# Table of Contents

1. SUMMARY
   1.1 Current political and socio-economic conditions
   1.2 Priorities and resources for innovators in the water-energy-food (WEF) nexus

2. MACRO-ECONOMIC ENVIRONMENT
   2.1 Gross Domestic Product (GDP)
   2.2 Labor force and unemployment
   2.3 Doing business in Botswana

3. COVID-19 MITIGATION MEASURES AND RESPONSE

4. TAXATION STRUCTURE

5. SMEs AND ENTREPRENEURSHIP

6. POLICIES AND TRENDS IN THE WATER-ENERGY-FOOD NEXUS
   6.1 Agricultural context
   6.2 Water use and energy in agriculture

7. AGRICULTURE INVESTMENT POTENTIAL
   7.1 Agri-businesses incentives

8. GENDER AND SOCIAL INCLUSION IN THE WEF NEXUS
**List of Figures**

Figure 1. Botswana: Ease of Doing Business Summary ................................................................. 4

Figure 2. The GDP Annual Growth Rate for Botswana between 2000 and 2020 in %.................. 13

Figure 3. The unemployment rate (%) in Botswana between 1999 and 2020 in %............... 13

Figure 4. The average interest rate of loans given by the commercial banks in Botswana and lending interest rate in %*  .................................................................................................................. 14

Figure 5. The average exchange rate (Pula to US Dollar) as reported by the Central Bank of Botswana (Source: Central Bank of Botswana (2021)) ........................................................................................................... 14

Figure 6. Demonstration of the value of exports and imports, recorded in Botswana from 2008 to 2019................................................................................................................................................. 15

Figure 7. SME funding sources per sector ......................................................................................... 15

**List of Tables**

Table 1. Active Stakeholders in the WE4F Nexus in Botswana ...................................................... 16
1 SUMMARY

1.1 Current Political and Socio-economic Conditions

- **Stable macroeconomic environment.** Botswana offers a stable political, fiscal, and macroeconomic environment. Although Botswana’s per capita Gross Domestic Product (GDP) of $6,710.99 marks a five-year low and is a 19 percent decline from its 2018 peak, Botswana maintains its World Bank designation of an Upper Middle-Income Country.

- The World Bank assessed Botswana’s 2019 GDP at approximately $18.36 billion and the Bank of Botswana reported a 2020 GDP of $16.5 billion.

- **Political stability.** Botswana has successfully held eleven general elections since its independence in 1966. Each multi-party election has maintained constitutional provisions for a free and fair process. As Africa’s longest-standing democracy, political stability is a key stimulus for investment in Botswana.

- **Safety and security.** Botswana is one of the most secure countries in Africa and compares well worldwide for low crime rates and the rule of law. Well-trained law enforcement deploys the latest crime prevention strategies and equipment. The country thus has little or no exposure to large scales security concerns, such as terrorism, cybercrime, and money laundering.

- **Corruption.** International studies have consistently ranked Botswana among the world’s least corrupt countries. This reputation is fortified both by public, private and civic anti-corruption institutions and by a deeply ingrained anti-corruption culture in the country’s economic sectors. Botswana has the least corrupt government in Africa, which increases the security of the investment environment.

- **Top sovereign credit rating.** Botswana has long been among the top-level credit ratings for both economic outlook and political stability worldwide. In Standard & Poor’s 2018 ratings, Botswana was rated ‘A-‘ and ‘A 2’ for the long and short term respectively. This was based on a strong government balance sheet, a well-managed economy, and a long record of political stability.

1.2 Priorities and Resources for Innovators in the Water-Energy-Food (WEF) Nexus

Several priorities and opportunities for innovators in the WEF nexus are presented in this profile including but not limited to:

1. Botswana is highly suited to solar energy production and is often described as one of the best-irradiated countries in the world.

2. In some areas, lack of access to the power grid has led rural farmers and tourist lodges to meet their own energy needs using solar. There are several providers of solar equipment such as panels and irrigation pumps (e.g., Megawatt New Energy, Soltake Energy, and Grit-tech). However, there is little available information on the uptake and impact of renewable energy options at the household and farm levels.
3. There is also support for a transition away from barbed wire fencing towards single strand solar-powered fencing. As well as reducing snagging, moveable solar-powered fences would facilitate grazing control and the promotion of regenerative grazing.

4. Current investment in the production and utilisation of biogas from agro-waste is being explored. The project targets districts of South-eastern Botswana, where 200 households will be provided with biogas plants which will convert livestock waste into energy for cooking and lighting among other things.

