
Gender Assessment

FP158: Ecosystem-Based Adaptation and Mitigation in Botswana's Communal Rangelands

Botswana | CI | B.28/02

24 March 2021



**GREEN
CLIMATE
FUND**

Ecosystem-Based Adaptation and Mitigation in Botswana's Communal Rangelands

ANNEX 8: Gender Assessment Report and Gender Action Plan

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List of Acronyms

ASSAR	The Adaptation at Scale in Semi-Arid Regions
CEDA	Citizen Entrepreneurship Development Agency
CEDAW	Commission on the Elimination of Discrimination Against Women
COB	Community Based Organization
COP	Conference of Parties
FAO	Food and Agriculture Organization of the United Nations
FHHs	female headed households
GAP	Gender Action Plan
GFC	Green Climate Fund
HDR	Human Development Report
ISPAAD	Integrated Support Programme for Arable Agriculture Development
LIMID	Livestock Management and Infrastructure Development
MHHs	male headed households
MLGRD	Ministry of Local Government and Rural Development
MoA	Ministry of Agriculture
NAPA	National Adaptation Programmes of Action
NDB	National Development Bank
NPGAD	National Policy on Gender and Development
UNCCC	United Nations Climate Change Conference
VET	Village Extension Teams

1 EXECUTIVE SUMMARY

Botswana's agriculture sub sectors, rangeland and livestock are heavily dependent on rainfall and as a result highly vulnerable to climate variability and change. Climate model projections show increased temperature and more frequent climatic disasters in the future across Africa. Botswana's second national communication to UNFCCC estimated an increase of 2°C and 3–9% decline in rainfall by 2050 across the country. These changes are likely to exacerbate agricultural land degradation and reduce agricultural productivity. Botswana's rangeland-based livestock sector is characterized by high mortality and is particularly exposed to climatic shocks. Annual rangeland production is expected to decline and consequently its capacity to support the livestock industry will be reduced. This will exacerbate poverty already being experienced by livestock farmers in the country¹. The negative impacts of climate change on rangelands are experienced differently by women, men and the youth, particularly in already water-stressed areas in Botswana. The high dependence of rural communities on agriculture has left many women and men farmers exposed to loss of agriculture and rangeland-based livelihoods.

In pursuant of gender inclusion in climate adaptation, resilience and mitigation strategies several climate funds, including the GCF have since developed and implemented gender mainstreaming guidelines for country programmes to follow. Integration of gender in UNFCCC processes, including the recent Enhanced Lima Work Programme on Gender and its Gender Action Plan, requires that countries' National Adaptation Programmes of Action (NAPAs) and sustainable development programmes and policies be guided by the principle of gender equality. Until recently, Botswana was among countries that had not integrated gender in its NAPA but this has now been done through the country's 3rd National Communication as well as the preparation of the National Strategy on Climate Change. Issues highlighted in the 3rd National Communication includes: capacity building for local change experts — strengthening of the Department of Gender Affairs, grassroots women, parliamentarians and CSOs— — to enable them to participate fully in gender and climate change negotiations during the COPs and related UNFCCC processes. Furthermore, a national gender and climate change strategy and action plan, as guided by the UNFCCC Gender Action Plan under the Lima Work Programme on Gender will be developed and mainstreamed into national climate ², programmes and strategies^[OBJ].

In line with the Government plans, this gender assessment and Gender Action Plan (GAP) developed for Ecosystem and Livelihood Resilience in Botswana's Communal Rangelands" project has been reviewed by the Department of Gender Affairs. They have made inputs to align the GAP with national climate change priorities. This report presents the gender assessment study which was undertaken to enable preparation of a gender assessment report to support the proposal development for the larger project "Ecosystem and Livelihoods Resiliency: Climate Change Risk Reduction through Ecosystem-based Adaptation in Botswana's Communal Grazing Lands" to be submitted to GCF for financial support. The report is based on a desktop literature review, stakeholder consultations (planning workshops and focus group discussions), key informant interviews and survey interviews with heads of households (single, married, widowed, and separated) as well as married women in three project sites, namely Ngamiland and Kgalagadi Districts, and Bobirwa sub-District. The Department of Gender Affairs as well as

¹ Ecosystem and Livelihood Resilience in Botswana's Communal Rangelands: Climate Change Vulnerability Assessment And Adaptation Planning In Rangelands Across Botswana. C4ES, 2019

² Botswana's Third National Communication to the United Nations Framework Convention on Climate Change 2019

key policy makers working in gender and agriculture in central government were also consulted, in addition to local Chiefs, social workers, extension and veterinary officers in the project target districts.

Women and men, as well as young women and men aged 15–35 in the project sites, are being impacted differently by climate change, in part, because of gender roles. They have adapted in ways that are possible for each group depending on the resources they currently have access to. At the level of individuals, the larger project aims to create 6,000 jobs for unemployed women and men — including 500 male and female graduate monitors — to become Eco-rangers and Restoration Workers through the development of a formal qualification and training programme for livestock herding and rangeland restoration. Furthermore, poor and vulnerable farmers will be empowered to make informed decisions on climate-resilient livestock production systems and will have improved income from market access for their livestock. The project will partner with the Department of Gender Affairs to ensure that women and youth needs are deliberately addressed, and the composition of the training workshops, technical experts and national validation workshops has equitable participation of women and youth among other vulnerable groups³. In year 1 of the project, starting with a core group of 225 individuals, equitably representing women, men and indigenous peoples, the purpose and process for establishing a Stewardship Agreement will be co-developed based on regional and global best practices. Stewardship Agreements are a mechanism for rangeland governance. These activities will support women's empowerment aims and, in doing so, support the eradication of the widespread gender-based-violence (GBV) within the country. Further efforts to address GBV will include; i) partnering with initiatives that promote anti-GBV by engaging men in non-violent fathering and caregiving roles; ii) GBV monitoring as an element of the overall project monitoring process; and iii) sharing information about the Grievance Reporting Mechanism (GRM) via communication channels that are designed to reach women, such that the GRM captures and responds to reports of project-related GBV.

In order to ensure that men, women and the youth in the project sites will benefit equally from the project, a gender analysis was conducted to assess implications of changing climate, particularly with regard to frequent drought, on women and men's current roles in households, access to and control of resources as well as their ability to make decisions in the household and communities within the project sites. Key findings of the gender assessment are outlined below.

1.1 WOMEN

1. In Botswana, women are more likely than men to be unemployed, with a large portion of unemployed women being young and poor.
2. Women in the project districts are more vulnerable than men to climate change as a result of their gender roles which are highly focused on looking after children and other family members, while they depend on subsistence agriculture to meet the family's needs. Relevant differences were observed between women from poor households and women who were not as poor and headed their households, with the former showing more signs of desperation with regard to inability to afford school fees, to feed and clothe their children properly when they lose their livestock due to drought. Less poor women, although also participating in

³ Ecosystem and Livelihood Resilience In Botswana's Communal Rangelands: Climate Change Vulnerability Assessment And Adaptation Planning In Rangelands Across Botswana Concept Note submitted to GCF

Ipelegeng are able to participate in saving schemes and pay insurance subscriptions that are available in their villages, afford the minimum electricity connection, install stand pipes in their homes, etc. Relevant differences were also noted between young and older women, as well as between single/widowed/divorced women and married women, as well as those with children and without.

3. The vulnerabilities induced by climate change and the responsibilities regarding domestic care work — including looking after children — means that women, more than men, turn to Ipelegeng as their main source of income. The additional burden of providing food and other necessities for the family shows that women in the project sites are more severely affected by poverty than men. A study conducted by UNICEF in 2012 found that 80% of Ipelegeng households were headed by females.
4. Digging wells by hand, is an added physical burden on women. The water produced is for both small stock such as goats, as well as cattle and household consumption for those who live at the cattle post or nearer their ploughing fields.
5. Because women are more likely to be employed in Ipelegeng, and work from morning until noon or 1pm, they are also likely to be vulnerable to loss of livelihoods as they are unable to take better care of their livestock and crops while they are working at Ipelegeng. Women are more likely to be concerned about the nutritional needs of children, and therefore often have two jobs — Ipelegeng and in particular keeping goats.
6. Some women are said to turn to sex work to earn income in times of climate stress – since women need to support their families. The women are aware of the dangers of this trade, however, their desire to provide for the family outweighs the negative aspects of sex work.
7. Additional stressors for women can also be seen in increased workload for those who own goats as they have to collect additional water for the goats from public standpipes.
8. Almost two thirds of women have experienced GBV in their lifetimes, predominantly in the form of Intimate Partner Violence (IPV). An extreme, but relatively common, example of IPV is 'passion killings', in which a man kills his woman partner when she threatens to leave him.
9. Many women in rural areas do not own productive land and rely on ploughing fields (when the rains are good) to produce crops. Some women in the project districts have suggested that ploughing fields that are lying fallow could be leased to the proposed project for collective grazing zones as well as to grow fodder.
10. Women in general are responsible for grocery shopping and this is done with money they earn from Ipelegeng or other remittances they receive from relatives. In ideal situations, married women get regular additional support from their husbands and some women have become vulnerable as the husband's income from cattle herding starts to decline.
11. Women are generally responsible for goat care and production. The project will assist women in the districts to become part of the Stewardship Agreements as well as to benefit from potential livestock income generating activities.

1.2 MEN

1. As men in the project districts rely a great deal on cattle production as a means of generating income, they are exposed to loss of large numbers of cattle, particularly in the last three years due to reduced communal grazing land and insufficient water for the livestock.
2. Spending on supplementary feed and water for the cattle at the expense of the family can potentially lead to conflict in the home. It also leaves the wives with the responsibilities to generate income through Ipelegeng, for instance, to support the family.

3. Male farmers, who have primarily responsibility for cattle are greatly affected by degraded grazing land and some migrate their cattle to better pastures during drought. This often results in more land degradation and increased possibility of land conflict with communities.
4. The invasion of wildlife has also led to increased workload for some male farmers as they have to spend more time guarding crops and livestock, for example to chase elephants away. The ability to relocate livestock to better pastures demonstrates the mobility and security of men. Usually, women cannot relocate their goats, cattle nor their children.
5. Male farmers face reduced water supplies for their cattle and there have been reported instances of husbands giving their wife's water to livestock, which demonstrates the extent to which men will try to ensure that their cattle survive. The project will assist those who agree to participate in the communal grazing with a reliable water supply for their livestock. Most women and men farmers with livestock (both cattle and small stock⁴) said they would agree to collective grazing provided they have access to water for the livestock, i.e. both cattle and small stock (goats).
6. Compared to women, men tend to have more opportunities and enabling circumstances to shift into alternative income-generating activities, rather than having to rely on social protection or public employment schemes like Ipelegeng.
7. As men are traditionally the breadwinners in their families, the negative impacts of climate change could be affecting their mental health and leading to increased alcoholism, This can result in gender-based violence (GBV) as a result of conflict over money that women would have earned from Ipelegeng.
8. Men rely to a large extent on cattle production as a means of generating income. Therefore, they are exposed to loss of large numbers of cattle, particularly in the last three years due to reduced communal grazing land and lack of water for the livestock. Men's incomes from cattle herding have been impacted, as much of the income has to be reinvested into the cattle production in the form of supplementary feed.

Livestock Ownership

In 2017 women in Central Bobonong, of which Bobirwa is a sub-district, owned 35% of the cattle and men 65%, while women owned 25% and men 75% of cattle in Ngamiland. In the Kgalagadi district, women owned 19% of cattle while men owned 81%. Regarding goats, women owned 40% of the goats and men 60% in Central Bobobonong, while women own 48% of all goats, and men 52% in Ngamiland and in the Kgalagadi district women own 65% of goats.

Climate Vulnerability

Data and information collected during the gender assessment shows that both men and women are struggling to adapt to the increasingly frequent droughts. They have lost some or all of their livestock (cattle and goats). Wildlife and human conflict has also increased. For example, in the past five years elephants have invaded communities in Bobirwa (Bobirwa sub-District) and Ngamiland as they look for water — eating and destroying crops and sometimes causing injuries and even death during the invasion. This has left many members of communities in the project sites concerned about their safety, feeling vulnerable, and in some communities herding of cattle

⁴ Examples of small stock are goats and sheep.

has been stopped completely because of the human, wildlife and livestock conflict. The already inadequate grazing land is also affected by the presence of wildlife.

