of socio-economic transformation and transition to low carbon economy and development. These actions would enable the private and public sectors to access new market-based instruments and reforms that can enhance climate resilient economy and society.

The National Communications and Bi-annual Reports will be used to evaluate the progress of implementation of response measures for all sectors covered under this Policy. This would include the conduct of vulnerability assessments and review of adaptation and mitigation plans.

#### — **Review of the Policy**

The policy shall be reviewed every 10 years. The review process shall be informed by the monitoring and evaluation on the effectiveness of deployed interventions, as well as international developments on climate change jurisprudence.

#### ***1.5.2.4 Botswana's Strategic Framework for Climate Finance Project Portfolio.***

In 2017 Botswana, with assistance from UNDP, developed its Strategic Framework for Climate Finance Project Portfolio.<sup>42</sup> This strategy recognizes the need for climate finance access in order to help Botswana achieve a low-carbon and climate resilient development path. It recognizes the difference between what Botswana is capable of achieving on its own versus the levels of transformation that is required from a climate perspective, and that it is crucial that the country mobilizes additional resources, especially climate finance, to bridge the gap.

The development of this strategy entailed the review of the global and domestic fundamentals and identified five priority programmatic areas in which Botswana could develop adaptation and mitigation actions with climate finance. These are:

- Energy Efficient, Clean Technology, and Renewable Energy Development,
- Agriculture-Water-Natural Resources Management-Renewable Energy nexus,
- Agriculture, Forestry and Other Land Use (AFOLU),
- Ecosystem-Based Adaptation (EbA), and
- Rehabilitation and restoration of degraded rangelands.

The strategic framework and the programme elements and priorities are discussed in more detail in section 2.3 below.

These five programmatic areas are underpinned by the following objectives:<sup>43</sup>

- Putting Botswana on gender responsive low carbon and climate resilient development pathway geared towards the attainment of Vision 2036, NDP 11, its NDCs target, and the

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<sup>42</sup> UNDP, Strategic Framework for Climate Finance Project Portfolio in Botswana, August 2017

<sup>43</sup> UNDP, Strategic Framework for Climate Finance Project Portfolio in Botswana, August 2017

SDGs. Crucially, the private sector should take advantage of the emerging commercial opportunities in designing and implementing climate finance programmes that would put Botswana on a low carbon and climate resilient development pathway.

- Building resilience in the productive sectors especially agriculture, water, and ecosystems important for sustainable livelihoods, food, water, and energy security and job creation through an integrated approach.
- Harnessing private sector finance to complement public and climate finance. This would require partnerships in mobilizing necessary resources, and attracting private sector investments. While the public sector has a vital role to play, the private sector will provide the bulk of the financing and insurance driving the transition.
- Increasing accuracy and use of climate information in decision making at all levels.
- A programmatic approach where whatever climate action proposed should address cluster-based agenda with multiple benefits and be implemented for at least 5 – 10 years.

## 1.6 Regional engagement

Botswana is a member of the Southern African Development Community (SADC) and the Southern African Customs Union (SACU). It is one of the smaller member-states of both regional groupings.

The country's economic performance is based on successful exporting, dominated by diamonds, which accounts for over 80% of exports. Yet this raw commodity is vulnerable to fluctuations in world demand and thus market prices for precious stones, as demonstrated during the global economic crisis in the late 2000s. Consequently, there is an acknowledged need to diversify the export base to reduce over-reliance on a single non-renewable resource, which naturally will be exhausted over time.<sup>44</sup>

Specifically, with regard to climate change, Botswana is a member of the Southern African Science Service Centre for Climate Change and Adaptive Land Management (SASSCAL). This is a joint initiative of Angola, Botswana, Namibia, South Africa, Zambia, and Germany in response to the challenges of global change.

The mission of SASSCAL is to strengthen the regional capacity to generate and use scientific knowledge products and services for decision-making on climate change and adaptive land management through research management, human capital development, and services brokerage. Specific objectives are to conduct research in adaptation to climate change and sustainable land management, to provide products, services, and information for decision-making, and to contribute to the creation of a knowledge-based society through academic and non-academic capacity development programmes.

## 1.7 Access to finance

### 1.7.1 Domestic Finance

Due to the decrease in global commodity prices, Botswana's declining diamond revenue has affected domestic investments in infrastructure projects. National development financial institutions in Botswana mainly focused not on infrastructure projects but on agriculture, commerce, and industrial development. These institutions include:

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<sup>44</sup> *Rhetoric and realities of regional integration: Botswana SME perspectives on Southern African trade* A.O. Thomasa\* and E. Marandub a Stockholm Business School, Stockholm University, 106 91 Stockholm, Sweden b Faculty of Business, University of Botswana, P. O. Box 70243, Gaborone, Botswana, 2017

- Botswana Development Corporation;
- Citizen Entrepreneurial Development Agency; and
- The National Development Bank

These institutions have the mandate to promote small and medium enterprises and private sector development in the country and thus to leverage private sector involvement.<sup>45</sup>

## 1.7.2 International Donors and Climate Finance

### International Donors

As a country taking active steps to prudently manage its macroeconomic and fiscal outlook, Botswana is well positioned to mobilise climate finance. The government's track record of sound macroeconomic policy, low levels of corruption, liberal tax system, and political stability are solid foundations for climate finance mobilisation. In this respect, Botswana stands out among its regional neighbours.<sup>46</sup>

Still, significant steps are needed to sustainably both attract foreign investment and diversify existing finance into non-mining sectors. Further, at the same time as being in a strategic position to leverage climate finance, Botswana's status as an upper-middle income country means that it has largely been at the periphery of development assistance. In this context, it stands to benefit from a strategic approach to mobilizing innovative finance streams for greening and development. Botswana's sustainable debt profile means that it is in a strategic position to leverage both commercial as well as concessional loans and grants. As the following sections show, there are also opportunities for Botswana to consider non-traditional sources such as green bonds and existing trans-boundary natural resource management platforms.<sup>47</sup>

**Table 1: Net overseas development assistance received by Botswana, 1960-2018**

|  | 1960         | 1980          | 2000         | 2015         | 2016         | 2017          | 2018         |
|--|--------------|---------------|--------------|--------------|--------------|---------------|--------------|
| <b>Net official development assistance received (constant 2015 US\$)</b> | \$31 680 000 | \$228 320 007 | \$42 130 001 | \$67 360 001 | \$91 959 999 | \$102 089 996 | \$80 419 998 |
| <b>Net ODA received (% of gross capital formation)</b>                   | 187,4%       | 24,7%         | 1,7%         | 1,4%         | 2,0%         | 2,1%          | 1,5%         |
| <b>Net ODA received (% of GNI)</b>                                       | 10%          | 10,4%         | 0,6%         | 0,5%         | 0,6%         | 0,6%          | 0,5%         |
| <b>Net ODA received (% of central government expense)</b>                |              |               |              | 1,6%         | 2,2%         | 2,3%          | 1,9%         |
| <b>Net ODA received per capita (current US\$)</b>                        | 6,8          | 117,2         | 18,6         | 30,9         | 41,9         | 46,3          | 36,6         |

Source: World Bank

### Climate Finance

Botswana can use climate finance for several specific reasons to enhance its domestic finance and advance its climate change adaptation and mitigation agenda. Specifically, climate finance can help in:

<sup>45</sup> Sekakela K. (2018): Infrastructure Financing in Botswana Engagement with Multilateral Development Banks and Recommendations for Improving Lending Process. Global Economic Governance Africa.