2 MACRO-ECONOMIC ENVIRONMENT

2.1 Gross Domestic Product (GDP)

- Botswana offers a stable political, fiscal, and macroeconomic environment. Historically it has enjoyed one of the highest economic growth rates in the world, but that rate has slowed down in recent years due to drought and COVID-19 related impacts.

- The Gross Domestic Product (GDP) in Botswana contracted by 8.9 percent in 2020 following a positive yet declining growth from 2016 to 2019.

- On the supply side, mining output declined significantly, mainly due to falling global demand for diamonds. Non-mining output also shrank, from both the pandemic-induced domestic restrictions and weaker global markets. The sub-sectors most affected were trade, construction, manufacturing, hotels and restaurants, and transport.

- Agriculture accounts for about three percent of Botswana's Gross Domestic Product (GDP) with diamonds and tourism the main contributors to the economy. Agricultural potential is limited due to the Kalahari Desert which occupies a large area of the country.

- Despite the agriculture sector's small contribution to GDP, the sector is the mainstay of the rural economy. Roughly 30.6 percent of Botswana's population live in rural areas and approximately 70 percent of rural households depend on subsistence farming for their livelihoods.

2.2 Labor Force and Unemployment

- Since the 2000s, Botswana's unemployment rate has been declining steadily reaching a minimum of 16.2 percent in 2009 (see Figure 2). In 2020, 23.3 percent of the total labor force in Botswana was unemployed, an increase from 18.20 percent in 2019.

- Youth unemployment is particularly acute at 61 percent (15-17 years), 43 percent (20-24 years) and 31 percent (25-29 years) in 2020 exceeding the national and adult rates. This has been attributed to the lack of skills and proper work experience, and jobless growth (whereby GDP continues to grow without resultant growth in jobs) spearheaded by the mineral sector, which is capital intensive and hence does not create enough jobs.

- In 2021, the Cabinet approved the National Employment Policy. The policy is expected to be able to assess the adequacy in promoting productive, gainful, and decent employment for Botswana in five strategic areas namely, strengthening the growth of employment in the private sector; reforming the education and training system; improving the flow of
information between job seekers and job openings; strengthening of programs, and the implementation of a systematic monitoring and evaluation framework.

- Approximately 7.4 percent of people in formal employment in Botswana work in agriculture, forestry, or fishing. This equates to 55,932 people in total, 77 percent of which are male and 23 percent female. Roughly 66 percent of those employed in the agriculture, forestry, and fishing industry work in semi/unskilled occupations, while 20 percent are skilled agricultural workers. Skilled agricultural workers also operate in other industries including public administration, wholesale and retail trade, and accommodation and food service activities. Female participation is stronger in this category, with women accounting for 44.5 percent of all employed skilled agricultural workers. An estimated 41 percent of skilled agricultural workers are youth (aged 15-35).

### 2.3 Doing Business in Botswana

- In terms of the ease of doing business in Botswana, the country’s rank deteriorated in 2020 to 87 from 86\(^1\) in 2018 according to the 2020 World Bank annual ratings\(^1\). The rankings and scores per category are shown in Figure 1.

- Out of 100, Botswana scored 60 in Obtaining Credit for businesses which gave it a rank of 80. Botswana’s financial and capital markets are among the most sophisticated in Africa, boasting numerous domestic companies and regional offices of multinationals. According to a recent Rand Merchant Bank survey, Botswana is among the top five African countries in terms of accessibility to bank loans and has the highest percentage in Africa of firms with lines of credit. However, this has not translated into favorable financial product/service access for agribusinesses.\(^2\)

- On the other hand, Botswana scored 76.2 in terms of Starting a Business which is lower than the sub-Saharan Africa regional average (80.1).

- In the Ease of Doing Business Report, Botswana scored low in terms of Resolving Insolvency with a score of 48.2 percent and Enforcing Contracts with a score of 50.0 percent but above the regional average for both scores. Botswana made resolving insolvency more difficult through an amendment to its Employment Act thus increasing the priority ranking of employee benefits to preferred status. In addition, the Insolvency Act for Botswana was amended to criminalize false statements made by an insolvent company that may affect a prospective buyer’s decision whether to purchase the company as a going concern. The average score for Protecting Minority Investments was recorded at 60.

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\(^1\) Ease of Doing Business Report, 2020. Ease of Doing Business is - a metric that measures the number of procedures, time, cost and paid-in minimum capital requirement for a small- to medium-sized limited liability company to start up and formally operate in each economy’s largest business city.
The average lending interest rate in Botswana has been constant from 2000 to 2008 ranging from 15.5 percent to 16.5 percent. The lending interest rate is the rate charged by banks on loans to prime customers (see Figure 4, Annex 1).