In addition, the increase in temperatures and heat waves have resulted in the presence of more mosquitos and an increase in malaria incidences, even outside of malaria season. It is fair to say that the burden of increased malaria incidences falls on women because they are generally the main carers for the sick. The high temperatures have also led to other health impacts, such as skin rash, and death from heat stroke.

Conclusion

This Gender Assessment and subsequent Gender Action Plan (GAP) follow the Guidelines outlined in the Green Climate Fund (GFC) *Mainstreaming Gender in Green Climate Fund Projects* and the *Updated Gender Policy and Action Plan 2018–2020*, as well as the *Gender Policy* in the *Conservation International GCF/GEF Agency Environmental and Social Management Framework (ESMF)*. Under this project, measures have been put in place (see the GAP and project Logframe) to ensure that women and men benefit equally and that the burden on women in particular — as a result of their gender roles — is not increased, but reduced by the project activities.

The proposed project provides a lifeline for many of the poor women in the project sites who will have the opportunity to be employed as Eco-rangers and Restoration Workers. In addition, women will be provided with opportunities to diversify from Ipelegeng by starting income-generating activities from the main grazing/herding programme. Improved grazing resources will lead to greater food security, sustainable fuelwood and water catchment areas which can reduce the demand on domestic water that is also being used for livestock. The improved livestock quality will provide food supplies for households as well as draught power and potential for household savings. The project will also help male and female farmers who are experiencing reduced grazing land through grazing agreements and better livestock management, such as destocking to ensure that the available land's carrying capacity is able to support their livestock.

2 INTRODUCTION

Botswana's rangeland and livestock sub-sectors are heavily dependent on rainfall and as a result highly vulnerable to climate variability and change. Projections by the United Nations scientific body working on climate change issues, show increased temperature and more frequent climatic disasters in the future ^[5] across Africa. Botswana's second national communication to UNFCCC estimated an increase of 2°C and a 3–9% decline in rainfall by 2050 across the country. These changes are likely to exacerbate agricultural land degradation and reduce agricultural productivity. Botswana's rangeland-based livestock sector is characterized by high mortality and is particularly exposed to climatic shocks. The rangeland annual production is expected to decline, and as a result its capacity to support the livestock industry will be reduced. This will exacerbate the poverty already being experienced by male and female livestock farmers in the country. Rangelands and livestock industry contribute substantially to the wellbeing of Botswana's rural communities, but their sustainability is being threatened by climate change. Rangeland ecological services include provision of grazing resources, food provision, energy source (fuelwood ^[6]). In addition, livestock provides draught power and increased supply of domestic savings. However, under climate change these ecosystems and livelihoods are under threat, with the impacts of increased temperatures and rainfall variability having inter- and intra-gendered impacts, and with differential adaptation strategies to cope with these shocks and disruptions.

Gender considerations were made by the United Nations Framework Convention on Climate Change, (UNFCCC) at: i) Conference of Parties (COP) 20 — which adopted a two-year 'Lima Work Programme on Gender' to provide knowledge and capacity building on gender-responsive climate policy; ii) adoption of the Paris Agreement during COP21 — which included gender references in adaptation and capacity building measures; and iii) COP23 — during which a two-year gender action plan (GAP) was adopted. In pursuit of gender inclusion in climate adaptation, resilience and mitigation strategies, several climate funds, including the GCF have since developed and implemented gender mainstreaming guidelines for country programmes to follow. Integration of gender in UNCCC processes require that countries' National Adaptation Programmes of Action (NAPAs) also be guided by the principle of gender equality. Until recently, Botswana was among the countries that had not integrated gender into its NAPA, but this has now been achieved. This was demonstrated in the recent development of the National Climate Change Strategy. The Department of Gender Affairs has contributed to the project by providing staff to ensure gender is integrated in this strategy.

As part of its NAPA, the country has since developed a Climate Change Adaptation Strategy that outlines gender as one of the six cross cutting issues. The Strategy emphasizes that "women represent a slightly more vulnerable segment of the population... and a perspective that accords special protection to women, and also creates opportunities for women to be drivers of climate change response in Botswana" will be adopted. This is being achieved through mainstreaming of gender into development planning to ensure that climate change response measures are gender-sensitive — particularly in recognition of the vulnerability of women, children and people living with disability to climate change. Relevant to the proposed *Ecosystems and Rangelands Project* are several interventions and policy goals outlined in the Climate Change Strategy, to be

⁵ Ecosystem and Livelihood Resilience In Botswana's Communal Rangelands: Climate Change Vulnerability Assessment And Adaptation Planning In Rangelands Across Botswana. C4ES, 2019

implemented starting in 2020, namely: i) promotion of equitable participation of women farmers and female-headed households in Climate Smart Agriculture (CSA) programmes; ii) empowering communities — especially women and youth — to actively participate in the implementation of climate change response measures in both rural and urban areas; iii) including women's voices in natural resources management through their equitable participation in community-based natural resource management (CBNRM) processes; and iv) ensuring that gendered differences of climate change are mainstreamed into climate change education. Integrating gender and climate change in academic curriculum at all levels, ensuring the full participation of women and female-headed households in disaster management public gatherings, to address both the higher vulnerability of women and children, and to plan for the higher post-disaster burden placed on women due to their dual roles as producers and carers. Strategies that are targeted at increasing resilience of most vulnerable groups such as women, children and people living with disability to climate change impacts through provision of means of implementation such as technologies, finance and capacity building.⁶

The negative impact of climate change on the rangelands is experienced differently by women, men, elderly people, and the youth, particularly in already water-stressed areas . The high dependence of rural communities on agriculture has resulted in increased exposure of many male and female farmers to loss of agriculture and rangelands-based livelihoods. For this reason, it is important to integrate gender in sustainable development programmes — including those that address climate change adaptation. The inequitable distribution of rights, resources and power constrain many people's ability to take action on climate change, with different constraints and impacts on women and men⁷. Adaptation actions reduce vulnerability and increase resilience to current and projected climate risks at the national, regional and community levels.

This study was undertaken to enable preparation of a gender assessment report to support the proposal development for the larger project “Ecosystem and Livelihoods Resiliency: Climate Change Risk Reduction through Ecosystem-based Adaptation in Botswana's Communal Grazing Lands” to be submitted to GCF for financial support. The report is based on a desktop literature review and stakeholder consultations — including workshops, key informant interviews, and questionnaire interviews with male and female heads of households and married women who did not identify themselves as heads of their households. The Department of Gender Affairs, as well as key policy makers working in gender and agriculture in central government, were also consulted.

The selected project areas fall into three administrative districts, including Ngamiland, Kgalagadi, and Central, as well as five sub-districts, including Ngamiland East; Ngamiland West; Kgalagadi North; Kgalagadi South; and Bobirwa (see Figure 1 below). The project areas were selected in 2016 by national stakeholders based on the proportion of land in communal land tenure and highest proportion of rural poor dealing with severe impacts of drought. The climate vulnerability across the project areas and target communities within an area varies based on exposure, adaptive capacity, and rurality (a measure of access to key services), increased climate impacts of length of dry season and increasing temperature are greatest in Ngamiland where the largest target population is located and therefore is a climate risk reduction priority for the project⁸.

⁶ FINAL STRATEGY. A National Climate Change Strategy for Botswana, December 2019

⁷ European Capacity Building Initiative, 2017, “Pocket Guide to Gender Equality”, Updated January 2018

⁸ Ecosystem and Livelihood Resilience In Botswana's Communal Rangelands Project Funding Proposal

Figure 1. Project districts

To gather information to support the larger project, the three districts in Botswana namely Ngamiland, Kgalagadi and Bobirwa pre-selected during development of the project Concept Note in 2016, were visited to conduct stakeholder consultations.

2.1 METHODOLOGY

Several methodologies were used for this study. These were:

- A desk review of policies namely;
 - i. The National Gender and Development Policy 2015 and a related National Survey to Establish a Baseline on Gender in Botswana report that was produced prior to the policy.
 - ii. Revised Botswana Land Policy and Tribal Land Act, 2018.
 - iii. Reports of Government poverty reduction and agriculture programmes such as the Final Report for the Review of the Ipelegeng Programme, the Guidelines for Livestock Management and Infrastructure Development (LIMID) Programme Phase II Evaluation of the Livestock Management and Infrastructure Development Support Scheme in Seven Districts of Botswana report, among others. LIMID Phase I comprised seven packages with the three packages focussed on resource-poor households (i.e. small stock, guinea fowl and Tswana chickens). LIMID II aims to promote food security through improved productivity of cattle, small stock and Tswana chickens, among others¹⁰.
- Key informant interviews, for example, policymakers, local authority representatives and agriculture officers. See list of key informant interviews in Annexes.
- One stakeholder engagement plan consultation workshop in each project target district, followed by *kgotla*¹¹ meetings in Bobirwa (Selibe Phikwe and Bobonong), Ngamiland (Maun and Gumare) and Kgalagadi (Kang and Hukuntsi). The workshops were hosted by the Ministry of Agriculture and attended by local Government representatives from district councils and chiefs, VDCs and women and men farmers.
- Focus group discussions (FGDs) on livelihoods, access to land, water and livestock that followed immediately after *kgotla* meetings in Bobirwa (Gobojango, Tshokwe), Ngamiland (Sehithwa, Etsha 13 and associated locality) and Kgalagadi (Zutshwa) facilitated by the gender expert. Members of the communities were first briefed on the proposed Ecosystem and Livelihood Resilience in Botswana's Communal Rangelands project during a *kgotla* meeting, a requirement for all new or proposed development projects. The FGDs mainly targeted women because men were quite vocal during the *kgotla* meetings. The women were more vocal during FDGs, and elderly women would interject often, requesting the younger women to let them have their say. During the *kgotla* meetings, men asked questions and presented their challenges and needs in relation to climate change and collective grazing proposed by the larger project, while women, although they out-numbered the men in most cases at the *kgotla* meetings did not say much, i.e. not many women spoke in this setting.
- Interviews with women and men household heads using questionnaires developed through the Survey Monkey web app in the three districts in the villages of Sehithwa, and two settlements Kgabaganyane and Spanplak (Ngamiland), Lepokole, Tshokwe, Gobojango (Bobirwa) and Hunhukwe, Tshane and Zutshwa. Thirty-two FHHs, forty-seven MHHs and ten

¹⁰ Guidelines for Livestock Management and Infrastructure Development Programme Phase II

¹¹ A *kgotla* is a designated tribal authority meeting place where members of the community congregate for various meetings and discussions and to make decisions pertaining to developments in their village.

married women living in MHHs were interviewed, bring the total of those interviewed to eighty-six. Though the number of married women interviewed was very small, all but one said they were not heads of their households, which supports the notion that married women have been socialised to view and accept the husband as the head. Of these, 27 were single female headed, 26 were single male headed, 16 married males and 10 married women. The rest were either widowed, separated or divorced. The women and men were invited for the interviews immediately after the kgotla meetings. This was not a technical survey, but to set the scene for a baseline survey to be conducted at the start of implementation of the larger project at the village level.