<sup>46</sup> Botswana National Climate Change Strategy 2018

<sup>47</sup> Botswana National Climate Change Strategy 2018

- **Meeting the financing gap:** Climate finance could be used to meet the shortfall in financing or increase the attractiveness of investment to catalyse financing from other sources. The tools, which could be used, are mainly soft loans.
- **Managing risks:** Climate finance could be structured to reduce the risks associated with agriculture projects, either by reducing the overall financing requirement or through the provision of climate finance in the form of risk mitigation instruments such as guarantees or equity. Soft loans may also play a role to mitigate project risks and in some specific cases (pilot projects, highly innovative projects) grants may be used as well.
- **Reducing transaction costs:** Climate finance could be deployed programmatically to finance interventions that could systematically reduce transaction cost associated with energy projects.

### 1.7.3 GCF Engagement-Summary

Botswana has so far submitted two successful readiness proposals to the GCF and one successful project preparation application. The two successful readiness proposals were Strategic Frameworks support for Botswana with UNEP, and NDA Strengthening & Country Programming support with GIZ. The successful project preparation application was submitted with Conservation International and was for the project Ecosystem and Livelihoods Resiliency: Climate Change Risk Reduction Through Ecosystem-based Adaptation in Botswana's Communal Grazing Lands.<sup>48</sup>

However, no GCF project application has been approved yet. The country has engaged many GCF accredited institutions in the past, and it is foreseen that further GCF concept notes and applications will be made in the future. GCF accredited entities that are active in Botswana are:<sup>49</sup>

**Table 2: GCF Accredited Entities Accessible to Botswana<sup>50,51</sup>**

| Entity   | Level of Accreditation | Fiduciary Standards  | Sector Focus                             |
|--|------------------------|--|--|
| African Development Bank (AfDB)                                    | Large                  | Basic, Project management, Grant award<br>On-lending/blending: Loan, Equity, Guarantee | General                                  |
| Agence Française de Développement (AFD)                            | Large                  | Basic, Project management, Grant award<br>On-lending/blending: Loan, Guarantee         | General                                  |
| Conservation International (CI)                                    | Medium                 | Basic, Project management, Grant award   | Nature conservation                      |
| Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH | Medium                 | Basic, Project management, Grant award   | General                                  |
| Food and Agriculture Organization of the United Nations (FAO)      | Medium                 | Basic, Project management,   | Food and agriculture                     |
| International Finance Corporation (IFC)                            | Large                  | Basic, Project management, Grant award<br>On-lending/blending: Loan, Equity, Guarantee | General, private sector                  |
| International Union for Conservation of Nature (IUCN)              | Medium                 | Basic, Project management, Grant award   | Nature conservation, ecosystems          |
| Japan International Cooperation Agency (JICA)                      | Large                  | Basic, Project management, Grant award<br>On-lending/blending: Blending                | General                                  |
| Kreditanstalt für Wiederaufbau (KfW)                               | Large                  | Basic, Project management, Grant award<br>On-lending/blending: Loan, Equity, Guarantee | General, lending                         |
| United Nations Development Programme                               | Medium                 | Basic, Project management  | General, economic and social development |

<sup>48</sup> <https://www.greenclimate.fund/countries/botswana>

<sup>49</sup> These GCF-accredited international entities have had programs and projects in Botswana in the past or have them currently, but not necessarily in climate finance.

<sup>50</sup> <https://www.greenclimate.fund/about/partners/ae>

<sup>51</sup> Websites of individual AE's

| <b>(UNDP)</b>                                      |        |  |                                   |
|--|--------|--|-----------------------------------|
| <b>United Nations Environment Programme (UNEP)</b> | Small  | Basic, Project management, Grant award   | General, environmental protection |
| <b>World Bank</b>                                  | Large  | Basic, Project management, Grant award<br>On-lending/blending: Loan, Guarantee | General                           |
| <b>World Meteorological Organization (WMO)</b>     | Small  | Basic, Project management  | Climate, early warning system     |
| <b>World Wildlife Fund, Inc. (WWF)</b>             | Medium | Basic, Project management, Grant award   | Ecosystems, wildlife protection   |

Level of Accreditation Key:

|        |                       |
|--------|-----------------------|
| Micro  | <\$10M (project size) |
| Small  | \$10-\$50M            |
| Medium | \$50-\$250M           |
| Large  | >\$250M               |

In addition to international accredited entities, Botswana is presently actively pursuing accreditation for two domestic direct access entities: the National Development Bank, and the University of Botswana.

More details on GCF engagement are provided in section 2.

## 1.8 Gaps and opportunities

### 1.8.1 Climate Finance Gaps and Opportunities

Because the GCF NDA was officially established only in 2018 within the Ministry of Finance and Economic Development (MFED), the NDA's GCF proposal for Readiness and Preparatory Technical Support Programme was submitted only in February 2019.

The proposal was developed in collaboration with GIZ as the delivery partner of the Readiness Programme on strengthening the capacity of the NDA to develop a country programme to efficiently engage with the GCF. So far, two concept notes have been developed and submitted for approval to the GCF, both concerning building climate resilience in agricultural systems of Botswana.

The efforts to mobilise climate finance involved a collaboration of the NDA with the Ministry of Environment, Natural Resources Conservation, and Tourism as the focal point. As noted in section 1.5.2.4 above, Botswana developed a Strategic Framework for Climate Finance Project Portfolio with the assistance from UNDP in 2017, identifying 5 priority programmatic areas:

- Energy Efficient, Clean Technology, and Renewable Energy Development and Access
- Agriculture–Water-Natural Resources Management-Renewable Energy nexus
- Agriculture, Forestry and Other Land Use (AFOLU)
- Ecosystem-Based Adaptation, and
- Rehabilitation and Restoration of Degraded Rangelands

### 1.8.2 Challenges in Accessing Climate Finance

Two assessments were recently conducted in Botswana to assess the country's gaps and capacity to access climate finance. One was a needs-based climate finance workshop held in Botswana in October 2019, and the other was an assessment and SWOT analysis carried out within the GIZ

readiness project.<sup>52</sup> This combined effort identified the following challenges and gaps in accessing climate finance:

- Low awareness of climate financing mechanisms. This results in few bankable concepts submitted for funding because ministries still rely on government budgets for adaptation/mitigation programmes/projects and the private sector to participate in climate finance;
- Insufficient institutional capacity. There is low capacity in the country to develop concept notes and full proposals for GCF funding. Additionally, there is inaccessible or not readily available data needed to fill out GCF templates;
- Lack of coordination of climate financing activities. There is no clear and described workflow, coordination mechanism, and clear distribution of responsibilities;
- Critical lack of baseline data, which are necessary for GCF project proposal development;
- Complex and usually lengthy requirements by financiers. This includes intensive accreditation processes for domestic entities. Botswana does not have a GCF national accredited entity or direct access entity. There is little understanding of the template used to source funding (usually requires the use of external consultants);
- Uncoordinated activities. Accessed climate finance countrywide still cannot be fully quantified due to fragmented coordination and lack of climate finance tracking tools;
- Insufficient supporting policies and strategies. There is no climate finance mobilisation strategy and its implementation plan. However, this may change in the future, as the Climate Change Policy has just gone through the national approval process.

The SWOT analysis that was conducted provided the following results:

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<sup>52</sup> Assessing the capacities of Botswana's NDA to the Green Climate Fund, BEZK, December 2019



The combined effort of the assessment workshop, the assessment report and the SWOT analysis provided much needed overview of the state of the capacity in Botswana to access climate finance, and identified the following gaps and priorities:

- Capacity building. There is a need for technical support for NDA, ministries, and the private sector to raise awareness, and assist with concept note/proposal development. Local experts/consultants should be used and trained as much as possible in order to solve the complexity of the template or meeting stringent funding requirements.
- There is a need for simplified funding requirements and templates



- Enabling environment needs to be developed, including developing supporting policies and strategies, plans, climate finance resource mobilisation strategy, and implementation plan. It is also necessary to improve the coordination of climate finance and develop climate finance reporting/ monitoring framework
- Status of key strategic documents needs to be clarified;
- Regular communication among stakeholders and sharing of information (round tables, NDA website, NDA newsletter) needs to be established;
- The development of a monitoring system is required;
- The development of GIS with climate-related baseline data is necessary;
- Regional Approach e.g. SASSCAL (see section 1.3.2) should be utilized as much as possible.