Lending to the agricultural sector varies from commodity to commodity. Lending to the livestock sector is particularly well developed in Botswana. Parastatals such as the National Development Bank (NDB) and concessional lender, the Citizen Entrepreneurship Development Agency (CEDA) both provide concessional finance to the sector and there are indications that the level of uptake is fairly good. However, CEDA requires personal surety which favors those who are well connected and which many smallholders and vulnerable group members are not able to provide.

In the absence of land and other fixed collateral, many farmers find it difficult to borrow so that they can develop their farms to operate on a commercial basis.

Many farmers depend on their families for funding, but this is often unreliable and usually insufficient to make the necessary investments. Family affiliations have further complications as commercial banks sometimes refuse customers credit if other family members have defaulted even where the borrower was not a guarantor. Those who have difficulties servicing their loans may then struggle to access finance in the future. This is one of the reasons why farmers often opt to sell to feedlots for quick cash, even if the prices are less favorable.

The inflation rate has been moving together with the lending interest rate. As depicted in Figure 4, interest rates have been declining over the years and remained at the bottom end of the central bank’s 3–6% target range. However, inflation rates rose in 2021, attributable to upward adjustments in administered prices for most categories of goods and services. In 2009, the average interest rate was recorded at 13.8 percent. The country observed a consistent decline in interest rates, in 2019 interest rate was recorded at 6.4 percent.
• From 2008 to 2015, exports were below the average value of imports but have steadily increased since 2009 except for the decline from 2016 to 2019 (Figure 6, Annex 1). The total value of Botswana exports reached US$ 5.2 billion in 2019, mostly driven by diamonds and other minerals including gold and disodium carbonate.

• Imports also showed an increase starting from US$ 4.7 billion in 2009 to US$ 10.3 billion in 2012 and then a declining trend until 2017 (Figure 6, Annex 1). The top importing countries in 2019 were South Africa (57.9 percent share), Namibia (7.9 percent share), Canada (6.9 percent share), India (4.1 percent share) and Belgium (3.3 percent share).

• The Pula to USD exchange rate went through slight fluctuation in the last decade but has been a relatively strong and stable currency in Africa, generally stronger than the South African Rand by 20-30 percent.

• It is difficult and often cost-ineffective to compete for Government of Botswana (GoB) contracts without a local partner even in cases in which the tender announcement does not limit participation to local companies. To gain access to most GoB loans and grants, having a local partner is generally mandatory.

3 COVID-19 MITIGATION MEASURES AND RESPONSE

• Like many other countries, Botswana’s economy has been affected adversely by the COVID-19 pandemic. The government’s pandemic containment measures included movement restrictions and social distancing, which led to constrained output levels for local businesses. According to the Bank of Botswana (BoB), the most affected sectors included mining (especially the diamond industry), travel, tourism, hospitality, and entertainment. As a result, the value of exports fell from $5.13 billion in 2019 to $4.39 billion in 2020, worsening the current account deficit from 7.6% of GDP in 2019 to 9.8% in 2020. The overall economy contracted by approximately 7.9% in 2020 compared to the corresponding period in 2019 in which it expanded by 3%. The contraction was mainly due to the mining output which fell by 21.9%.

• The decline in travel and tourism had a knock-on effect on the beef sector, with reduced demand for more expensive meat cuts to supply hotels and restaurants. Early in the pandemic, the SADC community worked hard to keep trade flows open as far as possible, despite some temporary physical border closures.

• Among the GoB’s response measures, a BWP 15 billion stimulus package was developed to support national recovery and facilitate structural transformation. The government committed to paying purchase orders swiftly, streamlining the procurement process, and issuing VAT refunds. It has also set up a COVID-19 relief fund worth BWP 2 billion. Interventions to support the private sector included:
  o Wage subsidies (BWP 1 billion)
  o A 24-month loan guarantee of up to BWP 25 million for loans with commercial banks
  o Tax concessions (deferral of 75% of any two quarterly payments between March and September 2020 to be repaid from March 2021, reduced VAT refund period)
  o Waiver of training levy for six months
  o Repayment holidays for commercial bank loans to be negotiated by the Bank of Botswana
Public and private sector actors have had to adapt quickly to the pandemic and restrictions. CEDA put in place a special relief protocol to cushion the effect of the pandemic on SMMEs. This focused on working capital facilitation and providing repayment breaks for CEDA clients. The organization also established an essential supplies loan to be extended to companies involved in the production of essential products that would help ensure the country’s self-sufficiency during the pandemic.