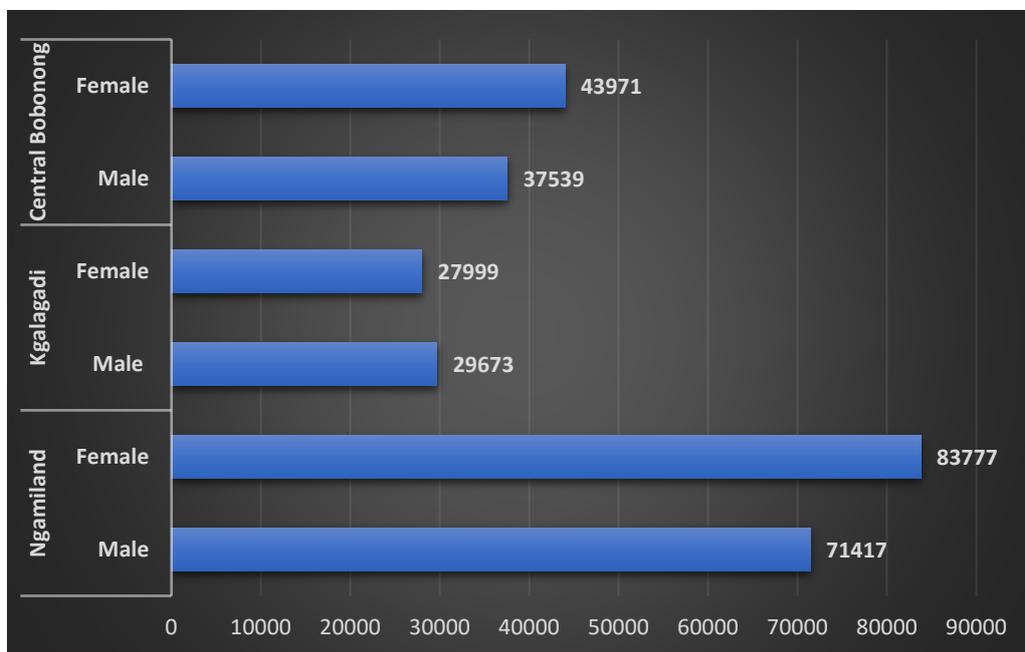
The gender assessment and subsequent gender action plan follow the Guidelines outlined in the Green Climate Fund (GFC) *Mainstreaming Gender in Green Climate Fund Projects* and the *Updated Gender Policy and Action Plan 2018–2020*, as well as the Conservation International *Gender Policy* in their latest (November 2020) *Environmental and Social Management Framework*. The purpose of the assessment is to ensure that the proposed project is 'gender responsive as opposed to gender sensitive' as emphasised by the *Updated Gender Policy and Action Plan 2018–2020*. According to the Policy, gender-responsive means that instead of only identifying gender issues or ensuring a 'do no harm' approach, a process will substantially help to overcome historical gender biases. Measures have been put in place by this project (see the Gender Action Plan (GAP) and project Logical Framework) to ensure that both women and men benefit equally and that the burden on women in particular, as a result of their gender roles, is not increased but reduced by the project activities.

3 THE SITUATION OF WOMEN AND MEN IN BOTSWANA AND IN THE THREE PROJECT DISTRICTS

3.1 POPULATION, HEALTH AND EDUCATION

Statistics Botswana's 2016 population projections stood at 2,219,736, with a 1% decrease (from 54.3 to 53.4%) in the proportion of male headed households at the national level¹². Average household size for both sexes of household heads was 3.5 people. Bobirwa¹³, Ngamiland West both had average sizes of 4.0 people per household. Figure 2 below shows the gender disaggregated populations in the three project districts. It also shows that there are more females than males in Bobirwa and Ngamiland compared with the Kgalagadi.

Figure 2. Project Sites Populations by District and Gender.



Source: Statistics Botswana

This figure shows the same numbers of women and men in Ngamiland and Bobirwa at 54% for women and 46% for men. The projections also show that women outnumber men in these districts by almost 10%. However, there are more men than women in the Kgalagadi districts at 51% and 49%, respectively.

In Botswana infant mortality rate declined from 48 to 38 deaths per 1,000 live births, between 2006 and 2017. Furthermore, the under-five mortality rate declined from 76 to 56 deaths per 1,000 live births over the same period¹⁴. The maternal mortality rate per 100,000 live births was

¹² Statistics Botswana, "Botswana Demographic Survey Report", December 2018, <http://www.statsbots.org/bw/>

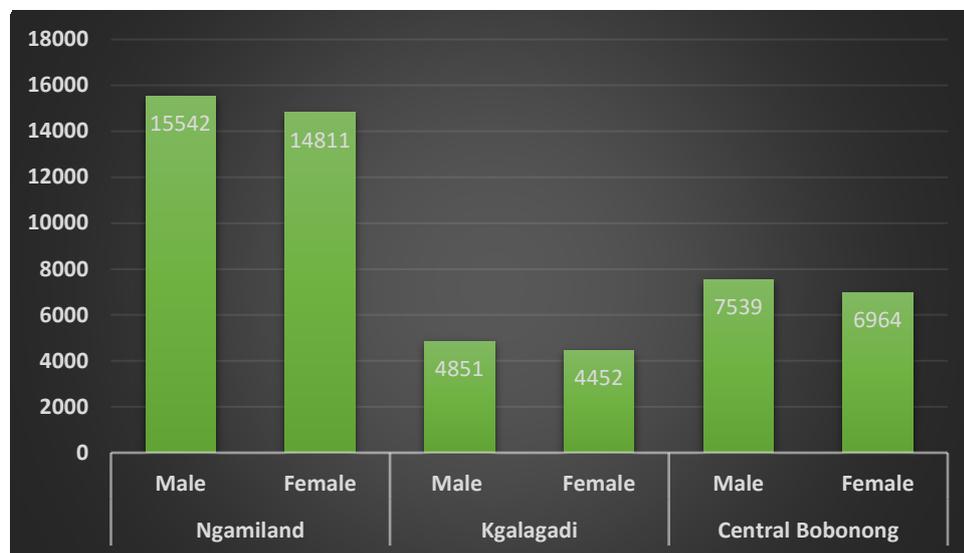
¹³ Bobirwa sub-District is part of Bobirwa District

¹⁴ Statistics Botswana, "Botswana Demographic Survey Report", December 2018, <http://www.statsbots.org/bw/>

129 in 2015 according to the HDR 2017. Life expectancy at birth in 2001, was estimated at 55.6 years. A decade later, i.e. at the time of the last census in 2011, the life expectancy had increased to 68 years.¹⁵ According to the UN Human Development Report 2017, life expectancy at birth for Botswana was 70 years for females and 65 years for males. The increase in life expectancy in Botswana can be attributed to the improved economic status, improved access to health care and a successful reduction in HIV/AIDS related deaths.¹⁶

Overall literacy rate in Botswana for ages 15–65 was estimated at 89%, with the female literacy rate at 90% while the male literacy rate was 87%¹⁷. Figure 3 below shows primary school enrolment for males and females in 2013 in the project districts.

Figure 3. Primary School Enrolment by Project District and Gender



Source: Statistics Botswana Education Report 2013¹⁸

The Botswana Multi-Topic Household Survey Report 2015/16 notes some correlation between school attendance and poverty rate. For instance, districts such as Ngamiland West with a 42% literacy rate, is also the most affected by poverty. Many of the women and men surveyed during this gender assessment indicated that they had attained only primary school education. Unlike the high national female literacy levels above, there are likely to be similar literacy rates from the women and men surveyed in the three districts. Those in the age range 54–65 years (who were not civil service pensioners) had mainly primary or no education at all. This is to be expected as those with better education are likely to migrate to urban areas to seek employment. The Demographic Survey conducted in 2017 shows that the population aged 15–39 tend to migrate more than other age groups. Children of school going ages and the elderly are usually less likely

¹⁵ Republic of Botswana Ministry of Finance, “National Development Plan 11 April 2017 – March 2023”, September 2016

¹⁶ Statistics Botswana, “Botswana Demographic Survey Report”, December 2018, [http:// www.statsbots.org.bw/](http://www.statsbots.org.bw/).

¹⁷ Statistics Botswana, Botswana Multi-Topic Household Survey Report 2015/16, December 2018, [http:// www.statsbots.org.bw/](http://www.statsbots.org.bw/)

¹⁸ The national education data production is lagging behind and newer data is outstanding.

to migrate¹⁹. But, there were young women and very few young men with Junior or O'Level certificates who have remained behind and who also work in Ipelegeng.

Consultations revealed that young people are becoming pregnant and having children younger than previously, with young men often abandoning their children and refusing (or being unable) to pay maintenance. Often, these children are taken or left with older relatives whilst their young parents migrate to find work. This creates intergenerational dependencies, that are increasingly unsustainable as climate change impacts resources, livelihoods

3.2 GENDER EQUALITY

According to the Human Development Report (HDR) 2017, Botswana is ranked number 98 out of 189 countries within the Gender Inequality Index. In 2017, the country had only 9.5% share of seats held by women in Parliament²⁰. The status quo has remained as much fewer women than men won parliamentary seats during the October 2019 elections. This translates into 6 female and 23 male members of the Cabinet²¹. The number can be increased through specially elected members of parliament i.e. those that did not stand for elections. This is a stark inequality between women and men, and likely leads to inadequate representation of women's issues within the legislature. However, the newly appointed Assistant Minister of Agricultural Development and Food Security, under which the proposed GFC Botswana project falls, and the Minister of Environment and Natural Resources are both female.

The Government of Botswana acknowledges unequal participation, benefit and contribution between women and men in many facets of development and economy and has put in place several measures to empower women. In 2015, the Botswana Government endorsed the National Policy on Gender and Development (NPGAD). The policy mandates all line Ministries to mainstream gender in sector policies and programmes. NPGAD, while advocating for gender equality and equity in Botswana, also calls for an enabling environment, adoption of affirmative measures and capacity building on the integration of gender in all sectors of sustainable development.

NPGAD calls for the elimination of discrimination in order to achieve gender equality and equity and to ensure that both women and men benefit equally from development programmes implemented by the government. Programmes are required to undertake gender analysis in order to address existing gender issues and concerns, set measurable targets, timelines and indicators, and with the required budgets as well as monitoring and evaluation²². NPGAD has a fully endorsed institutional arrangement which includes district gender committees, as well as civil society, for the policy coordination and management of gender responsive programmes. The Department of Gender Affairs confirms that many of the plans in the operational strategy developed for the policy have not been achieved. However, it is important to note that, through this Department and the Gender Policy, gender has been integrated in national climate change

¹⁹ Statistics Botswana, "Botswana Demographic Survey Report", December 2018, <http://www.statsbots.org.bw/>

²⁰ UNDP, "Human Development Report", http://hdr.undp.org/sites/default/files/2018_human_development_statistical_update.pdf

²¹ Government of Botswana, <http://www.dailynews.gov.bw/news-details.php?nid=52733>, November 2019

²² Republic of Botswana, National Policy on Gender and Development 2015, Department of Gender Affairs

policies, agriculture strategies, and the National Policy on Land (which highlights the need to protect widows land rights).

Gender analysis and gender equality centred planning are being promoted to inform gender responsive and rights-based policies²³ as shown by reporting on gender equality achievements and progress in the National Development Plan Review, and at district planning levels. During the scoping mission, two gender officers were also observed presenting a Department of Gender Affairs progress report at a scheduled Ngamiland District meeting on government poverty eradication programmes. A gender officer from the Department of Gender Affairs, Bobirwa-sub district, participated in the scoping mission workshop and helped facilitate some of the group discussions. Other good practices regarding implementation of the NPGAD can be found through the Ministry of Agriculture and Food Security which has developed a draft gender strategy with the assistance of the Department of Gender Affairs. Additionally, the Ministry of Land Management, Water and Sanitation Services has mainstreamed equity, affirmative actions for widows, youth and other vulnerable groups such as remote area dwellers (for example, Basarwa), the disabled and needy as well as protection of widows and orphans' land rights.

Community Based Natural Resource Management (CBNRM) is another Government programme that offers limited employment for women and men in smaller rural villages. CBNRM is implemented through community-based organisations (CBOs) and most high-revenue CBOs are found in Ngamiland and Chobe. They are located close to protected areas with good opportunities for ecotourism²⁴. A CBNRM project (caves) in Lepokole, Bobirwa sub District, is managed by the VDC and Botswana Tourism Organisation. The Lepokole Chief confirmed that the caves are visited by tourists (albeit in very small numbers), and offer employment to about three women and one man from the village.

3.2.1 Legal status of Women

Botswana's constitution states that "every person in Botswana is entitled to the fundamental rights and freedoms of the individual, that is to say, the right, whatever his or her race, place of origin, political opinions, colour, creed or sex"²⁵. This means that all peoples, female, male, and others, are considered equal before the law. Botswana has a dual legal system which are common and customary laws. Customary law, which applies a lot in the rural areas, is enforced by tribal structures and customary courts.