### 1.8.3 Technological gaps

This section needs stakeholders' input as no relevant literature can be found on the Internet. I suggest developing a specific questionnaire and conducting a series of Skype calls at the nearest opportunity with relevant stakeholders in Botswana.

### 1.8.4 Institutional and readiness gaps and opportunities

The Third National Communication identified lack of institutional arrangements and technical and institutional capacity needs to implement the country's climate change agenda. Specifically, the following gaps were identified that pertain to the GCF agenda:

- Lack of capacity for proposal development
- Insufficient financial resources
- Weak institutional arrangement
- Absence of legislative and policy frameworks, and
- Inadequate mainstreaming of climate change
- Inadequate climate finance monitoring

As above, this section needs stakeholders input to update the more general gaps with specific readiness gaps

## 2. Country Agenda and GCF Engagement

### 2.1. Institutional arrangements

#### 2.1.1 Coordination mechanism - description

##### National Designated Authority / GCF Focal Point

The National Designated Authority (NDA) is the primary interface between the GCF and national institutions/entities. The NDA also plays a key role in ensuring country ownership and a country-driven approach, which are the core principles of the GCF's business model. In February 2018, the NDA role (initially under the Ministry of Environment, Natural Resources Conservation, and Tourism) was taken over by the Ministry of Finance and Economic Development (MFED). As such, the MFED is the main focal point for all matters related to GCF activities in Botswana.

The NDA is currently in the process of establishing itself as a dedicated GCF unit to fulfil its mandate of providing an efficient and transparent link between the GCF and Botswana's institutions and entities with interest in the GCF, as well as communicate the strategic oversight of GCF activities at the country level.

Apart from its NDA role, the overall mandate of MFED is to coordinate national development planning, mobilize, and prudently manage available financial and economic resources. Furthermore, MFED is responsible for the formulation of economic and financial policies for sustainable economic development. The core functions of the MFED falls into three main areas:

- Treasury and Budget Administration;
- Economic Management and National Development Planning Coordination;
- Financial Administration and Management.

As an integral part of its mandate, the primary responsibilities of the Ministry are as follows:

- Mobilize resources for economic development;
- Improve accountability for the use of resources;
- Facilitate improvements in project implementation and monitoring processes;
- Ensure strict adherence to budgetary processes;
- Facilitate the contributing role of the private sector and non – governmental organizations to the strategy of creating greater prosperity and embracing this in the development process;
- Facilitate and support citizen economic empowerment schemes and initiatives; and
- Facilitate the involvement of Botswana in regional and global economic issues.

The MFED, acting as the NDA for Botswana, is responsible for the coordination of climate financing related to the GCF and plays these important roles:

- 1) Coordination centre for communication and maintaining contacts with the GCF; facilitating the communication of nominations from implementing organizations and intermediaries of the GCF;
- 2) Main authority to authorize on behalf of the government on matters relating to the GCF. If necessary, the NDA seeks Governmental/National Committee on Climate Change (NCCC)/National Climate Change Unit (NCCU)\* approval before its decision;

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\*\*Subject to final mandate and terms of reference of the NCCC and NCCU

- 3) Execution of the 'no objection' procedure, searching for consistency of funding proposals with national plans and strategies, and developing a financing proposal in context with national strategies and plans;
- 4) Coordination of priorities and activities in the country and facilitation of interaction concerning these priorities. Responsibility of GCF Country Programme development including identification and selection of Project ideas.

### Proposed Structure of the National Designated Authority for Botswana

The NDA institutional structure is not requested or designed by the GCF, rather it is country-driven.

**Figure 5: Proposed Structure of the National Designated Authority for Botswana**



### NDA Secretariat Terms of Reference

Based on the expected workload (number of expected projects, Country Programme renewal) the NDA Head will decide for the next GCF working period whether NDA Secretariat staff will be hired as full time or part-time and whether their ToR will be added to other tasks. A proper balance between efficiency and sufficient capacity has to be identified.

| Position                           | Responsibilities  |
|------------------------------------|---|
| <b>Head of the NDA Secretariat</b> | <ul style="list-style-type: none"> <li>• Communication with the GCF Secretariat;</li> <li>• Communication with Botswana's UNFCC Focal Point;</li> <li>• Responsible for information update regarding GCF policies and modalities;</li> <li>• Leads the NDA Secretariat;</li> <li>• Provides support to the NDA Head.</li> </ul> |

| Position | Responsibilities   |
|----------|--|
|          | <ul style="list-style-type: none"> <li>• Responsible for GCF Country Programme development;</li> </ul> |

|                                 |  |
|---------------------------------|--|
| <b>Country Programme Expert</b> | <ul style="list-style-type: none"> <li>Responsible for identification and selection of Project ideas for the Country Programme including an update of the Project idea evaluation matrix;</li> <li>Communication with other ministries and stakeholders responsible for climate-related strategy development.</li> </ul> |
|---------------------------------|--|

| Position   | Responsibilities   |
|--|--|
| <b>Accreditation and Coordination Mechanism Expert</b> | <ul style="list-style-type: none"> <li>Responsible for the 'No objection' procedure including an update of the questionnaire for the TEG;</li> <li>Communication with Accredited Entities and project developers;</li> <li>Assisting national Accredited Entities and national Implementing Entities.</li> </ul> |

| Position                                  | Responsibilities  |
|---|---|
| <b>Readiness and Communication Expert</b> | <ul style="list-style-type: none"> <li>Responsible for awareness-raising and information dissemination: <ul style="list-style-type: none"> <li>Development and updating the NDA website,</li> <li>Seminars for stakeholders,</li> </ul> </li> <li>Dissemination of information among stakeholders;</li> <li>Responsible for training of experts;</li> <li>Responsible for GCF Readiness projects;</li> <li>Cooperation with Readiness delivery partner(s).</li> </ul> |

### Technical Expert Group (TEG)

The NDA will create the Technical Expert Group (TEG) from line ministries experts as well as from other stakeholders (CSO, academy, and private sector representatives). The experts shall be selected according to their previous experience. The role of the TEG is to support the NDA by their sectorial expertise mainly through:

- 1) Country Programme development – a selection of bankable project ideas
- 2) No objection procedure.

The representative of each above-mentioned ministry or agency who is appointed as a member of the TEG is fully responsible for the GCF agenda and Coordination mechanism within his/her ministry/agency.

### The unit-level at line ministry

Each ministry or agency listed as the TEG/NCCC member is responsible to appoint one unit to be responsible for the Green Climate Fund agenda, the GCF Coordination mechanism, and cooperation with the NDA. The responsibility has to be described in the unit's terms of reference or delineation of responsibilities.

### Expert level at line ministry

The relevant ministry has to appoint at least one (1) member as a focal person for the GCF activities. The officer will be guided in their role with terms of reference. The expert shall be a member of the TEG and will be responsible for practical communication with the NDA and the expert works in the

frame of 'no objection' procedure. He/she will be responsible for his/her participation in training organized by NDA as well as individual learning.

#### **Stakeholders, independent experts, NGOs**

If necessary, the NDA may request the cooperation of additional experts or representatives of the private sector and civil society. They will comment on relevant documents, procedures, or project proposals according to their expertise.