The NDB promoted domestic food production through its Feed the Nation Campaign under the bank’s Agribusiness Stimulus Fund, designed in part to address the food supply issues that were exacerbated by the pandemic. The fund financed activities under 5 agricultural sub-sectors including horticulture, small stock, cereals, beef and poultry.

It has been noted that serious disruption to Botswana’s food system was, to a large extent, avoided thanks to agriculture being designated as an essential service sector and GoB setting up a relief fund to support farmers.

Business Botswana projected that agriculture would be one of the more resilient sectors. Farmers did however lose their ability to harvest during the lockdown and were unable to get movement permits, which resulted in income losses overall. Despite this, agricultural growth was projected to drop by one-tenth of a percentage point (from 1.7% to 1.6%) and the sector is expected to bounce back quickly.

The pandemic resulted in funding being diverted from planned activities, including investment in infrastructure for the agricultural sector and a plan to scale up horticultural production. Efforts are now also more targeted toward food storage to ensure that there are sufficient reserves in the wake of COVID-19 and the recent outbreak of African migratory locusts.

### 4 TAXATION STRUCTURE

All individuals are liable for taxation on their earnings and profits generated from a source within Botswana. Profits include both income and capital gains realized by the individual. Income tax payable by individuals is calculated by applying a graduated rate schedule to taxable income. Currently, the top rate is 25 percent on income over 144,000 Botswana Pula (BWP) per year.

#### 2021 Taxes on income for residents:

- **P0 to P72000** are expected to pay 5 percent of each Pula over P36 000
- **P72001 to P108000** to pay 12.5 percent of each Pula over P72000
- **P108001 to P144000** to pay 18.75 percent of each Pula over P144000
- **P144001 and over** to pay 25 percent of each Pula over P144000

#### 2021 Taxes on income for non-residents:

- **P0 to P72000** are expected to pay 5 percent of each Pula over P0
- **P72001 to P108000** to pay 12.5 percent of each Pula over P72000
- **P108001 to P144000** to pay 18.75 percent of each Pula over P108000
- **P144001 and over** to pay 25 percent of each Pula over P144000

#### Capital transfer tax (CTT) - a tax levied on the transfer (by way of inheritance or gratuitous disposal) of tangible or intangible, movable or immovable, property at 12.5%, subject to
certain exemptions. The person to whom property is transferred by way of inheritance is expected to pay CTT.

- **Value Added Tax (VAT)** - a tax imposed on taxable supplies and the importation of goods into Botswana. The standard VAT rate of 14% applies to all supplies that do not qualify for an exemption or are not zero-rated. Certain specified supplies are either zero-rated or exempt from VAT.

- **Transfer duties on immovable property** - is levied at 5% for citizens and 30% for non-citizens of the value of immovable freehold and leasehold property. The first BWP 1 million of such value is exempt from transfer duty in case of transfer to a Botswana citizen.

## 5 SMEs AND ENTREPRENEURSHIP

- Botswana's SMMEs contribute 35% to GDP and play a meaningful role in the development and contribution to the national economy. The specific role played by SMMEs include employment creation, poverty eradication, and economic diversification. However, their ability to grow depends on their potential to invest in restructuring and innovation, a strategy that requires access to finance. Unfavorable financial market conditions may impede the performance and growth of SMEs.

- However, agribusiness SMMEs face numerous challenges including lack of, or limited access to markets, financial inadequacies, limited management skills, and a lack of competitiveness.

- In Botswana, 32 percent of the employees fall in the SMMEs sector and 14 percent are from Micro, 14 are Small, and 4 percent are from the Medium SMMEs.

- In 2001, the government established CEDA as well as other funding schemes such as the Youth Development Fund and the Women Economic Empowerment Program to provide finance to SMEs.

- Local Enterprise Authority (LEA) was launched to promote entrepreneurship and business development through training and mentorship. However, SMMEs are still faced with constraints related to access to finance as noted under Section 2.3.

- In a 2019 LEA Report published on SME competitiveness in Botswana, the following challenges were noted:
  - **Overall good management of production processes, with a few laggards** - Most Botswana companies follow professional management processes in running their businesses. Roughly, 85% keep track of revenues and expenses, and 77% of the goods they supplied were delivered on time. Some women-led and youth-led companies however trail other enterprises when it comes to adopting professional management practices and achieving results in terms of productivity, inventory and cash flow.

  - **Low rates of certification to standards** - Very few Botswana companies are certified to national and international standards. More than 75% of survey respondents said they were not certified in any quality, sustainability or other standards. A quality performance is particularly concerning for would-be agricultural exporters. The growing adoption of
standards by African smallholders has driven increased agricultural exports there, indicating that there may be lessons to be learned from across the region.