Marriage in Botswana can be governed by both customary law (negotiations, agreements and witnessing of the marriage between the spouses by their families) and common law through the Marriage Act, The Registrar of Marriage registers the marriage and issues a certificate if satisfied that the spouses concluded a valid Customary, or other religious marriage, and any other particulars prescribed. Chiefs and Headmen of record shall be *ex officio* district registrars of customary marriages in their respective areas of jurisdiction²⁶. Common law means any law, whether written or unwritten, in force in Botswana, other than customary law. Customary law means, in relation to any particular tribe or tribal community, the customary law of that tribe or community so far as it is not incompatible with the provisions of any written law or contrary to

²³ Republic of Botswana Ministry of Finance, "National Development Plan 11 April 2017 – March 2023", Sept 2016

²⁴ USAID and Centre for Applied Research, "2016 Review of Community Based Natural Resources Management in Botswana" Report Prepared for SAREP.

²⁵ Government of Botswana, "Constitution of Botswana"

²⁶ Marriage Act

morality, humanity or natural justice. In cases and proceedings arising from inheritance, the appropriate customary law shall, subject to some provisions, be the customary law applying to the deceased²⁷.

Both customary and common laws that govern can be interpreted differently by different chiefs and also by those who are married. Discussions with two chiefs in Bobirwa and Kgalagadi showed the customary law relating to marriage is interpreted differently by different chiefs. One chief explained that for instance, the negotiations between the young woman and young man's parents fall within the Customary Law while moving on to marry and sign the register at the District Commissioner's office (Registrar) is part of the Common Law and this marriage is governed by the Marriage Act. Common Law takes precedence over Customary Law in the case that the two systems are used. If a couple married using the two systems, and wants to divorce, the Customary court is requested by the High Court to implement the divorce settlement. Customary court can therefore assist in dividing the property.

The Common Law rule in terms of which a husband acquires the marital power over the person and property of his wife, and the marital power which a husband had over the person and property of his wife' were both abolished in 2004. The effect of the abolition of marital power was to remove the restrictions which the marital power places on the legal capacity of a wife and abolish the common law position of the husband as head of the family. Acts requiring consent of spouse that are relevant to the proposed project are "a spouse married in community of property shall not without the written consent of the other spouse ... alienate, pledge or hypothecate any livestock, borehole..."²⁸. The Abolition of Marital Power Act (2004) specifies that women can enjoy the same rights to be head of the household and make major familial or economic decisions. However, this Act does not apply to customary or religious marriages, women married under customary law are considered legal minors, and require the permission of their spouse for household decisions, and access to finance²⁹.

The Miscellaneous Amendments Act of 2008 ensured that all relevant laws were aligned to the Commission on the Elimination of Discrimination Against Women (CEDAW) principles, following the adoption of the Abolition of Marital Power Act (2004). The Affiliation and Proceedings Act was adopted to enable both parents to provide maintenance of their children aligned to their economic income, in order to ease the burden of care on the parent with custody of the child. A Gender and Development Strategy was developed in 2012 to promote equitable distribution of services, protection, and respect of gender-related human rights. Furthermore, Botswana has ratified the SADC Protocol on Gender and Development.³⁰

Notwithstanding the amendments and gender positive legislation above, the Administration of Estate Act — which allows the customary laws to govern inheritance of the estate — has been shown to favour men at the expense of women. This Act allows the customary laws of a tribe to govern inheritance of an estate. For instance, in the Ngamiland district, it is the paternal uncles within the Tawana and Hambukushu communities that decide how the estate is divided if the husband dies and leaves behind a wife. If the wife dies and the husband remains alive, the estate is not shared because it is assumed that the head of the family is alive and will decide on how

²⁷ Customary Law. Act 51, 1969, <http://extwprlegs1.fao.org/docs/pdf/bot91329.pdf>

²⁸ Abolition of Marital Power Act, 2004. <https://botswanalaws.com/alphabetical-list-of-statutes/abolition-of-marital-power>

²⁹ OECD Development Centre, "Social Institutions and Gender Index", Botswana 2019, www.genderindex.org

³⁰ Prof. Gobopamang Letamo, PhD, Gender Analysis Study on the Ngamiland Sustainable Land Management Project.

the inheritance will be shared³¹. The national policy on land notes that although land policies and laws do not undermine widows' and orphans' rights, they can sometimes be dispossessed of land belonging to their deceased husbands or parents, by the late husband's relatives and guardians. This happens as they may not have access to administrative and legal channels to protect their land rights³². The Policy goes on to encourage local authorities and NGOs to speed up the education of women and orphans on their land rights. Additionally, the Land Policy proposes to address practices that are unfavourable to these two groups.

The Abolition of Marital Power Act (2004) provides women with the same right as men to administer the joint estate when married in community of property. The Act repealed common law practices of patriarchal marital power, and gave men and women equal rights within marriage and guardianship over their children. The default marriage regime is marriage out of community of property. However, prior to marriage registration spouses are able to indicate that they wish to marry in community of property. Constitutional clause on non-discrimination does not apply to the devolution of property on death, which puts women at a disadvantage upon the death of their spouses³³. Most of the respondents (80%) of the household interviews said they were head of the household, while 20% were not. Heads of the household are either married men, or single women and men. Most of the women surveyed who are married said their husbands were the head of the household. Figure 4 below shows that many of the gender assessment survey respondents were single, and many of these were women — a good indication, perhaps, of the number of single headed households whom the larger project is likely to benefit. The consultations found that this group (single or widowed household heads/parents) tend to, by necessity, be more autonomous and independent, but lack the customary social protections of a husband or male partner (and their accompanying livelihoods).

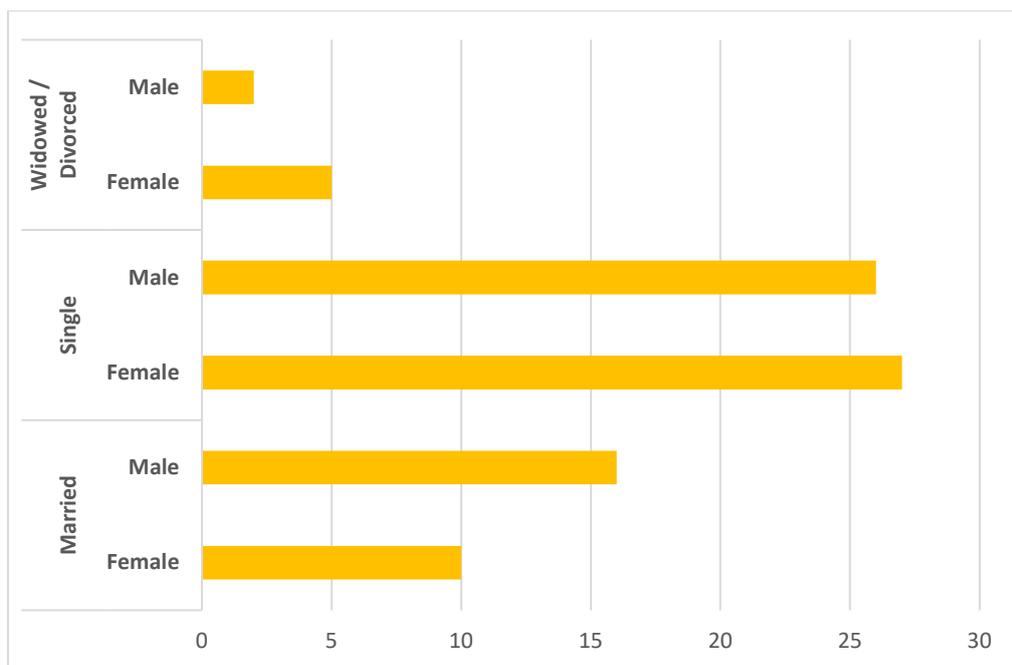
Examples of enforced marital power that were discussed in consultations include women having to request permission from their husbands to stop wearing a traditional dress that is bulky and switch to a more modern lighter dress, and it is up to the man to give that permission. In other areas the women have accepted that men will never do housework, and they (the women and their daughters) have to do all the work. Other marital power dynamics are discussed below, in the context of adaptation to climate change.

Figure 4. Marital Status of Survey Respondents.

³¹ Ibid Prof. Letamo

³² Republic of Botswana, "Revised Botswana Land Policy", Government Paper No. 1 of 2019.

³³ OECD, "Social Institutions and Gender Index", 2019, <http://www.genderindex.org>



Source: Gender Assessment

One of the chiefs interviewed views Customary Law in marriage as complex — if a husband buys the wife a car and the car is registered in her name, it is hers and does not fall under shared property. The same applies for cattle that the husband gifts and brands in her name. These cattle would not become part of the property to be divided between the two in the event of a divorce. This means the two property ownership systems exist at the same time, in a customary marriage. Good interpretation of marriage laws, particularly by chiefs is seen as a way through which women’s property rights can be protected, in the event of divorce or death of the husband. It must be noted that the question of property (home) ownership appeared sensitive to the women especially when asked if their names were also on the title deed together with their husband’s names.

As the project will be implemented in rural areas where older women are likely to be married under the customary marriage system, this means that women who are not married and who own livestock are likely to have better control and decision-making powers compared to those that are married under the customary marriage. This is an indication that the proposed project should reach both married and unmarried women, and that different strategies must be used to ensure that both groups benefit — particularly in relation to decision making over the cattle that will be integrated in the grazing agreements.

3.3 DIVISION OF LABOUR

Although the Abolition of the Marital Power Act (2004) repealed common law practices of patriarchal marital power — and gave men and women equal rights within marriage and guardianship over their children³⁴ — this has not translated into sharing of responsibilities at the household level, as women continue to take the lead in caring for children, elderly and the home. It must be noted however, that the younger generation of young men are regarded to have

³⁴ OECD, ‘Social Institutions and Gender Index’, 2019, <http://www.genderindex.org>

somewhat transcended this gender stereotype as they assist with household chores previously known to be the role of women and girls.

Division of labour in households is skewed towards women. Additionally, customary law applied in marriages means that many of the intended project women beneficiaries in rural areas are subordinate to men, and therefore have to do most of the housework. Discussions with women and men in the project areas indicate that both women and men get up around the same time. It is the amount of work that they do during the day and evening that differs a great deal depending on the area, e.g. dealing with livestock as well as wildlife that is invading communities in Bobirwa (Bobirwa sub-District) and Ngamiland for the men. Women are generally responsible for taking care of the family, which includes preparing the children for school while the men get ready to travel to the cattle post and stay there during the day to take care of the livestock. Daily/weekly chores for the women include water and fuelwood collection. Some women are employed in Ipelegeng and have to be at work from 6am to 1pm. Women that are not married or do not have male partners, often travel to the cattle-post after Ipelegeng to water their livestock, and later kraal.

There are distinct differences in terms of gender roles between Baherero (Ngamiland) and other tribes in project sites. Baherero women appear to have more work to do, particularly with regard to added gender roles which include milking cattle and processing milk and preparing wood in the evening. Additional milking can also be done in the evenings and girls are taught as early as 9 years old to perform this task. The husband's duty in this case is to let out the cattle and let them back in as herding is no longer done. The daily clock below, as well as discussions with women and men in the project districts show that men have leisure times particularly in the evenings, while women perform a greater proportion of unpaid domestic work in the afternoons and evenings.