#### **National Committee on Climate Change**

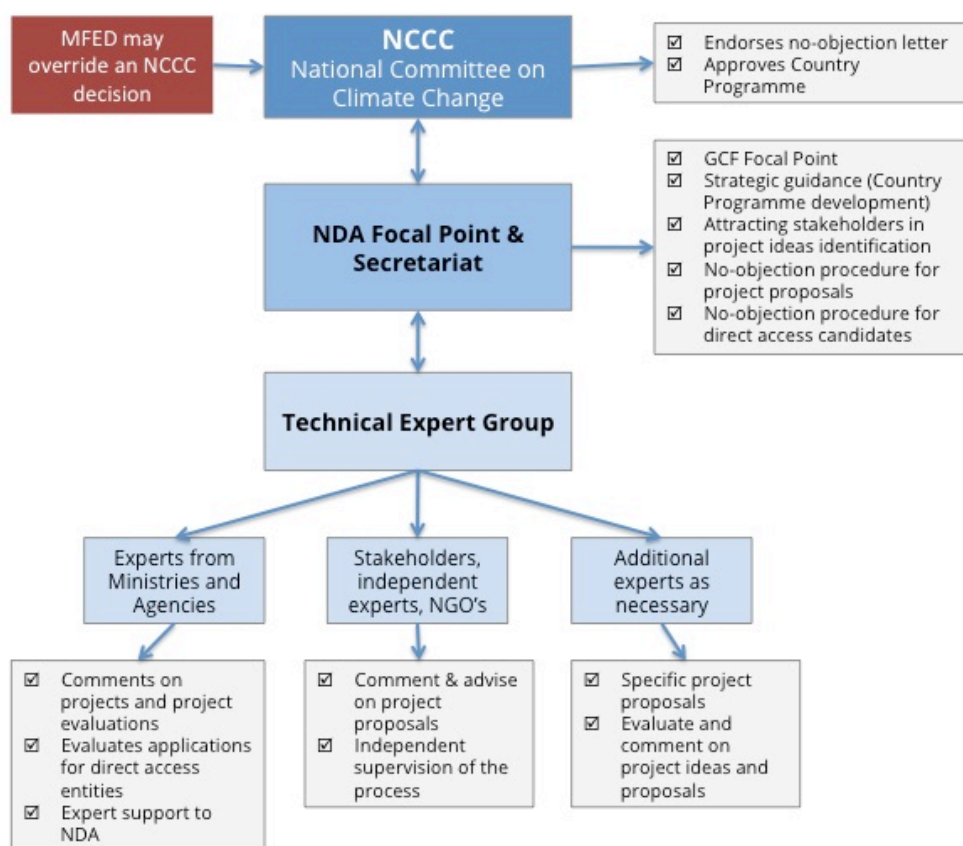
The final composition and regular renewal of the National Committee on Climate Change with the role to provide technical guidance to the government of Botswana on implementation of the UNFCCC resolutions, decisions, and recommendations will be established.

Secretariat of the NCCC: Ministry of Environment, Natural Resource Conservation, and Tourism.

The NCCC members (high-level government nominees) to serve as a board to decide the Climate Change Agenda in Botswana. It includes the GCF agenda as well.

The NCCC's decision regarding the GCF will be based on the GCF NDA recommendations. The Minister of the MFED has the right to override the NCCC decision when applicable.

Figure 6: Coordination mechanism scheme –Senior-Level NCCC



### **‘No objection procedure’**

Among the most important and also frequent work of the NDA is the execution of the ‘no objection procedure’, evaluating the consistency of funding proposals with national plans and strategies, and developing a financing proposal in compliance with national strategies and plans and the Fund’s Environmental and Social Safeguards.

The ‘no objection procedure’ is required for any Full Project Proposal (FP), Simplified Access Project (SAP) proposal and Project Preparation Facility (PPF) proposal to the GCF, when a ‘no objection letter’ is signed by the Focal Point/Head of the NDA it must be delivered to the GCF not later than 30 days after the project proposal submission (for letter templates see Annex D and Annex E).

Before reporting to the GCF the ‘no objections’, each country will decide on its own ‘no objection’ procedure in accordance with the country’s capabilities and existing procedures, processes, and institutional arrangement.

To increase transparency and consistency with the provisions of paragraph 46 of the GCF Guidance Document, each financial proposal of the accredited entity will provide a full description of how the ownership and participation of the country were secured, and if not convincing, the GCF Board may reject it.

The NDA will transmit its letters of ‘no objection’ to the GCF Secretariat regarding each financial proposal submitted for approval by the accredited entity. The letter of ‘no objection’ will be signed by the official representative of the NDA and registered at the GCF Secretariat (see Annex D and Annex E: Letter of a no-objection template). The GCF Secretariat will formally acknowledge receipt of the letter of ‘no objection’ to the NDA and the relevant accredited entity.

If a funding proposal is not accompanied by a ‘no objection’ letter, the GCF Secretariat will inform the NDA that the proposal will not be accepted for consideration by the Council until the NDA submits a corresponding letter of ‘no objection’. The NDA must submit its ‘no-objection’ decision within 30 days after receiving this information. After 30 days, the proposal will be suspended, and the GCF Secretariat will notify the accredited entity.

A letter of ‘no objection’ by the NDA, in accordance with the provisions of the GCF procedure, will mean the following:

- The government does not object to the financial proposal;
- The submitted financial proposal is consistent with the national priorities, strategies, and plans of the country and complements them; and
- The financial proposal submitted is consistent with the relevant national laws and regulations following the Fund’s environmental and social safeguards.

In order to increase transparency, all ‘no-objection’ letters will be posted on the Fund’s website. It is also recommended that the NDA publish all its letters of ‘no objection’.

In the case of funding proposals related to programme funding (consisting of several projects, e.g. in several countries), the ‘no objection’ procedure will be applied to all projects or activities that must be implemented under the approved programme.

### Execution of a coordination mechanism for the GCF and the 'no-objection' procedure.

According to the Country Coordination Mechanism, the 'no objection' procedure is led by the Focal Point /NDA.

#### Step by step description:

Aligned to the GCF operations requirements and national development and planning context.

- 1) The process starts at the level of project ideas formulation among the ministries, agencies, communities, and private sector, which turn to accredited entities (AE) with drafted concepts. The project ideas and thus Concept Notes have to be included/derived from this Country Programme;
- 2) After joint consultations, the latter elaborate those drafts into the GCF format Concept Notes (CN) and might undergo the process of the 'No-Objection Procedure' (NOP), which is not obligatory for Concept Notes and thus at this stage, the NDA will consider whether it is necessary (recommended for complex projects);
- 3) For this, an AE submits CN to the NDA;
- 4) The NDA sends it to the Technical Expert Group (TEG) comprised of relevant profile experts to examine the substance and alignment of the CN with national development priorities, safeguards, and legal frames. For this step, there is a need to develop and agree upon a special project evaluation form with scoring tables. The project evaluation form with the scoring table is in Annex I of the NDA Technical Guidelines<sup>53</sup>. The project evaluation forms are filled out by all the TEG members, and weighted on a joint session to justify selection (if any). All the forms and minutes of the decision-making meeting will be duly filed and archived in the NDA office;
- 5) After being approved, CNs are returned to the AE;
- 6) To be converted into a Funding Proposal (FP) and elaboration of the relevant Feasibility Study (FS). For this, the NDA also will propose relevant national expertise to collaborate with the brought-in international expertise of the AE. The AE is fully responsible for FP elaboration;
- 7) The elaborated FP with annexed FS will be submitted to the NDA again, which studies both and uses the same procedure to ensure a 'no objection' decision as described above: The NDA sends it to the Technical Expert Group (TEG) comprised relevant profile experts to examine the substance and alignment of the CN with national development priorities, safeguards, and legal frameworks. For this step, there is a need to develop and agree upon a special project evaluation form with scoring tables. The project evaluation form including scoring table is in Annex I of the NDA Technical Guidelines. The project evaluation forms are filled out by all the TEG members, and weighted during a joint session to justify selection (if any). All the forms and minutes of the decision-making meeting will be duly filed and archived in the NDA office;
- 8) If there are no objections the NDA submits its proposal to approve to the NCCC board members with the request to conduct a meeting (also inviting AE). If there are objections, the NDA will prepare their description and send them to the AE requesting improvement. Evaluation of the Improved FP will proceed from point 6 (above);
- 9) After FP/FS debates and commenting, the NCCC board decides to issue (or not) the 'No-Objection Letter' for a project proposal with or without any conditions;
- 10) The NDA Focal Point (after the approval of the Minister of MFED) has the right to override the decision of the NCCC board as applicable;
- 11) Then NDA issues the 'No-Objection Letter' on the AE-developed FP, which will be sent to the GCF;