- **Target infrastructure investment to sectoral needs** - Roughly 53% of surveyed agri-SMEs have cited transport-related problems as the biggest challenge they faced in meeting the cost and quantity requirements of buyers.

- **Financial inclusion requires a focus on specific groups of companies** - The banking portfolio in Botswana is more focused on household borrowing and tends to avoid lending to SMEs in general and the agricultural sector in particular because of the perceived high risk of these sectors. Indeed, agricultural companies that were interviewed were more likely to have accessed funding through government programs (see Figure 7).

- **Botswana companies are investing for positive environmental impact** - More than 60% of companies felt that environmental risks were significant for their business. Firms were most anxious about rising temperatures, though water scarcity and availability of inputs were also major concerns. Agricultural enterprises were more likely than companies in other sectors to identify environmental risks as significant for their businesses. They also tended to take more measures to mitigate those risks. Companies that invested in energy-efficient, renewable energy and water-efficient technologies often noted that these investments had resulted in lower input costs, increased product quality or other business benefits.

## 6 POLICIES AND TRENDS IN THE WATER-ENERGY-FOOD NEXUS

### 6.1 Agricultural Context

- Despite that 70 percent of Botswana’s landscape consists of desert and poor soils, agriculture is vital to the livelihoods of many citizens in Botswana mainly those operating at a subsistence scale.

- The sector comprises 2 percent of GDP. Livestock production, especially cattle, contributes approximately 80 percent of this and has been the only sub-sector that has constantly remained a significant contributor to national GDP. However, the contribution of the sector to GDP has been declining, mainly due to the very low productivity of the labor force engaged in the sector.

- Given its low and erratic rainfall and poor soils, arable production is at high risk. Crop production depends on rainfall, and it has been the most vulnerable part of the agricultural sector.

- Crop production has the highest productivity in millet, sorghum, and groundnuts. These crops represent the most efficient use of land and play a critical role in addressing food and nutrition security in Botswana.
• Most farmers are small-scale farmers who lack assistance for capacity building to commercialize agriculture, hence the need for government to support farmers to tap into the high-value markets. 

• Investment and policy interventions in management skills among women and young entrepreneurs could yield dividends in terms of increased capacity to meet the quantity, cost and time demands of international and domestic markets.

• Despite the interventions by the government to address issues of inputs to production and access to markets, the sector still faces challenges in production volumes and efficiency. In addition, there is a lack of infrastructure and support services, which hamper production and productive farms are scattered apart making it difficult to provide services such as roads, electricity, water, telecommunications, and extension services. Further, according to Statistics Botswana, the sector is also affected by recurring droughts, losses due to straying and theft and endemic animal diseases such as Foot and Mouth Disease (FMD).

• Nonetheless, agriculture remains a viable option for poverty reduction and employment creation considering its labor-intensive nature.

6.2 Water use and energy in agriculture

• Energy is an essential input into many agricultural processes. The remoteness and sparsely located farms make grid electricity uneconomical because of high connection costs and transmission losses mainly exacerbate this.

• The livestock sector habitually uses manually operated systems for water pumping which reduces the productivity of the livestock sector. Hence, there is a need to advocate for solar for water pumping and other electricity use to reduce volatility within the sector and turn agriculture into a low-carbon sector. The installation of hybrid solar-biogas plants for farm use can further address many of the sector’s energy challenges.

• To address its domestic power shortages as well as those of the region, the GoB seeks to become a net exporter of electricity by adding solar power and coalbed methane to its energy mix. In April 2021, the GoB signed a Memorandum of Intent with the governments of the United States and Namibia and developing banks to establish a 2-5 gigawatt Mega Solar project with sites in Botswana and Namibia. The twenty-year project is expected to add 300-500 MW of solar power to the energy mixes of Botswana and Namibia and to make both countries net exporters of solar power within two decades of the project’s inception.

• Botswana is a water-stressed country, receiving low and erratic rainfall ranging from 200 mm and 500 mm per year, and an estimated annual average evaporation rate of 1400 mm as well as frost. The country is also expected to experience among the most severe temperature increases in Sub-Saharan Africa by 2100.

• The bulk of water allocation for domestic and industrial use mainly comes from 94 dams constructed in various parts of the country, to capture some of the estimated average annual runoff of 696 million cubic meters per year.
• Farms generally use groundwater from boreholes, rivers and small dams. The use of recycled wastewater is strongly encouraged, though the quality is questionable and availability outside Gaborone is low.