Figure 5. Averaged Daily Clock for all Districts

Time	Women	Men
00:00	Sleep	Sleep
01:00		
02:00		
03:00	Wake up, bathes children, sometimes go and fetch water from the borehole if taps are dry.	Wakes up, prepare fire to warm water for children, make breakfast
04:00		
05:00		
06:00	Feed children and have them walk to school, travel to Ipelegeng site	Bathe, travel to cattlepost (walk, bicycle, donkey cart), go to kraal, collect grass for feeding
07:00	Go to work in Ipelegeng or cattlepost	Prepare ploughing fields - repair fences destroyed by elephants. Move, chase livestock from elephant /
08:00		
09:00		

10:00		predator areas. Herd fulltime during ploughing time to prevent livestock from eating crops.
11:00		Repair kraal or residence, collect / dig for water and look for lost livestock. Wait for cattle to come to the kraal, if not go home.
12:00		
13:00	Cook and eat lunch	Those that have migrated near border during drought herd to reduce theft. Those back at the village help with chores, collect fuelwood for weddings and funerals.
14:00	Go to cattle post after Ipelegeng to water and kraal livestock. Bring back fuelwood on some days.	Some do piece work such as brick laying, collect grass and acacia pods for animal feed. At home, cook for self if wife not around.
15:00		
16:00		
17:00		
18:00		Return to kraal, return to village, check and repan the goats
19:00		Those with children help supervise homework
20:00	Make dinner and bathe children	Watch TV / listen to news, sports, or go and “rest with wife” if there is no TV
21:00	Sleep	
22:00		Sleep
23:00		

Source: Developed by the author

Although the marital power abolition was a historic moment, as well as a welcome development by the women of Botswana, it remains an ineffectively enforced law in relation to division of labour in households. There is no legal or social reason that compels men to assist their wives or partners with household chores, and no incentives for the men to perform additional child rearing duties, especially in rural areas. Notwithstanding, a good example can be found in Gobojango where men are said to contribute in their households by, for example, preparing ploughing fields, repairing fences damaged by elephants, herding to keep cattle away from elephants and predators, collecting water and grass for livestock, and herding to keep cattle away from crops during the growing season. Some men also help unblock the hand dug wells that elephants sometimes fill with soil as they search for water. All these chores help reduce the burden on wives or partners, as well as protect the family’s livelihoods, i.e. cattle and crops. Men in areas where there are elephants or predators have more work in-terms of securing and guarding livestock and crops, which is sometimes done at night.

During the gender assessment stakeholder engagement, it was observed that there were mostly women in the project communities, particularly at the tribal meeting place, the kgotla. Men are said to normally not attend kgotla meetings in large numbers. Some chiefs from the project districts stated that the reason many men do not attend kgotla is that they are out drinking and when asked they say they are busy doing men’s work. Some abuse alcohol and have lost sense of responsibility and are said to be raising their male children in this manner.

The project will contribute to equal division of labour in households in the projects districts where women have added responsibilities. Examples include relieving the burden through day care for small children and provision of water for livestock, especially goats which many women own and have to collect additional water for. The project will also assist many young mothers who are interested in joining the Ecorangers training programme. Some say they are single mothers with

no relatives to assist with taking care of their small children and would need assistance to travel to and stay in the capital city with their small children to attend the Ecoranger courses. Young men whose sole responsibility is to look after the family livestock, or those that are currently employed at the cattle posts, will also be supported to attend the Ecorangers courses while the livestock they look after is being taken care of.

3.4 ACCESS AND CONTROL OVER ECONOMIC, FINANCIAL, PHYSICAL, NATURAL AND OTHER ASSETS

3.4.1 Poverty and Employment

The urban villages recorded a decrease in poverty incidence between the two periods from 19.9 to 13.4%, while in rural areas the poverty incidence marginally decreased from 24.3 to 24.2% between 2010 and 2016. During this period the proportion of people living below the poverty datum line dropped from 19 to 16%. Kgalagadi South had the highest poverty levels at almost 40%. Statistics also show that poverty in Botswana is most prevalent among FHHs compared to their male counterparts with the proportion of households in poverty at 55 and 45%, respectively³⁵. Poverty in FHHs is compounded by the low level of education, increase in division of labour with regard to taking care of children, taking care of the children's grandparents, and sometimes grandchildren, and husbands for those who are married. Poverty is also increased by loss of livelihoods in the form of crops and livestock.

In Botswana, women are more likely than men to be unemployed, with a large portion of unemployed women being young and poor. In 2016, the national unemployment rate was estimated at almost 18%. Unemployment rate for females was 19% compared with 16% for males. Of the total employed, 5% employed were from poor households and of those from poor households employed, 52% were females and 48% were males. Youth unemployment stands at 25% and out of the estimated total unemployed youth, 15% were from poor households. Males constituted 43% of the poor youth while 57% were females. Predominately, the unemployed poor youth were in rural areas (51%)³⁶.

A total estimated number of persons out of labour force population during the period 2015/16 was 36% males and 64% females. For both sexes, participation rate in economic activity was high for young adults. Participation rates for females were higher than their male counterparts. In rural areas there were 59% males employed compared to 41% of females³⁷. An informal sector survey study conducted in 2007 showed two thirds of informal businesses were operated by females compared to a third of the men. Education was seen as having an effect on operators of informal businesses, with those with no or less education more likely to run an informal sector business³⁸. Women dominate the informal economy, and they form the majority of informal market players, that are vending and hawking among other forms. Women also form the majority of subsistence fishers in the Okavango Delta. The gender dynamics of forestry in Botswana are not clear but women of the Baswara ethnic group dominate veldt product gathering include that of wild fruits³⁹.

³⁵ *ibid*

³⁶ Statistics Botswana, Botswana Multi-Topic Household Survey Report 2015/16, December 2018, <http://www.statsbots.org.bw/>

³⁷ *ibid*

³⁸ 2007 Informal Sector Survey Report, Statistics Botswana

³⁹ FAO and Government of Botswana, 2018. "Country Gender Assessment Series National Gender Profile of Agriculture and Rural Livelihoods BOTSWANA" <http://www.fao.org/3/i8704en/i8704EN.pdf>

A study undertaken by UNICEF and the Government of Botswana in 2012 showed that overall, the Ipelegeng households are more likely to be headed by women than by men (80:20). This high ratio 'may suggest that Ipelegeng is a good safety net for vulnerable female headed households'. A social worker in Tsetsebwe confirmed that current applications requesting for assistance, are mostly from women applicants. The UNICEF report indicates that in Ipelegeng households, the heads were characterised by low educational attainments, with the majority having primary or lower education. The report also states that Ipelegeng programme has created a positive environment for economic growth in the rural economy and the ever-increasing numbers of applicant for the programme seem to bear testimony to increased dependency on the programme, at the expense of other economic activities. For example, arable agriculture and livestock farming seem to have suffered from this effect most⁴⁰. This was confirmed by some women respondents in Bobirwa who said that they have partially neglected their livestock as they have to work half day, five days a week at Ipelegeng.

Some of the women and men that participated in the gender assessment did not have formal employment and relied heavily on government poverty eradication programmes, especially Ipelegeng for the women. Some women work in Ipelegeng together with their older children who are also unemployed. Few women were observed selling snacks around the village and at the kgotla meetings. In Ngamiland, some women weave baskets that they say have no or limited market — the main buyer of the baskets is Botswana Craft (*Ngwao Boswa*), whose selection standards are said to be extremely high and a result, buy very few baskets from the women at a time. Some women say many of the baskets they have produced are piling up in their homes, with no buyer in sight. In the Kgalagadi, in Zutshwa, Basarwa women make crafts, but they also have few buyers.

Women consulted described how young women are more likely to be single parents and unemployed, even when they have secondary educations. During consultations, it was revealed that young women would have entered subsistence farming after finishing their secondary schooling, but are now not able to because of drought and loss of natural resources, and have limited other skills for alternatives. Instead, many will go to work at Ipelegeng with their mothers, or move to larger villages, towns or even Gabarone to look for work ('marketing') since there is little economy in rural areas. During secondary school (when many are boarders, receiving three meals a day as well as pocket money) the young people become accustomed to a lifestyle, that is not sustainable or attainable on an Ipelegeng or subsistence agriculture income, with this relative deprivation leading them to become frustrated and disheartened. Many of these young women do not want to farm or work with their parents in the current Ipelegeng roles, and would rather be in higher earning tertiary services roles (although these are in short supply).

3.4.2 Access to Financial Resources

The gender survey conducted in 2014 by the Department of Gender Affairs found that more men access the National Development Bank (NDB) loans for cattle farming, mortgages and standard loans while women mostly requested loans for meeting the family expenses such as school fees. During the gender assessment, in the project districts, men said they were dependent on livestock, and have nothing to sell when they lose cattle to drought. The participants mentioned

⁴⁰ Republic of Botswana and UNICEF "Final Report for The Review of Ipelegeng Programme", June 2012

that some of the cattle were bought with loans from NDB and farmers have defaulted in repayments due to the loss of much of the livestock during the drought, particularly in the last two years. Male farmers who acquired NDB loans to purchase cattle say they are under a great deal of stress as they are unable to meet their repayment obligations.

As indicated earlier, many women survive through income generated from working in Ipelegeng. The women have control of these funds, BWP 567 which is equivalent to ~USD 56 and spend almost all of it on groceries for the family. The women consulted in preparation of this project say this is not enough and it is sometimes not paid on time. Women say they take groceries on credit from the local tuck-shop. This has become a cycle for some, as they pay the debt for the previous month's credit only to take the next groceries again on credit from the same shop. In addition, women say they are generally responsible for paying children's school fees (with family income) and many currently owe as they have no proper jobs. Despite being part of the same social development scheme, Ipelegeng earners are not exempt from paying school fees, but their earnings are not high enough to afford household expenses in addition to the fees. Owing school fees means that their children's school certificates are held by school administration until the debt has been settled. This can create disruptions to schooling, which will have intergenerational implications, that will likely be more heavily borne by girl children. The women remarked that an increase in Ipelegeng salary would enable them to buy clothes for their children and invest some in improving their lives. Elderly women and men receive the Government Pension (approximately USD 50), which is used for food and toiletries especially during drought periods.

The women and men farmers complained about the low prices they receive from abattoirs and *millers* or middlemen (unfavourable price per kg) for the cattle they sell. They feel because of their desperation they are taken advantage of by cattle buyers. Women commented that when they sell, the cow is divided and weighed in four portions and the entrails are given to the slaughter men as payment, depriving the women's children of much needed protein. Some farmers suggested that their chiefs must be given powers to set the price per kg on behalf the community during implementation of the proposed GCF Botswana project.

Since men are likely to have better paying jobs than women, and as such are more likely to have better collateral to secure loans compared to women. Men also have more access to and control of the productive resources such as land which they can use as security for the loans at the credit facilities⁴¹. Decisions made on when to sell the cattle are usually made by the men and the money is controlled by the men though some say they give the money to the wife to distribute among the family's needs. The men said that because of frequent drought, their cattle related economic activities have been disrupted leading to loss of livelihood for immediate and extended families.

Both women and men are vulnerable to climate change and there is potential for conflict in the homes as the father may choose to purchase supplement feed for the livestock, while the mother would want to buy food for the family, respectively. The project will remove this potential conflict through better management and feeding of livestock that is kept in collective communal areas. The proposed mobile abattoir will also help bring down costs — additional costs of transportation of the cattle to existing abattoirs by middlemen. Transportation costs are deducted from the final price paid to the farmer.

⁴¹ Republic of Botswana, 2013, "Gender Baseline Survey Report, 2014", Ministry of Labour and Home Affairs and UNDP

As women and men who reside in rural areas generally do not have regular sources of income, they also do not have bank accounts nor utilise mobile money services such as Orange Money, My Zaka or Poso Money. 62 out of 86 respondents said they do not have bank accounts as they do not have money. Village saving schemes (*metshelo*) exists in most villages in Botswana and these are highly populated by women compared to men. Savings generated through these groups will go to household expenses. Women and men consulted mentioned that these groups were predominantly women as men did not have the 'patience' for the monthly contributions and administration, and since they still benefitted from their wives/partners participation.

3.4.3 Access to Land

There are three types of land tenure in Botswana: tribal, freehold and state land — and any person over the age of 18 years can apply for land. The Deeds Registry Act, Married Persons Property Act, makes it possible for women to register deeds in their own name, whether married or unmarried. If married, women are required to disclose whether they are married in or out of community of property. The Act explicitly states that women shall not require the assistance of their husband in executing any deed, and that immovable property bequeathed or donated to a woman married in community of property shall not form part of the joint estate if this is specified as a condition of the bequest or donation⁴².

A gender study conducted by FAO found that one of the major problems in tenure rights and inheritance laws in Botswana was that women appeared to be unequally treated under the law. Under customary law, the homestead and land around it could be inherited only by the son. The majority of the land-holding contracts in Botswana are under the name of the male in the house (either the husband or older son)⁴³. Other constraining factors to women owning land in Botswana are said to be: age — those under 21 years have to obtain the consent of their parents in all property transactions; women who marry become minors unless they explicitly marry out of community; and most women lack the assets, capital or labour to use the land productively. Women married in community of property are permitted to own immovable property in their own names, however, their husbands still retain considerable control over jointly held assets of the marriage⁴⁴.