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<sup>53</sup> NDA TECHNICAL GUIDELINES: GCF COORDINATION MECHANISM, NO OBJECTION PROCEDURE AND PROJECT IDEAS SELECTION FOR COUNTRY PROGRAMME - REPUBLIC OF BOTSWANA, 2020



- 12) The further process to negotiate and to get an agreement with the GCF is under the full responsibility of the AE; the NDA inquires on the progress of the project approval and implementation launch;
- 13) However, if it comes to credit resources attracted from the GCF or any other sources, which might have an impact on the governmental budget, the NDA shall contact the Debt Management Unit at the MFED whose role it is a role to facilitate ratification of the final agreement on the financial support with the AE clearly defining the terms and conditions of the loan repayment.

### **Readiness project proposal approval**

There is no request from the GCF to issue a formal 'no-objection letter' to approve any readiness project proposal, however, each readiness project has to be submitted by the NDA or with the NDA's approval. No formal procedure is required and the decision is based fully on the NDA's decision.

### **Project ideas identification**

The process starts at the level of project ideas formulation for the GCF Country Programme among the ministries, agencies, communities, and the private sector, which turn to AE's with drafted concepts. The project ideas and thus Concept Notes have to be included/derived from this Country Programme. For Country Programme development and thus for project ideas identification and selection, the NDA is fully responsible. Project ideas have to be included in the Country Programme Project Portfolio and have to align with country priorities.

### **Step by step description**

- 1) The NDA disseminates project idea templates among various stakeholders (public sector, private sector, AEs, other stakeholders). This shall be done by open call, which might be published in the media. The project idea template is in Annex II of the NDA Technical Guidelines.
- 2) The NDA organizes series of workshops for various stakeholders focused on project idea identification and formulation.
- 3) The NDA collects all project ideas and prepares project ideas evaluation based on an evaluation table (Annex II of the NDA Technical Guidelines). The evaluation will be overseen by the TEG.
- 4) Based on the technical evaluation in point 3 the NDA will prepare its recommendations on which Project ideas shall be included in the GCF Country Programme Project portfolio. The NCCC will approve the NDA recommendation.

## 2.2 Roles and contributions of the key stakeholders

The development of the country programme followed an inclusive approach allowing all key stakeholder groups, outlined below, to actively engage with the NDA in developing project ideas and submitting those for potential inclusion into the project pipeline (see Section 2.4). However, during the COVID-19 restrictions, many meetings were held over voice or video conferencing, which in Botswana is a challenge because home Internet is often of low quality.

Main stakeholders groups consulted:

- Public sector – line ministries and agencies
- Private sector – banks and financial institutions
- Private sector – industry
- Civic society organizations
- Universities, research institutions
- Accredited entities and other international organizations

### 2.2.1 Consultations were undertaken

During the time period of ..... individual consultations and seminars were undertaken to focus on the private sector. In total, X seminars targeting representatives of different sectors in adaptation and mitigation domains were implemented. During these events, global climate challenges, the role of the international community, and in particular GCF were presented, collaboration modalities and financing instruments, as well as Botswana's collaboration framework with GCF, discussed. This has been supplemented/followed up with around XX individual meetings with big companies willing to design respective projects and submit for funding consideration to GCF. In total, consultations with XXX private sector representatives allowed us to understand the interest of the private sector and, thus, be able to elaborate both potential priorities for inclusion into the country programme and list of potential projects.

During the period .....public sector institutions (all ministries) were contacted and asked for their priorities. Based on the simplified project proposal template EPIU was collecting also their project ideas. In total 20 governmental institutions were contacted.

Additionally to the above mentioned measures to raise awareness about GCF among above mentioned stakeholders' group 5 workshops were organized in ..... Participants were from the public sector (ministries), private sector (banks and financial institutions, industry), civic society organizations, universities, research institutions.

Country programme priorities, which were identified during the above-described stakeholders' consultations were presented in the comprehensive format in stakeholders' consultations in XXXXXX (international donors, public sector, Ministry of Environmental Protection)

During the period ..... international organizations and province governmental representatives were contacted and asked for projects, priorities (goals), and programmes.

International agencies:

.....  
.....  
.....  
.....

Province and municipal representatives:

Workshop with Municipality specialists and;

X workshops were organized in the provinces: .....;

Based on above described process Strategic pillars, Investment areas, and Goals were identified (refer to 2.3) and project ideas were collected (refer to 2.4). Where it is known accredited entity or implementing entity (mainly ministry) is mentioned (refer to 2.4).

Further steps: A comprehensive version of Country programme will be presented on the NDA website and feedback will be collected and further discussed on final stakeholders' consultations in September / October. During the prioritization workshop in September / October sounding project ideas will be selected for the Country portfolio. Final Country Programme including Country portfolio will be approved by NDA.

During the consultation process address questions from 2.4

## 2.3 Identification of country priorities for the use of GCF funding

In 2017 Botswana, with assistance from UNDP, developed its Strategic Framework for Climate Finance Project Portfolio. This strategy recognizes the need for climate finance access in order to help Botswana move to a low-carbon and climate resilient development path. It recognizes the difference between what Botswana is capable of achieving on its own versus the levels of transformation that is required from a climate perspective, and that it is crucial that the country mobilizes additional resources especially climate finance to bridge the gap.

The development of this strategy entailed the review of the global and domestic fundamentals and identified the five priority programmatic areas in which Botswana could develop adaptation and mitigation actions with climate finance. These are:

- Energy Efficient, Clean Technology, and Renewable Energy Development,
- Agriculture-Water-Natural Resources Management-Renewable Energy nexus,
- Agriculture, Forestry and Other Land Use (AFOLU),
- Ecosystem-Based Adaptation (EbA), and
- Rehabilitation and restoration of degraded rangelands.

These five programmatic areas are underpinned by the following objectives:

- Putting Botswana on gender responsive low carbon and climate resilient development pathway geared towards the attainment of Vision 2036, NDP 11, its NDCs target, and the SDGs. Crucially, the private sector should take advantage of the emerging commercial opportunities in designing and implementing climate finance

programmes that would put Botswana on a low carbon and climate resilient development pathway.

- Building resilience in the productive sectors especially agriculture, water, and ecosystems important for sustainable livelihoods, food, water, and energy security, and job creation through an integrated approach.
- Harnessing private sector finance to complement public and climate finance. This would require partnerships in mobilizing necessary resources, and attracting private sector investments. While the public sector has a vital role to play, the private sector will provide the bulk of the financing and insurance driving the transition.
- Increasing accuracy and use of climate information in decision making at all levels.
- A programmatic approach where whatever climate action proposed should address cluster-based agenda with multiple benefits and be implemented for at least 5 – 10 years.