• Due to increased water demand, most of the storage dams have been constructed to provide water for the growing urban areas with very few allocating water for irrigation. Botswana’s agricultural sector is the leading water using sector accounting for 41 percent of water consumption and 35 percent of water abstraction over the period 2010-2014 and the livestock subsector accounts for around 75 percent of agricultural water use.¹⁴

• These conditions make agricultural/horticultural production challenging; water seasonality and overall scarcity are significant constraints to production, and it was reported that crops are often lost.

• Vegetable production requires adequate soil moisture conditions, so because of Botswana’s climatic conditions, irrigation is essential to production.

• However, access to water for irrigation can be challenging; groundwater is not evenly distributed across the country and varies widely in quality. Drilling boreholes is risky, expensive, and does not always yield good results.

• A range of different pumping units are used for drawing and pressurizing water, the most commonly used being submissible, mono, and centrifugal pumps. Assuming there is an existing borehole, the costs of complete set drip and sprinkler irrigation systems are estimated at BWP 120,000 and BWP 80,000 respectively. There is reportedly some limited use of solar water pumps. Whilst these require an up-front investment, they are much more economical to run and have none of the negative environmental impacts of the diesel generators that are often used.

7 AGRICULTURE INVESTMENT POTENTIAL

• The National Development Plan 9 & 10 has emphasized economic diversification from reliance on mining and reliance on food imports from neighbouring countries given the agricultural sector’s decreasing share in GDP.

• The total value of food imports in July 2020 stood at P 675,309,042, representing 11.4 percent of the total imports. The most imported goods were cereals, with sugars and sugar confectionery and beverages, spirits and vinegar coming second at 19.2 and 10.3 percent respectively. Regarding cereals, the most imported in July 2020 were maize and corn, followed by wheat and rice at 42.3, 35.8, and 21.1 percent, respectively.

• Through the interventions provisioned under the NDP, the GoB aims to promote investment in agro-industrial and supply chain development, create employment, create value-addition opportunities, enhance food security and ultimately export. The aim is to increase domestic production of cereals (grain sorghum and maize) and pulses.

• The Zambezi Integrated Agro-commercial Development Project (ZIACDP) presents another investment opportunity. Earmarked to start in May 2021, the ZIACDP is a technical assistance project designed to support the GoB in its efforts to diversify the economy
through the expansion of activities in the agriculture and agro-industrial sector. The Zambezi River will supply irrigation to will help increase 20,000 hectares of agricultural development.

- In addition, the National Master Plan for Arable Agricultural and Dairy Development (NAMPAADD) also aims to reform small-scale farming by introducing modern agricultural and commercially orientated practices, as well as enabling commercial farmers to upgrade their level of management and technology application. In this project, spin-offs are envisaged to be realised that include horticulture packaging and gross sales to domestic and international markets at standardized rates. Tomato paste production is an existing opportunity, utilizing surplus tomato production, and opens the possibility to other food packing opportunities.

- In the livestock sub-sector, dairy has been identified as a potential area of growth. A notable challenge is the cost of feed, which creates an additional investment opportunity for domestic feed production.

7.1 Agri-businesses Incentives

- The development of agro-processing activities is identified as a high priority for economic diversification and a key route to increasing agriculture’s contribution to export earnings. Value addition activities do take place but are limited and tend to be on a small scale.

- The Ministry of Investment, Trade and Industry (MITI) has drawn particular attention to the dairy, meat, and horticulture value chains regarding the potential for broadening and scaling up value addition.

- Post-harvest activities are largely limited to cleaning, sorting and some packing, predominantly on larger farms. There are no organized pack houses or chilling facilities that farmers can utilize on a rental basis.

- Solar drying technology offers an efficient means of value addition and post-harvest loss reduction. However, a recent study found that despite the need and appetite for solar dryers in Botswana, particularly for tomato which experiences high rates of postharvest loss (28 percent), the technology is scarce. Research in other nations has also found that when solar dryers are available, they are often inaccessibly priced for smallholder producers.

- The agri-food system in Botswana is based on local production and food imports mainly because of the arid to semi-arid climate (the main part of the country is covered by the Kalahari Desert which covers more than 70 percent of the country’s surface) and poor soil conditions.

- Botswana’s Local Enterprise Authority (LEA) has identified horticulture as a fragmented sector in which diversification and import substitution can be achieved. There is potential for fresh fruits and vegetables, which compels the country to import due to domestic demand surpassing local supply.

8 GENDER AND SOCIAL INCLUSION IN THE WEF NEXUS
• Botswana is ranked 71 out of 156 on the 2021 Global Gender Gap Index with a parity score of 0.716, and 16 out of 156 in the 2021 Economic Participation and Opportunity category with a score of 0.799.