A marriage solemnised under the Marriage Act is governed by civil law only so far as the marriage is concerned, but for the purpose of the matrimonial property, the property will remain under the customary law for persons who are subject to customary law, unless they express exemption from such. The Property Bill of Married Persons provides that the property of spouses who are married under the Marriage Act, but are subject to customary law, will be held, disposed of, or devolve according to customary law unless the spouses have exempted the property from this application⁴⁵.

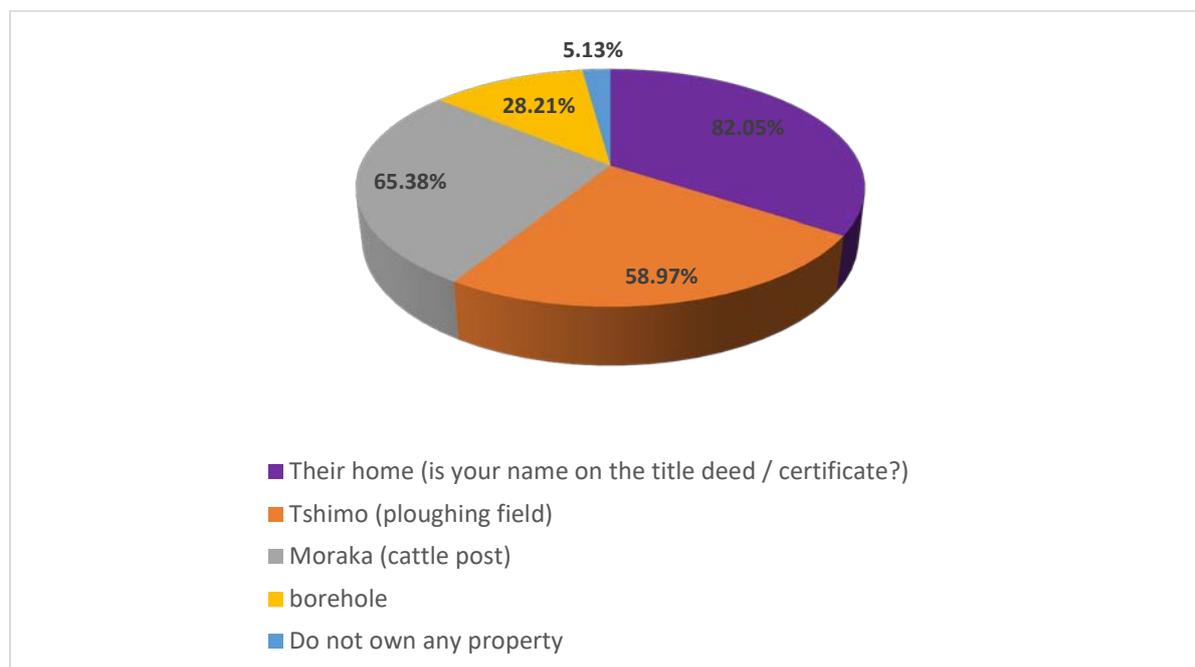
⁴² OECD, 'Social Institutions and Gender Index', 2019, <http://www.genderindex.org>

⁴³ FAO and Government of Botswana, 2018. "Country Gender Assessment Series National Gender Profile of Agriculture and Rural Livelihoods BOTSWANA" <http://www.fao.org/3/i8704en/i8704EN.pdf>

⁴⁴ Food and Agriculture Organization (FAO) http://www.fao.org/gender-landrights-database/country-profiles/countries-list/land-tenure-and-related-institutions/en/?country_iso3=BWA, Copyright FAO 2019

⁴⁵ E-Laws, Married Persons Property Bill, 2013

Figure 6. Property ownership by women and men.



Information from discussions with households show that women, single or married, in the three districts own at least a ploughing field as a minimum, of which they have a certificate issued by the Land Board. Some single or widowed women owned the homes they live in. It must be noted that the question of property (home) ownership appeared sensitive to the women, especially when asked if their names were also on the title deed together with their husband's names. One chief in Bobirwa gave an insight as to why this topic may be sensitive — the land certificate is usually in the name of the man, and he would have brought this piece of land, and possibly the property in it, into the marriage. The chief goes on to explain that there is no law that compels the husband to add the wife's name in the certificate/title deed. As noted in the Land Policy above, women need support in the case of the husband's death as some relatives can dispose the widow and children of the late husband's property, especially as there is unlikely to be a will. This chief has assisted some widows in his village as he would have been familiar with the widow's life situation.

3.4.3.1 Arable Land

A study conducted by the Heinrich Böll Foundation in Cape Town found that climate variability has had an impact on arable farming and this has a negative impact on women as this is predominantly a female activity. In contrast, climate variability is not likely to affect the hunter gathers (for example, in Kgalagadi South). However, the study noted that a drier climate may affect animal populations, and patterns of migration impacting on hunter gatherer life. The study concludes that with reduced natural resource-based livelihood options, more people will be looking for employment in order to supplement their income/livelihood⁴⁶. Many of the women participants in this gender assessment stated that they are unable to produce as many crops as often as they used to due to dwindling and unreliable rainfall.

⁴⁶<https://za.boell.org/2014/02/03/gender-and-climate-change-botswana-case-study-climate-change>

In Botswana, many women in rural areas depend on subsistence agriculture for the survival of their families. The 2010 Ministry of Agriculture (MoA) assessment of the Integrated Support Programme for Arable Agriculture Development (ISPAAD) showed that more females (57.6%) own arable land than males (41.6%)⁴⁷. The graph below shows property ownership among women and men farmers. Women said they owned the ploughing field while some men owned productive resources such as cattle post (*moraka*) or borehole.

Some women in the project districts say though they have ploughing fields they cannot afford, for instance, the down payment to invest in the land. It would seem that women have more arable land at their disposal yet are still harvesting less than men, as they are hindered by lack of inputs to maximise utilisation of all the land that they have⁴⁸. In Etsha 13 (Ngamiland), especially in female headed households women find it costly to plough as they cannot afford the additional costs for the diesel for the tractor and weeding. In some cases, single women or those from poor households say they cannot afford the required contribution to release government agriculture programmes' assistance. However, in the case of ploughing the government gives assistance to subsistence farmers in the form of free seeds and fertiliser and payment to a tractor owner after germination.

3.4.3.2 Communal Grazing Land

Local authorities in Tsetsebjwe (Bobirwa), said that there is not enough grazing as the villages and settlements around are slowly converging, reducing the communal grazing areas even further. It is also said that 'self allocation' of land has taken place in Bobirwa. The views from Tsetsejwe farmers are that *masimo* (ploughing fields) are better managed as they are properly allocated by the Land Board. On the other hand, *meraka* (cattle posts) are '*maipaafela*' (self-allocation). For example, if a person establishes a new *moraka* on a communal grazing land, community members cannot oppose as there is no law that prevents him to doing so.

In Ngamiland in Nxeke, buffalo and buffer zone fences more or less surround the village. Sentiments from the kgotla meeting discussions especially from men were that there is not enough land for the elephants, livestock and humans to share. However, the villagers feel they are losing in another way as wildlife, for example, buffalo, hippo, elephant, crocodile, etc, which were a source of tourism in the area, are now dying in the dried up river nearby. They no longer plough as elephants would come and eat everything. Government gives compensation of BWP 100 (USD 10) per ha for crops or fencing damaged by the elephants. There is no repeat compensation given if the elephants come back. Women complained not just about wildlife that break through their farm fences and eat their crops, but also about cattle that were never kraaled, and as a result roam about and eat their crops. The project will address the latter challenge through new approaches of managing livestock away from croplands, thereby reducing this vulnerability contributor.

Members of communities in the three districts feel powerless, squeezed by numerous boreholes, buffer zones and buffalo fences. Ngamiland is a red zone which experiences outbreaks of Foot and Mouth Disease (FMD), and the two fences serve a purpose, to control this disease. One

⁴⁷ Republic of Botswana, 2013, "Gender Baseline Survey Report, 2014", Ministry of Labour and Home Affairs and UNDP

⁴⁸ FAO

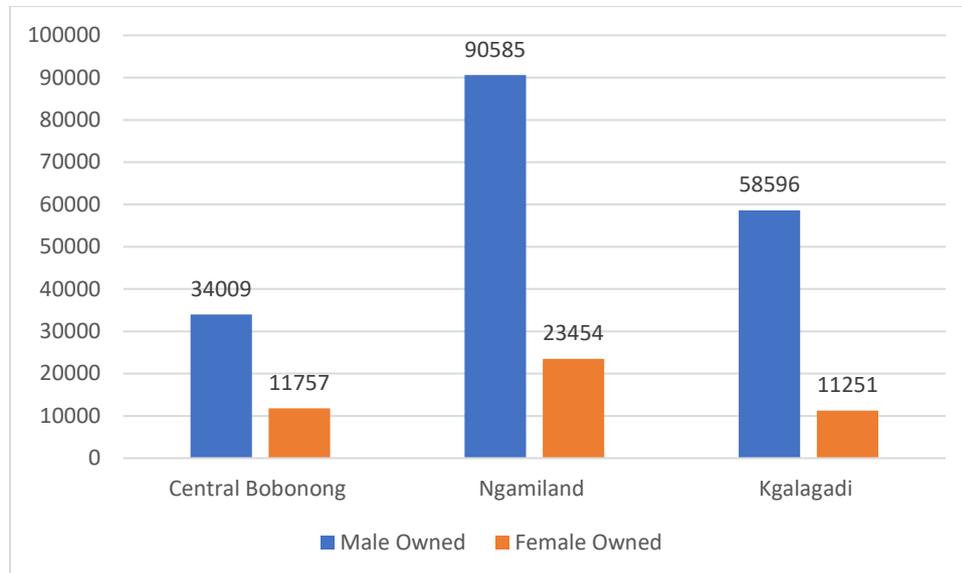
male member feels the fence has encroached their area and should be moved towards the wildlife area. The men also believe that recent plans to drill boreholes in the area will encourage wildlife to drink anywhere in the communities, which will lead to more injuries and death. In Hunhukwe, Kgalagadi District, members of the communities say it is difficult to form effective syndicates for boreholes as available land has been greatly reduced by the Ghanzi border and game reserves.

3.4.4 Livestock Ownership

In the case of livestock, the Livestock Management and Infrastructure Development (LIMID) is one of the MoA's women's economic empowerment programmes that assists farmers to purchase small stock, including poultry and guinea fowl for production. In 2010, women accounted for 78% of beneficiaries of LIMID. Men who applied at the time for LIMID had chosen borehole drilling and borehole equipment⁴⁹. These programmes require down payment that many women cannot afford especially in case of boreholes and related equipment. In Botswana men are likely to be in a better financial position than women hence they can afford the 50% required to release government's 50% and acquire borehole drilling and pump.

Cattle ownership is dominated by men. The majority of the women who own cattle do so through marriage⁵⁰. Figure 7 below shows that women in Central Bobonong, of which Bobirwa is a sub district, own 35% of the cattle, while women own 25% of all cattle in Ngamiland, and in the Kgalagadi district women own 19% of cattle.