The details of the five programmatic areas are presented below:

#### **Programmatic Area 1: Energy Efficient, Clean Technology and Renewable Energy Development (Mitigation with Adaptation co-benefits)**

Botswana has rich deposits of coal and currently, it is used to generate most (80%) of the power produced in the country. Power generation in Botswana will continue to be dominated by coal for the foreseeable future although it has the potential to improve the energy mix using solar energy. Significant carbon intensity and GHG emissions reduction can be achieved in Botswana by prioritizing investments in technologies across sectors with low incremental abatement cost (IAC) and other co-benefits. The scope of these investments can cover (1) promotion of energy efficiencies such as energy-efficient buildings and other infrastructure; energy efficient lamps, air conditioners, and solar electric motors and other appliances; and low carbon transport infrastructure including partial modal shifts in the transport sector; (2) clean technology especially in the generation of power from coal; and (3) development of renewable energy especially from solar and waste.

Botswana's ability to fully harness and better utilize cleaner coal and solar resources can be improved with the necessary technology, including modern control systems, commercial incentives, supporting infrastructure, and adequate financial resources. Botswana has enormous potential for solar energy but it is currently greatly underutilized. Moreover, regional cooperation provides a major opportunity for Botswana to optimize its clean coal and solar production to feed into the intraregional Southern Africa Development Community (SADC) energy pool (i.e., sharing electricity generation through cross-border transmission interconnections). This will help meet SADC regions' energy demand and provide multiple benefits to Botswana as it will be fully exploiting economies of scale in energy resource development and supply and would contribute towards improving Botswana's trade balance.

A combination of clean and renewable energy sources and energy efficiency could provide a safer and cost-effective way to mitigate GHG emissions and combat climate change, enhance energy security, and establish long-term sustainable energy development. However, energy efficiency must be combined with technological innovations to reduce the carbon intensity of the power sector. In this context, an appropriate policy environment is a prerequisite for a paradigm shift toward a sustainable energy future.

This may require institutionalized multi-pronged energy efficiency, clean technology, and renewable energy development programme. Such a programme could include initiatives increasing energy efficiency in relevant sectors, promoting the adoption of renewable

energy resources, and improving energy access especially in poor and remote regions of the country as set out in Table 3 below. In addition, such a programme would catalyse private resources/investments, and monitor and assess progress toward national GHG emission reduction targets as set out in Botswana's NDCs.

**Table 3: Energy efficiency, Clean Technology, and Renewable Energy Development Programme Opportunities.**

| Programmatic Area  | Elements of the Programme  | GCF Target Result Areas   | Key partners  |
|--|--|---|---|
| Energy Efficient, Clean Technology, and Renewable Energy Development | Energy efficiency<br>Energy efficient buildings and water supply.<br>A partial modal shift in the transport sector.<br>Energy-efficient lamps, air conditioners, and solar and electrical cooking stoves in residential and commercial sectors.<br>Energy-efficient electric motors and boilers in the industrial sector.<br>Efficient tractors in the agriculture sector. | Buildings, cities, industries, and appliances (M).  | Ministry of Environment, Natural Resources Conservation, and Tourism<br>MMEWR<br>MOA<br>Private sector<br>Consumers |
|  | Clean Technologies<br>Clean coal.<br>Clean and energy saving cooking stoves.   | Energy access and power generation (M).<br>Health and well being (A, S).                              | MMEWR<br>Ministry of Local Government and Rural Development<br>Private sector                                       |
|  | Renewable energy development<br>100 MW solar plant/farm with transmission line<br>20 Mini-/off-grid solar plants<br>Solar-powered small-scale irrigation systems and livestock watering.<br>Waste to energy  | Energy access and power generation (M).<br>Health and well-being, and food and water security (A, S). | MMEWR<br>Private sector<br>Ministry of Local Government and Rural Development<br>Communities<br>MOA                 |

#### **Programmatic Area 2: Agriculture-Water-Natural Resources Management-Renewable Energy (Adaptation and Mitigation)**

The agricultural sector in Botswana covers both crops and livestock production. About 70% of rural households derive their livelihoods from agriculture, through subsistence farming. Crop production is mainly based on rain-fed farming with the majority being small-scale farmers with a few and commercial farming systems. Reliance on rainfall makes production very unreliable. This is exacerbated by poor farming practices. Moreover, Botswana's agriculture is dominated by livestock production, particularly beef cattle which are a major export earner. The country has a cattle population of over 3 million, with 85% of the livestock raised in communal lands and 15% in ranches, all producing 37, 000 tonnes of beef annually. Fodder production is generally low in Botswana.

The agriculture sector is vulnerable to changes in temperature, rainfall, and the frequency and intensity of extreme weather events. Grazing and water are serious resource constraints for Botswana's livestock farmers. The prevailing semi-arid conditions limit rangeland productivity and surface water. There are few perennial rivers (Chobe, Okavango, and to a lesser extent the Limpopo Rivers) and limited surface water (e.g. pans, small dams) is occasionally available whenever there are any rains. Due to low rainfall, estimated to decline even further due as a result of climate change, the use of underground water remains the main source of water.

Many people in Botswana, especially in rural areas, are dependent on natural resources for their livelihoods. As a consequence, Botswana's abundant biological resources are under increasing threat from a variety of land use practices and overexploitation, especially for fuelwood, which, if not addressed, could lead to ecosystem imbalances. The situation is made worse by periodic droughts, desertification, and habitat loss, resulting in increased human-wildlife conflicts due to competing interests between wildlife and human settlements. This calls for enhancing agricultural productivity along with sustainable natural resources management, and underscores the pivotal role of agriculture and natural resources in food and water security. This could be complemented with the provision of alternative sources of clean and renewable energy, especially for vulnerable communities not able to be connected to the national power grid, as outlined in Table 4 below.

**Table 4: Enhancing adaptive capacity and climate resilient of the most vulnerable rural communities in Botswana**

| Programmatic Area   | Elements Scope   | GCF Target Result Areas   | Key partners  |
|---|--|---|---|
| Agriculture-Water-Natural Resources Management-Renewable Energy | <p>Agriculture</p> <p>Increased production and productivity through CSA and indigenous agricultural approaches.</p> <p>Identify and develop new varieties of resilient crops, livestock breeds, and alternative cropping patterns capable of withstanding weather extremes, flooding, pests, and disease.</p> <p>Improve access to climate smart input/output markets.</p> <p>Enteric abatement through fodder and other livestock feeds</p> | <p>Health and wellbeing, and food and water security (A, S).</p> <p>Forestry and land use (M).</p>                | <p>MOA</p> <p>Ministry of Local Government &amp; Rural Development</p> <p>Communities</p> <p>Private sector (Service providers)</p>   |
|   | <p>Sustainable Natural Resources Management</p> <p>Strengthening the Resilience of the Water Sector.</p> <p>Water conservation techniques incl. aquifer recharging.</p> <p>Recycling of wastewater</p> <p>Solar-powered small-scale irrigation systems and livestock watering.</p> <p>CBNRM.</p> <p>Rehabilitation of degraded lands.</p>  | <p>Health and wellbeing, and food and water security (A, S).</p> <p>Ecosystems and ecosystem services (A, S).</p> | <p>Ministry of Land Management, Water and Sanitation Services</p> <p>Ministry of Environment, Natural Resources &amp; Tourism</p> <p>MMEWR</p> <p>Private sector (Service providers)</p> <p>Communities</p> |
|   | <p>Energy efficiency, clean technologies, and renewable energy</p> <p>Mini-/off - grid solar systems</p> <p>Localized hybrid solar-biogas plants.</p> <p>Clean and energy saving stoves.</p> <p>Solar fish drying facilities.</p>  | <p>Energy access and power generation (M)</p> <p>Health and wellbeing (A).</p>                                    | <p>MMEWR</p> <p>Ministry of Local Government &amp; Rural Development</p> <p>Private sector (Service providers)</p> <p>Communities</p>   |
|   | <p>Climate information services</p> <p>Strengthening hydro-meteorological information delivery services incl. EWS.</p> <p>Preparations of downscaled climate change projections and impact scenarios for policy</p>  | <p>Most vulnerable people and communities (A)</p>   | <p>DMS</p> <p>MOA</p> <p>Ministry of Local Government &amp; Rural Development.</p>  |



|  |   |  |   |
|--|---|--|---|
|  | Rehabilitation and restoration of rangelands<br>Agroforestry and Reforestation<br>Enteric abatement through fodder and other livestock feeds.<br>Greening the tourism sector through ecotourism.<br>Restoration of croplands and rangelands through the integration of indigenous agricultural practices and CSA technologies | Forestry and land use (M).<br>Buildings, cities, industries, and appliances (M). | Ministry of Environment, Natural Resources Conservation & Tourism Communities |
|--|---|--|---|