• In the Botswana Labor Force Survey, agriculture was identified as the fastest-growing employing industry with growth mainly driven by the entrance of women into the industry.

• There have been gradual but significant shifts in the demographics of agriculture in recent years. Men still dominate farming activities (63.1 percent) compared to their female counterparts (36.9 percent). However, the number of women who own land has increased due to positive changes in the legal system, including the Deeds Registry Act, and the Married Persons Property Act.

• More recently, an amendment to the 2015 Land Policy means that a woman can now own land alongside her husband, giving women independence within marriages. The most recent available figures suggest that 49.3 percent of women in Botswana now own land, and this is only likely to increase the strength of the amendment.

• Whilst women entrepreneurs face several such challenges, recent research indicates that the legal and regulatory environment in Botswana is highly conducive and supportive of women's entrepreneurship.

• Botswana is ranked second to Uganda at 34.6 percent on the MasterCard Index concerning women's entrepreneurship activity rate, first in Africa at 66.6 percent in the women advancement index, and first in Africa at 62.6 percent on providing supportive entrepreneurship conditions to women.

• Concerning economic participation and opportunity, the labor force participation rate for women is 68.5 percent compared to 78.1 percent for men.

• Overall, female participation in the labor market is 65.4 percent compared to 76.9 for men but women's income is still less than men's.
ANNEX 1: FIGURES

Figure 2. The GDP Annual Growth Rate for Botswana between 2000 and 2020 in %

Figure 3. The unemployment rate (%) in Botswana between 1999 and 2020 in %
Figure 4. The average interest rate of loans given by the commercial banks in Botswana and lending interest rate in %

*The data are available for each month of the years shown above and the figure represents the average annual value of each year (Source: World Bank (2021) & Central Bank of Botswana (2021)).

Figure 5. The average exchange rate (Pula to US Dollar) as reported by the Central Bank of Botswana (Source: Central Bank of Botswana (2021))
Figure 6. Demonstration of the value of exports and imports, recorded in Botswana from 2008 to 2019

Figure 7. SME funding sources per sector
### ANNEX 2: WE4F NEXUS RELEVANT
STAKEHOLDERS & ENTITIES