Figure 7. Cattle Population by Gender and District

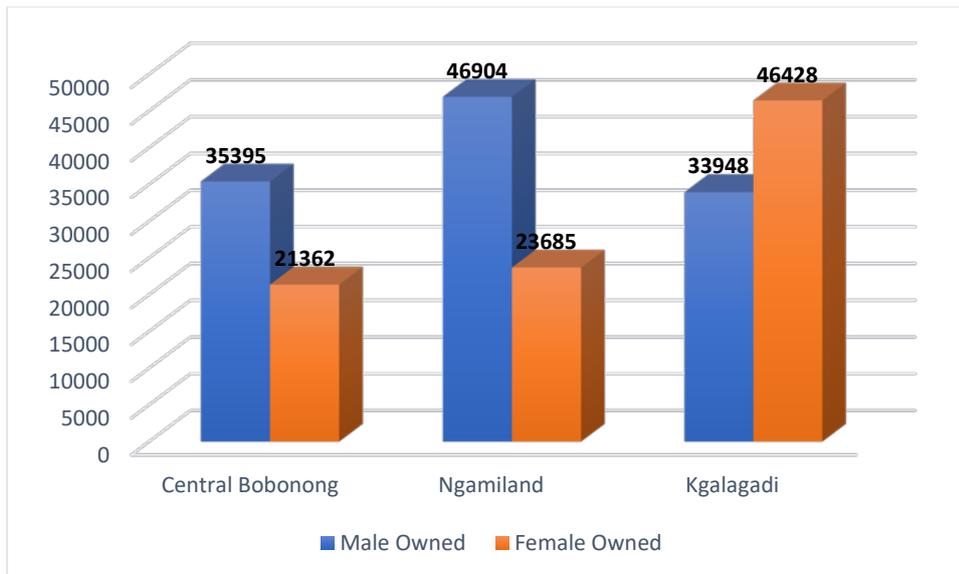


Source: Statistics Botswana

Figure 8. Goats Population by Gender and District

⁴⁹ Republic of Botswana, 2013, "Gender Baseline Survey Report, 2014", Ministry of Labour and Home Affairs and UNDP

⁵⁰ FAO and Government of Botswana, 2018. "Country Gender Assessment Series National gender profile of agriculture and rural livelihoods BOTSWANA" <http://www.fao.org/3/i8704en/i8704EN.pdf>



Source: Statistics Botswana

While cattle production is highly dominated by men, a high proportion of goats are owned by women⁵¹. Figure 8 above shows that women own 40% of the goats in Central Bobonong, while women own 48% of all goats in Ngamiland and finally in the Kgalagadi district women own 65% of goats compared to men. A LIMID evaluation conducted in 2010 demonstrated that females participated in LIMID in larger⁵² [OBJ]. The larger project will ensure that female headed households fully participate in the project by supporting sustainable production of small stock. Women say they have also lost goats due to drought and disease. The goats get sick and eat dirt and waste because of lack of vegetation. Men worry about their livestock and want to put in place measures to ensure that it survives as much as possible. However, the discussions with members of the community who own livestock show that both women and men have lost animals as a result of drought or disease caused by the aftermath of heavy rains in 2017. From both the women and men's experiences, it is clear that drought is becoming more frequent.

The Annual Agricultural Survey was conducted in 2017 and the above livestock numbers may have been greatly reduced, as can be deduced from the gender assessment survey which shows that many farmers have lost cattle since 2018 due to drought. Farmers in Etsha 13 alluded to the fact that the rate at which cattle are dying means there may be no cattle left by the time the project is implemented. It must be noted that all but one (79 out of 80 respondents⁵³) of the respondents in the project districts who said they own cattle and other livestock said they have lost some livestock due to drought. In Ngamiland, many cattle are said to have died and continue to die in the drying rivers as they get stuck in mud. Much of the borehole water has become saline leading to some deaths of cattle.

In Bobirwa farmers mentioned that there were large livestock mortalities during severe droughts. One drought was so bad that goats also died — (notably, goats are considered very hardy animals that can weather a drought much easier than cattle). In Bobirwa women say their cattle resort to eating the dry leaves and 'di koma mmu' (they eat soil) once all grazing in the area has

⁵¹ GCF Botswana Project Concept Note

⁵² Ministry of Agriculture, "Guidelines for Livestock Management and Infrastructure Development Programme Phase II". Botswana

⁵³ Six respondents did not answer this question.

been exhausted. Also in Bobirwa, there are said to be high incidences of donkey theft with donkey providing many women and men's draught power.

In Kgalagadi, when a woman gets married, she brings cattle her father would have allocated to her before she was married. The cattle are placed under the control of the husband who adds them to his existing herd. The husband is told by the wife's parents that he must not allow his wife to manage the cattle but must discuss and agree with his wife before any of the cattle is sold. The culture gives him complete control over the cattle although he is not allowed to change their branding. The resulting calves are also branded with the wife's brand⁵⁴. If the wife predeceases her husband, he takes ownership of the cattle and the brand is re-registered in his name. If they both die at the same time, the husband's relatives collaborate with the wife's parents/relatives to divide the cattle among the remaining children. For women from poor families, it is permitted to bring no livestock into the marriage.

In Bobirwa, when a husband brings cattle into a marriage, they are his alone. Those accumulated during the marriage are shared with the wife and bear their collective brand. This is done for all livestock. The practice is done to share out cattle amicably during divorce. If the man is guilty of adultery during the marriage, he leaves with nothing and must start afresh with his new family.

In the majority of cultures, the first male child is the natural heir of the estate of the deceased father. Customary law and therefore traditional courts appear to favour men in the division of inheritance and seriously disadvantages women. As a result societal discrimination against women persists in practice especially in rural areas and in relation to restrictions on women's property rights and economic opportunities⁵⁵. It must also be noted that cultural practices that apply to livestock appear to affect older women and men more as they are married under Customary Law, than young people as many of these do not own cattle. It is the older women who are married whom the project must ensure that they discuss and agree with their husbands on how the wife can participate and benefit from the project activities, especially if the only livestock they have is cattle. Women, including those that are married, are normally given the prerogative over small stock and hence have decision making powers over this type of livestock — so this is unlikely to become an issue during project implementation.

There are concerns from women and men regarding collective grazing and these include: similar brands particularly for the small stock and access to the cattle for milking, branding and even to just check on the cattle. The project will address these issues by giving access to the farmers to undertake the activities that they did in the past such as milking and branding. Men and MHHs are able to adapt much quicker during drought as they can mobilise resources for fodder, and transport water to the livestock.

Preliminary observations can be made from the gender assessment and stakeholder discussions that many women own more goats than cattle. For the women that own cattle their numbers may be small. Men own cattle and married couples by default 'share' their livestock. The project should establish a gender disaggregated baseline of cattle ownership to ascertain existing numbers of cattle in the project areas as stocks are likely to have been depleted particularly in the last three years. It could be the case that many women do not own cattle but goats and

⁵⁴ A cattle brand is an identification system that bears the name of the cattle owner.

⁵⁵ Gender Analysis Study on the Ngamiland Sustainable Land Management Project, Prof. Gobopamang Letamo, PhD

enterprise development opportunities for optimising value for climate adaptation from goats or alternative livelihood options should be a project priority

In farming communities, farming associations are mostly dominated by men. Women do not make any major decisions or even respond to any agricultural surveys in the absence of their male counterparts, who are the decision-makers. The expectation of agricultural extension is also that a male should answer and make decisions.⁵⁶ The married women interviewed during the stakeholder engagement mentioned that the livestock the family had was 'shared' between the wife and husband. The husbands said the same. Customary marriages are by default in community of property which means elderly couples married under the Customary Law share all the property including livestock. The married respondents said that the decision to sell livestock, including cattle, was done by both of them. It is not clear whether this is a default answer, as it is known that in many cases it is the husband who makes decision to sell cattle. The wife, although having more control over small stock still has to inform the husband of a decision to sell. Decisions made on shared livestock in relation to communal grazing will be a key consideration in the project, and culturally-appropriate actions will be implemented to ensure equitable participation of married women in Stewardship Agreements.

3.4.5 Access to Water

Land use and allocation processes have a profound impact on water resources and demand, and the rights of access to land generally include access to surface water resources, subject to existing rights. Individuals and syndicates requesting a borehole generally contribute to the cost of sinking the borehole, and operate and maintain the borehole in exchange for free use of the water. This scenario already displays some gender inequalities as fewer women than men can afford paying for the sinking of the borehole because they lack access to financial resources and other agricultural inputs. There is a huge disparity in borehole ownership with women owning 27% and men owning 73%⁵⁷. This is supported by findings from focus group discussions in the projects sites that revealed that women relied on government standpipes, buying water from those who own boreholes or water sellers.

There is currently high-water scarcity particularly in some parts of Bobirwa such as Gobojango and surrounding areas. Boreholes and perennial rivers are drying up much faster than the respondents have seen in the past. In areas in the projects sites that are water stressed goats are given potable water from standpipes in the homes or the public water pipes. In Nxaraga, the women use their stand pipe coupons to collect water for the household and their goats (goats drink at the compound). They have to use 20 litre containers, about five per day to collect water and take it to the compounds. Some farmers buy water from neighbours or those who sell water while others request from borehole owners for goats. Furthermore, both women and men farmers in the project districts where there is water stress have dug wells that some call 'dry' or *metraesiso*. These are hand operated as can be seen in the picture below.

⁵⁶ FAO

⁵⁷ FAO and Government of Botswana, 2018. "Country Gender Assessment Series National Gender Profile of Agriculture and Rural Livelihoods BOTSWANA" <http://www.fao.org/3/i8704en/i8704EN.pdf>



Hand-dug and operated wells in Bobirwa and Kgalagadi (photos by Nozipho Wright)

Cattle are said to be dying in large numbers particularly in Ngamiland where farmers relied heavily on the rivers, which in their own words, are drying up much faster recently. In Sehithwa, we are told that the situation was different when the river flowed annually and most farmers applied for the livestock programme (LIMID) and other poverty eradication programmes. The goats were then disbursed because the farmers said they had access to water from the river for the goats. There were no water issues or stress then. Now the lake has dried. In Etsha 13, cattle drink almost 15 km on the eastern side of the village where they spend about two days then travel back, then travel to the west where grazing is available. Some of the cattle are said to die on the way to the grazing areas due to hunger and fatigue.

The Nxaraga chief mentioned that this is the first time in his life that he has seen such livestock as donkeys and goats succumb to drought. In Etsha 13, one gentleman said “there will be no cattle in the community to save by that time”, meaning at the time of project implementation. This shows the severity of situation. In Kgalagadi there are no rivers or dams and most of the water for the livestock is from boreholes. In Tshane, Kgalagadi, syndicates have been formed and they have drilled boreholes to provide water for the livestock. Some women farmers find some of the boreholes to be situated far from when they keep their livestock which means longer times are required to take the livestock to drink. The project will enable better use of these remote water and grazing areas and, correspondingly, women’s time availability for other activities.

Women in water stressed communities spend time and effort on water collection (for household use and for goats, for those who own goats) from the public standpipe using coupons/tags. This is common in all the project communities. In Ngamiland, we were informed of long queues for water at the public standpipe which happened almost daily. Women have to get up early to start collecting with 20 litre containers which they line up and sometimes finish collecting up to 6 loads around midday. Sometimes the coupon system malfunctions, hence the queueing. FHHs in which the women own livestock have added responsibilities of taking care of livestock. These households are more likely to be hard hit by the negative impact of climate change on subsistence farming and livestock farming. Goat production has become an income generating

activity that comes with a burden for the women as they have to draw additional water for the goats. However, there has been an announcement in the past for people to remove goats from the village as watering goats from potable water sources is deemed 'illegal'.

The public stand pipe water system is a project that was implemented by the government countrywide to cater for consumers who cannot afford standpipe installation in their homes. In some villages including in the project districts some households pay for installation of standpipes in the homes. This is a prepaid system that works in which a consumer purchases a 'quantity' of water which is loaded into the tag/coupons. Those living where there is no water reticulation are encouraged to use the tags. There is an arrangement for purchasing a certain amount of water for those who cannot afford to load the tags. The water is affordable and possibly highly subsidised; for example, one woman in Ngamiland can load her tag for BWP 10 (US\$ 1), which she says lasts a month for her household and two goats. The project is said to have failed due to several reasons; the software that controls the pumps requires high water pressure for it work leading to long queues. In one village in the Kgalagadi, there were public standpipes in the past but people abused them by drawing water for livestock and transporting to the farms, and the government closed them down. In other villages the public stand pipes have been damaged by livestock and children. Consumers cite abuse by farmers who come with trucks and donkey carts which creates congestion. The water is not regulated as farmers can use the excuse that it is for household consumption when it is also for livestock, and they pay well below the market price for the water.