#### **Programmatic Area 4: Ecosystem-Based Adaptation (Adaptation with Mitigation co-benefits)**

Botswana is rich in diverse ecosystems ranging from tropical and subtropical grasslands, savannahs, and shrublands, flooded grasslands and savannahs, deserts and xeric shrublands, Zambezi freshwater, and southern temperate freshwater. These ecosystems and the associated processes support sectors such as energy, food, fibres, water, medicines, fishery, and agriculture on which the country and her people depend. Traditional management approaches have tended to be compartmentalized, considering individual ecosystem components in isolation. This has often led to poor decisions, conflicts over space and resources, environmental degradation, and economic losses. This is likely to become worse with climate change. In contrast, the ecosystem-based adaptation (EbA) is a holistic approach to building ecosystem resilience.

Ecosystem resilience is the capacity of an ecosystem to respond to changes and disturbances, yet retain its basic functions and structures. The resilience of ecosystems in Botswana is currently being reduced by a number of threats, including:

- Habitat loss, degradation, and fragmentation,
- Invasive species,
- Unsustainable use and management of natural resources,
- Changes to the aquatic environment and water flow,
- Changing wildfire regimes, and
- Climate change—increased temperatures accompanied by unpredictable rainfall; this will affect differently the diverse ecosystems.

The EbA integrates the management of land, water, and natural resources that promotes conservation and sustainable use in an equitable way. This would call for strong stakeholder participation – involving all those who have an interest in, or could be affected by, decision-making. This is crucial, not least because the EbA would consider all activities as part of a single system where all sectors are integrated, allowing the wider consequences of decisions to be determined and managed. Examples of intervention areas under EbA are set out in Table 6 below.

**Table 6: Ecosystem-based adaptation Programme**

| <b>Programmatic Area</b>   | <b>Elements of the Programme</b>   | <b>GCF Target Result Areas</b>   | <b>Key partners</b>   |
|----------------------------|--|--|---|
| Ecosystem-Based Adaptation | Building resilient ecosystems<br>Restoration and management of ecosystems.<br>Water resources protection and integrated water resources management incl. payment of ecosystem services (PES) – Regional dimension. | Ecosystems and ecosystem services (A, S).<br>Health and wellbeing, and food and water security (A, S). | Communities<br>Ministry of Land Management, Water & Sanitation Services |





There is concern that unless alternative sources of energy the consumer base increase in comparison to the resource base will exacerbate the degradation of the rangelands. To ensure this problem is addressed, Table 7 sets out possible intervention areas.

**Table 7: Rehabilitation and restoration of degraded rangelands**

| <b>Programmatic Area</b>                              | <b>Elements of the Programme</b>  | <b>GCF Target Result Areas</b>  | <b>Key partners</b>   |
|---|---|---|---|
| Rehabilitation and restoration of degraded rangelands | Rehabilitation and restoration of degraded rangelands<br>SLM in rangelands incl. management of invasive plant species.<br>Agroforestry and Reforestation.<br>Enteric abatement through fodder and other livestock feeds.<br>Restoration of croplands and rangelands through the integration of indigenous agricultural practices and CSA technologies.<br>Enhancing biodiversity conservation.<br>Implement climate smart livelihood activities:<br>Mini-/off-grid solar plants<br>Increase agricultural production through CSA and indigenous agricultural approaches and solar-powered small-scale irrigation systems and livestock watering.<br>Greening the tourism sector through ecotourism.<br>Clean and energy saving cooking stoves.<br>Waste to energy<br>Climate information services<br>Strengthening hydro-meteorological information delivery services incl. EWS.<br>Preparations of downscaled climate change projections and impact scenarios for policy development and further impact analyses at the sector level. | Forestry and land use (M).<br>Ecosystems and ecosystem services (A, S).<br><br>Energy access and power generation (M).<br><br>Most vulnerable people and communities (A). | MENRCT<br>MLGRD<br>MoA<br>Communities<br>Private sector<br><br>MMEWR<br><br>DMS |

## 2.4 Country's project portfolio

This section presents an indicative project and programme pipeline, based on identified strategic pillars (refer to chapter 2.3) and bilateral consultations with stakeholders in both the public and private sectors. The following project/programme portfolio reflects submitted, approved and potential new readiness support, Project Preparation Facility (PPF) support, and investment projects to be funded and co-financed by the GCF over the 2021-2024 period and beyond. The portfolio was developed through careful consideration of the latest known environmental impacts due to climate change, through a rigorous stakeholder consultation process led by the NDA, policy analysis, alignment with past and future support from other climate finance sources, and a review of similar processes implemented in other countries. This process was further supplemented by capacity strengthening in the area of GCF Concept Note development. The pipeline is subject to review and approval by designated authorities including the NDA and the GCF. A summary of more detailed items in the pipeline is presented in Table 8 below.

The country's project portfolio shall be reviewed and updated on a rolling basis, using the coordination mechanism described in section 2.1.1.

**Table 8: Summary of Country Programme pipeline**

|                             | #  | Project Name | GCF/Total Costs (US\$) | Accredited Entity | Key Contacts | Project Status              |
|-----------------------------|----|--------------|------------------------|-------------------|--------------|-----------------------------|
| ADAPTATION                  | 1  |              |                        |                   |              | Example: Draft Concept Note |
|                             | 2  |              |                        |                   |              |                             |
|                             | 3  |              |                        |                   |              |                             |
|                             | 4  |              |                        |                   |              |                             |
|                             | 5  |              |                        |                   |              |                             |
|                             | 6  |              |                        |                   |              |                             |
|                             | 7  |              |                        |                   |              |                             |
|                             | 8  |              |                        |                   |              |                             |
|                             | 9  |              |                        |                   |              |                             |
|                             | 10 |              |                        |                   |              |                             |
| MITIGATION                  | 11 |              |                        |                   |              |                             |
|                             | 12 |              |                        |                   |              |                             |
|                             | 13 |              |                        |                   |              |                             |
|                             | 14 |              |                        |                   |              |                             |
|                             | 15 |              |                        |                   |              |                             |
|                             | 16 |              |                        |                   |              |                             |
|                             | 17 |              |                        |                   |              |                             |
|                             | 18 |              |                        |                   |              |                             |
|                             | 19 |              |                        |                   |              |                             |
|                             | 20 |              |                        |                   |              |                             |
| READINESS SUPPORT PROGRAMME | 21 |              |                        |                   |              |                             |
|                             | 22 |              |                        |                   |              |                             |
|                             | 23 |              |                        |                   |              |                             |
|                             | 24 |              |                        |                   |              |                             |
|                             | 25 |              |                        |                   |              |                             |
|                             | 26 |              |                        |                   |              |                             |
|                             | 27 |              |                        |                   |              |                             |
|                             | 28 |              |                        |                   |              |                             |
|                             | 29 |              |                        |                   |              |                             |
|                             | 30 |              |                        |                   |              |                             |