**Table 1. Active Stakeholders in the WE4F Nexus in Botswana**

<table>
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<tr>
<th>Sector</th>
<th>Name</th>
<th>Relevance to WE4F</th>
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| Water-Energy-Food nexus | **FAO** | ● Implementation of several projects to support the agricultural sector in Zimbabwe under three priority areas:  
  ○ Resilience and restoration of agricultural livelihoods  
  ○ Restoration of degraded agricultural land and higher productivity of water resources in agriculture  
  ○ Increased sustainable smallholder agricultural productivity for improved food security and nutrition |
| Water-Energy-Food nexus | **WFP** | ● WFP helps to enhance the food security of vulnerable people through restoring or creating key community assets such as irrigation and orchards, and work opportunities such as on climate change mitigation projects. |
| Development | **UNDP** | ● Implements several projects in food security, climate change, water resources, rehabilitation of ecosystems and supporting livelihoods  
  ● Manages the Accelerator Lab for advancing community-sourced solutions |
<p>| WaSH | <strong>UNICEF</strong> | ● Has a dedicated WaSH program to support water and sanitation infrastructure and awareness projects |
| Development | <strong>AfDB</strong> | ● GCA and the AfDB are embarking on a project concerning climate-smart upscaling digital technologies around climate change adaptation |
| Development | <strong>GIZ</strong> | ● Funding multi-sectoral programs in collaboration with government and private sector actors including waste, energy, and agribusinesses. |
| Development | <strong>World Bank</strong> | ● Funding multi-sectoral programs in collaboration with government including water, energy, and climate change |
| Development &amp; Cooperation | <strong>USAID</strong> | ● Funding multi-sectoral programs in collaboration with the government including water, energy, and agriculture that fall under their “Stabilization” goal |
| Development &amp; Cooperation | <strong>Sida (Swedish Embassy)</strong> | ● Funding multi-sectoral programs in collaboration with international NGOs providing to access water, sanitation, and livelihood including agriculture. |</p>
<table>
<thead>
<tr>
<th>Sector</th>
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<th>Relevance to WE4F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development</td>
<td>Common Market for Eastern and Southern Africa (COMESA)</td>
<td>Research, policy development, capacity strengthening</td>
</tr>
<tr>
<td>Development</td>
<td>Southern Africa Development Community (SADC)</td>
<td>Research, policy development</td>
</tr>
<tr>
<td>Water</td>
<td>Ministry of Land Management, Water and Sanitation Services</td>
<td>Ensure proper land administration and management, Delivery of reused and reuse of greywater for both domestic and agricultural development, Water supply networks infrastructure management and maintenance, Permitting of wells, Assess, develop, and protect Botswana’s water resources for sustainable contribution to socio-economic growth</td>
</tr>
<tr>
<td>Agriculture</td>
<td>Ministry of Agricultural Development and Food Security</td>
<td>Improve food security and champion agricultural development, Establishment of agricultural-based poverty eradication projects, Regulation of agricultural activities and of monitoring the supply of Agri-products, Support in providing subsidized agricultural supplies to farmers, Coordination and support of agricultural cooperatives</td>
</tr>
<tr>
<td>Energy</td>
<td>Ministry of Mineral Resources, Green Technology and Energy Security (MMGE)</td>
<td>Maintaining the security of electricity supplies, Increasing the contribution of natural gas and renewable energy to the total energy mix, Rationalize energy consumption and improve efficiency in all sectors, Lead policy-making authority of Government on all matters of energy supply and demand management, Formulate and coordinate national energy policy and programmes</td>
</tr>
<tr>
<td>Water-Energy-Food nexus</td>
<td>Ministry of Local Government and Rural Development</td>
<td>Reduction of poverty, finding ways to help provide opportunities for income generation and involvement in economic activities by Batswana, Create employment and enhance popular participation in the development planning and implementation processes as a basis for broad-based, balanced, and sustainable development</td>
</tr>
<tr>
<td>Water-Energy-Food nexus</td>
<td>Ministry of Investment, Trade and Industry</td>
<td>Creating a conducive environment for the promotion of investment and development of sustainable industries and trade, Creating wealth and employment so that there is prosperity for all</td>
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</table>
| Climate                     | Meteorological Services Department (MSD)                    | • Providing weather-related information  
• Weather forecast  
• Early warning information |
| Water-Energy-Food nexus      | Local Enterprise Authority (LEA)                             | • Promote & facilitate entrepreneurship and enterprise development among the Small, Medium and Micro enterprises (SMMEs) community in Botswana  
• Creating vibrant SMMEs in the country |
| Government                  | Citizen Entrepreneurial Development Agency (CEDA)            | • Provide financial and technical support for business development  
• Promote a viable and sustainable citizen-owned business enterprise  
• Provide subsidized loans for various micro-enterprises.  
• Providing entrepreneurship development through funding and training |
| Government                  | Botswana Energy Regulatory Authority (BERA)                 | • Providing an efficient energy regulatory framework for electricity, gas, coal, petroleum products, solar and all forms of renewable energy. |
| Bank                        | Central Bank of Botswana                                    | • Regulating the macroeconomic environment  
• The Bank maintains the capability to analyze all key economic policy issues that impact the economy of Botswana  
• Promotes financial stability through the regulation and supervision of banks and other financial institutions |
| Civil union                 |                                                             | • Providing technical support to farmers |
| Government                  | Botswana Agricultural Marketing Board (BAMB)                | • Providing markets for locally grown scheduled crops such as cereals, pulses/beans and oilseeds, and ensure that adequate supplies exist for sale to customers at affordable prices  
• Providing market-relevant information to farmers |
| Government                  | National Agricultural Research and Development Institution (NARDI) | • Providing licensing & permits for animal husbandry, crop production, and advisory Role  
• Providing allowances, subsidies, schemes, and grants to farmers  
• Business registration, sales of goods and services, business compliance  
• Transport, transport permit, communications |
| Government                  | Water Utilities Corporation                                 | • Provides water and wastewater management services in Botswana. |
| University                  | The Botswana University of Agriculture and Natural Resources (BUAN) | • Producing market-ready graduates for the agricultural and natural resource sectors through innovative teaching and research  
• Engaging in production areas which are profitable under Botswana conditions. |
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<td>Water</td>
<td>The Zambezi Watercourse Commission (ZAMCOM)</td>
<td>• Developing the attitudes of students towards working with their hands to acquire some good working habits.</td>
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<tr>
<td></td>
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<td>• Research</td>
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<td></td>
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<td>• Water supply networks infrastructure management and maintenance</td>
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<td>• Regulation of water projects</td>
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<tr>
<td>Agriculture</td>
<td>Global Center on Adaptation (GCA)</td>
<td>• Investment</td>
</tr>
</tbody>
</table>
ENDNOTES

10 Ibid.
13 Ibid.