**Table 9: Country projects/programmes pipeline**

| Country projects/programmes pipeline - ADAPTATION |             |                   |        |                         |
|---|-------------|-------------------|--------|-------------------------|
| Project #1<br>Title:                              | Description | Accredited Entity |        | Submission<br>timeframe |
|   | .           |                   |        |                         |
| Mitigation/Adaptation/Cross-cutting:              |             | Total financing:  |        | Status                  |
|   |             | GCF:              | Other: |                         |
| Project #2<br>Title:                              | Description | Accredited Entity |        | Submission<br>timeframe |
|   | .           |                   |        |                         |
| Mitigation/Adaptation/Cross-cutting:              |             | Total financing:  |        | Status                  |
|   |             | GCF:              | Other: |                         |
| Project #3<br>Title:                              | Description | Accredited Entity |        | Submission<br>timeframe |
|   | .           |                   |        |                         |
| Mitigation/Adaptation/Cross-cutting:              |             | Total financing:  |        | Status                  |
|   |             | GCF:              | Other: |                         |
| Project #4<br>Title:                              | Description | Accredited Entity |        | Submission<br>timeframe |
|   | .           |                   |        |                         |
| Mitigation/Adaptation/Cross-cutting:              |             | Total financing:  |        | Status                  |
|   |             | GCF:              | Other: |                         |

| Country projects/programmes pipeline - MITIGATION |             |                   |        |                         |
|---|-------------|-------------------|--------|-------------------------|
| Project #11<br>Title:                             | Description | Accredited Entity |        | Submission<br>timeframe |
|   | .           |                   |        |                         |
| Mitigation/Adaptation/Cross-cutting:              |             | Total financing:  |        | Status                  |
|   |             | GCF:              | Other: |                         |
| Project #12<br>Title:                             | Description | Accredited Entity |        | Submission<br>timeframe |
|   | .           |                   |        |                         |

|                                      |             |                   |                      |
|--------------------------------------|-------------|-------------------|----------------------|
| Mitigation/Adaptation/Cross-cutting: |             | Total financing:  | Status               |
|                                      |             | GCF: Other:       |                      |
| Project #13<br>Title:                | Description | Accredited Entity | Submission timeframe |
|                                      |             |                   |                      |
| Mitigation/Adaptation/Cross-cutting: |             | Total financing:  | Status               |
|                                      |             | GCF: Other:       |                      |
| Project #4<br>Title:                 | Description | Accredited Entity | Submission timeframe |
|                                      |             |                   |                      |
| Mitigation/Adaptation/Cross-cutting: |             | Total financing:  | Status               |
|                                      |             | GCF: Other:       |                      |

| Country projects/programmes pipeline – READINESS SUPPORT PROGRAMME |             |                   |                      |
|--|-------------|-------------------|----------------------|
| Project #21<br>Title:  | Description | Accredited Entity | Submission timeframe |
|  |             |                   |                      |
| Mitigation/Adaptation/Cross-cutting:                               |             | Total financing:  | Status               |
|  |             | GCF: Other:       |                      |
| Project #22<br>Title:  | Description | Accredited Entity | Submission timeframe |
|  |             |                   |                      |
| Mitigation/Adaptation/Cross-cutting:                               |             | Total financing:  | Status               |
|  |             | GCF: Other:       |                      |
| Project #23<br>Title:  | Description | Accredited Entity | Submission timeframe |
|  |             |                   |                      |
| Mitigation/Adaptation/Cross-cutting:                               |             | Total financing:  | Status               |
|  |             | GCF: Other:       |                      |
| Project #24<br>Title   | Description | Accredited Entity | Submission timeframe |

|                                      |  |                  |        |        |
|--------------------------------------|--|------------------|--------|--------|
|                                      |  |                  |        |        |
| Mitigation/Adaptation/Cross-cutting: |  | Total financing: |        | Status |
|                                      |  | GCF:             | Other: |        |

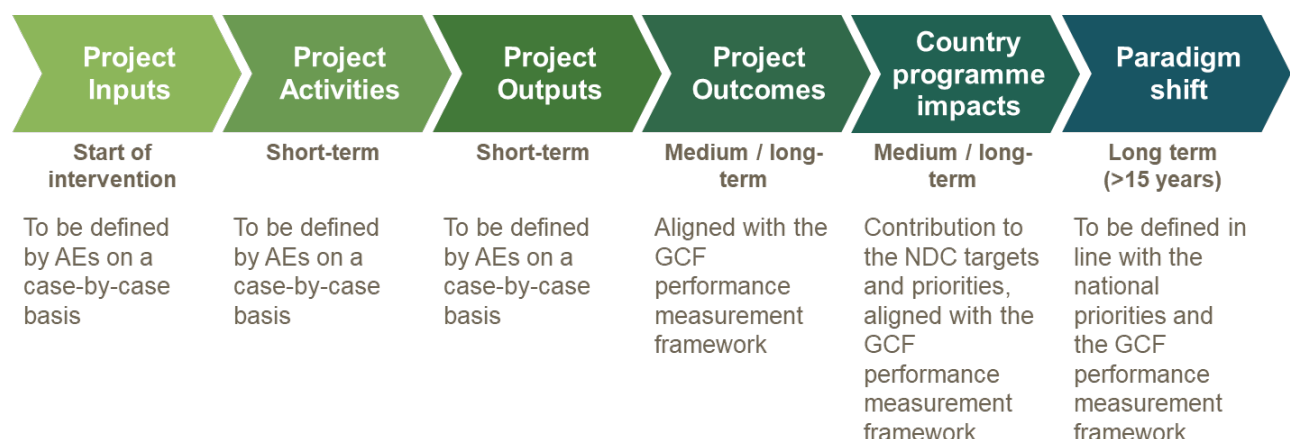
### 3. Monitoring and evaluation of the Country Programme Implementation

Botswana's NDA will monitor the implementation of the Country Programme and will take its regular reviews and updates. The schedule and process of review and updates will be aligned with the key developments related to Botswana's economic, social and climate-relevant circumstances, participation in the UNFCCC process, and implementation, submission of NCs/BURs and update of its NDC. This will be based on the monitoring and evaluation reports on the GCF-funded projects/programs included in the country pipeline.

The schedule of the Country Programme periodic review and update is to be aligned with the schedule of the NDC updates. Namely, the Country Programme should be reviewed and updated within 18 months after submission of the updated NDC to the UNFCCC – the regular update of the Country Programme is 5 years – of Country's project portfolio annually. The stakeholder consultation process used for the development of this Country Programme and the coordination mechanism for the GCF activities in Botswana, with the NDA in the lead, will be used for reviewing and updating the document. Furthermore, the review and update of the Country Programme will be aligned with the national MRV framework and coordination once it is established.

Figure 8 presents the logic model for measuring the performance of the Country Programme. Applicable indicators from the GCF Results Measurement Framework and the Performance Measurement Framework are proposed for measuring the project/programme outcomes and the impacts of the Country Programme, having an effective contribution to the NDC targets and priorities as a core expected result. Additional indicators can be added to accommodate the changes and developments in the project pipeline. The more detailed review process will be developed once the coordination mechanism for GCF activities in Botswana is finalized.

**Figure 8. Logic model for measuring the performance of the Country Programme**



The NDA will oversee the implementation of the GCF-funded projects in Botswana. Using the (forthcoming) coordination mechanism, the NDA will inform on a rolling basis about progress on the project implementation, new projects in the country pipeline, as well as any other important updates that take place between the scheduled periodic reviews. Therefore, the Country Programme and its project pipeline should be treated as a living document that is dynamic and subject to change.