Women are more vulnerable to drought in terms of livestock rearing as they have to utilise potable water from public standpipes for their small stock and this is not allowed. There is also the additional chore of collecting water for the goats. Male farmers face reduced water supplies for their cattle and examples of husbands taking the wife's water tank to take water to his livestock is evidence of how far the men will go to ensure that their livelihoods, i.e. cattle, survives the drought. It must be noted that 'borrowing' the wife's backyard garden rain water tank or *jojo*, creates potential for conflict in the home. This may also disrupt the wife's backyard gardening. The project will assist those who agree to participate in the communal grazing with a reliable water supply for their livestock. The majority of those with livestock said they would agree to collective grazing provided they have access to water for the livestock.

3.4.6 Access to Information and Technology

As of March 2016, mobile phone access stood at 3.5 million subscribers, meaning that there were 3.5 million active mobile simcards in use in Botswana⁵⁸. There were also 1.4 million mobile phone internet users in Botswana. Mobile penetration has placed Botswana as one of the major users of mobile broadband internet as evidenced by the country raking among the highest in Africa in terms of usage of social media, particularly Facebook⁵⁹. The majority of women and men who participated in household interviews have access to mobile phones (80 out of 86 respondents), which shows high access to this technology. Women have the same high rate of access as men to mobile phones.

⁵⁸ Some people have more than one sim card in their phones so they can benefit from calling different service providers.

⁵⁹ Botswana Communications Regulatory Authority (BOCRA), <https://www.bocra.org.bw/bocra-response-does-bocra-deliver-connected-and-informed-society>, Copyright 2016 BOCRA

Some women and men in the project districts also have access to the radio and can read the Government newspaper (Daily News) which is delivered at the local administration (*kgotla*) where members of the community can collect the newspaper from Monday to Friday. The Daily News has some summary news in the local language, Setswana. Many women and men also receive news announcements about government programmes via the *kgotla*. Before Government Officials address community meetings to present the programmes, the Chief sends his staff to notify the community through a loud speaker to tell them about the officials' visit. Nonetheless, those residing in adjacent settlements or localities say they can miss out on the announcements as the van circulates mostly in the main villages. These are important practices the project communications strategy will take into account as outreach activities are developed.

Both women and men in Ngamiland have requested for important announcements e.g. for this project to be announced days in advance via the radio as is done for some of the Government programmes. The announcements for the *kgotla* meetings do not reach everyone, which means women and men from outside the main village may miss out, therefore they do not have equal access to information nor participation during the meetings. We were informed that it is mostly women rather than men who attend *kgotla* meetings. This was proven by the fact that all the *kgotla* meetings addressed during the gender assessment had a larger audience of women than men. The women share what they learn at the *kgotla* with members of their family and friends. Women are therefore likely to be easy to reach through the *kgotla* system, in terms of delivering messages but not for acquiring their free and informed consent, during the project implementation.

The level of education among women and men farmers is similar, and in some areas both have been trained by Veterinary Officers on how to vaccinate their livestock. In the case of abattoirs LIMID applicants are required to undergo training in cooperative management and husbandry management organised by the Department of Animal Production for those applying for small stock and chickens⁶⁰. Both women and men can therefore be trained on different skills in the project where feasible and be enabled to meaningfully benefit and participate in the GCF Botswana project. For example, one tailor in Tshane would like to be given the opportunity to produce the Ecorangers uniform.

The equal access to mobile phones by both women and men, and access and use of internet by both genders within the youth group, means that they can be trained during the Ecorangers courses to utilise mobile phones to transmit data.

3.5 DECISION MAKING

In 2012, women accounted for just under a third (30.6%) of all decision-making positions within the four political parties. Of the 23 cabinet posts, 4 (17.4%) were held by women while there were also 4 women members of parliament out of 61 (6.5%)⁶¹. In 2019, only a fifth of members of the Cabinet were women. In Botswana areas such as politics including cabinet and local authorities such as district councils and traditional leadership have some of the lowest ratios of females to males, showing serious underrepresentation of women in these bodies. It is likely that

⁶⁰ Ministry of Agriculture, "Guidelines for Livestock Management and Infrastructure Development Programme Phase II". Botswana

⁶¹ Republic of Botswana, 2013, "National Survey to Establish a Baseline on Gender in Botswana", Gender Affairs Department, Ministry of Labour and Home Affairs and UNDP.

the cultural stereotype that perceives women as incapable of holding leadership positions is a likely contributory factor to the status quo⁶². The unequal representation between women and men in the highest decision-making bodies continues. The bias against women, whether deliberate or not, is evident in Botswana's political landscape.

3.5.1 The Local Government System

Botswana has a two-tier system of government namely; the national government in the first tier, headed by the president, with councils forming the second tier. Councils are headed by a mayor in urban areas and a council chairperson in rural districts. Tribal administration is an institution of traditional village leadership that has both a traditional and a development component. Tribal administration supports rural development initiatives, particularly at the community level. It comprises two units; namely the judicial, led by the *kgosi*; and administrative, headed by the tribal secretary. The traditional system of village leadership works cooperatively with the councils. Each village is headed by a chief, or *kgosi*, who is an *ex-officio* member of the district council in their area of jurisdiction. The tribal administration system is supported by a traditional arbitration forum now known as the Customary Court of Appeal, and by the Ntlo ya Dikgosi, which advises government on social matters. The main legislation is the Local Government Act 2012.

The Local Government Act establishes village development committees (VDCs) at ward and village levels, whose role is to coordinate development at the local level in line with Botswana's principle of bottom-up planning, where developments are to be discussed with communities before implementation. The bottom-up planning approach requires that communities are consulted during the drafting of district/urban development plans. The consultations are done with the participation of all institutions operating at the district level, coordinated by the District Commissioner. The village/ward development committees which were established by the Local Government Act are used to reach the community. *Dikgosi* (traditional leaders) play a critical role in mobilising communities for consultation on all government policies and programmes at the local level. Good intergovernmental relations are promoted through various mechanisms such as national and local-level forums including *kgotla* meetings and high-level consultative meetings. Each district administration is headed by a district commissioner appointed by the permanent secretary to the president. Each district commissioner has authority over the development, implementation and monitoring of their local district/urban development plan. Local authorities, headed by council secretaries/town clerks, and heads of departments for national government provide effective communication links between communities and national government⁶³.

The District Administration is headed by the District Commissioner, whose primary responsibility is to serve as a coordinator of district level planning and development. The Land Board is a

⁶² Republic of Botswana, 2013, "Gender Baseline Survey Report, 2014", Ministry of Labour and Home Affairs and UNDP

⁶³ http://www.clgf.org.uk/default/assets/File/Country_profiles/Botswana.pdf

statutory body consisting of apolitical members, responsible for land and housing with the assistance of the District Commissioner, Land Board Secretary and the Chief. Land boards administer communal land through customary law and hold the tribal land in trust and allocate it for residential, agricultural, industrial, commercial or general development purposes. The three institutions participate in local economic development through the District/Urban Development Committees which are responsible for the development of the District Development Plans that the local authorities are responsible for implementation⁶⁴. It is important to note that the project sites have some women in the district councils such as the Deputy Council Secretary in Bobonong and District Commissioner in Kgalagadi District who are both supporting this project.

Several kgotla meetings were held in the three project districts to inform members of the community about the project as well to identify gender disaggregated challenges and climate change adaptation strategies, and to establish if the communities would be interested in collective grazing. Protocol dictates that community members be informed of development projects through kgotlas. There were many times during this gender assessment that women had to be encouraged to speak during the kgotla meetings. Very few women spoke, nonetheless. This could be due to the entrenched patriarchal nature of the rural setting which has made women to continue to perceive that they are not allowed to speak during kgotla meetings. This arises from the fact that poor women, and indeed men, feel self-conscious and are sometimes shouted down (one woman from Ngamiland mentioned this) when they try to make their opinions/ideas heard during a kgotla meeting. This has obviously not helped to build poor women and men's confidence over the years and it would take time for this inequality between the poor and the rich to be bridged.

Botswana is a patriarchal society and this is more evident in rural societies, for instance all the chiefs and their assistants interacted with during this gender assessment are male. This means decision making at the village level is led by the chief (male) which in turn means decisions made at the kgotla are likely to favour men/males more than women. In one community engaged in Ngamiland, one woman said they are not allowed to speak at the kgotla meetings and can sometimes be taken to task if they say the wrong things, so it is views of men that are heard during kgotla meetings. The women were later engaged via the questionnaire.

Although women are allowed to speak, they are self-conscious or shy as some say the class divisions at play in their community go against both women and men. One woman spoke of discrimination against poor women and men. She believes they are discriminated against even when Government programmes and resources are allocated. She has also observed that married women benefit more than unmarried ones. She further stated that there is no equality between women and men, men have more power and women have to ask permission to do certain things, e.g. changing from the long traditional dress worn in some parts of the country, to a normal, less heavy dress. Some men agree, others refuse.

3.5.2 Village Development Committees (VDCs)

A more positive picture emerged during the discussions that if anything, women outnumber men in the Village Development Committees (VDCs). Members of the (VDCs) are voted into the committee by the community. The maximum number of members of the committee is ten. There does not seem to be bias towards any gender and both women and men participate in the VDCs

⁶⁴ BIDPA

more or less in equal numbers. For example, Lepokole has 4 men and 6 women (the treasurer and secretary are both women), while Hunhunkwe VDC has 3 men and 7 women, Tshokwe has 6 women and 4 men, Tshane VDC has 7 women and 3 men (the chair is female and while the deputy is male and the secretary and treasurer are both women). Chiefs are ex-officio members of the VDCs. The ability of women to influence decisions in VDCs is varied and depends on the set up. VDCs with women chairs are an indication that women have more decision-making power in a particular community/VDC. Also, as observed in some project areas, VDCs headed by retired men and women civil servants appeared more assertive, visionary and with a fair understanding of climate change impacts and the direction development projects should take.

The Chair of a VDC usually chairs kgotla meetings, regardless of their gender. The VDC chairs, chaired all the kgotla meetings addressed by the project during the gender assessment, while the Chief welcomed the project team and members of the community. The project is presented, and the VDC chair would moderate the question and answer session while the Chief wraps up by giving consent for the project to be implemented in his village.

VDCs are highly regarded in the villages and come second to the chief in terms of decision making. Although this is a good thing, matters that are decided at the kgotla, and mostly by men, are likely to take precedence over those agreed in VDCs.

As can be seen in sections above, at a household level, men generally have more decision-making powers when it comes to cattle, while women manage mainly the small stock. Because women do not have decision making powers with regard to cattle — cattle related decisions in many cases will take precedence over small-stock. The project must therefore ensure that women's voices are heard during the development of the planned Stewardship Agreements.

3.5.3 Community Based Natural Resource Management

Most community-based organisations (CBOs) which manage and coordinates the CBNRM processes have Boards that meet, with an average board size of 9. The gender balance of the Boards is almost even (F:M = 47:53) and compared to earlier reviews, female board membership has increased. The age distribution of board members is fairly even. However, youth (below 30 years of age) are increasingly underrepresented. This trend that was observed in earlier reviews, may be due to the youth having more attractive income-generating options. For long-term sustainability CBOs need to attract more youth⁶⁵.

A good example of involving women in decision making with regard to management of communal natural resources is a community water agreement prepared and used by a syndicate in Tshane. The syndicate is chaired by a woman. The agreement is a constitution on how livestock belonging to members of the syndicate is watered.

3.5.4 Other CBOs

In all the three districts it was quite noticeable how very few men are involved in associations or groups of any type. More women said they were part of PTAs and other organisations such as

⁶⁵ USAID and Centre for Applied Research, "2016 Review of Community Based Natural Resources Management in Botswana" Report Prepared for SAREP

those working with the Red Cross in Tshane, and some said they were part of saving groups. The project must utilise the VDC as a conduit for equal participation of women and men in the project.

The drawn-out implementation of the decentralisation from central government to local government (see the ESIA Report) means that a top-bottom approach is still to be conceived to implement and monitor development projects. This has an impact on the ability of the few women within the local government system to make any meaningful decisions that can change rural and poor women's lives.

It was found, during consultations, that there are no women-focused organisations in the target areas, aside from self organising savings groups (stokvels or metshelo) which have predominantly women members. Additionally, the Village Development Committees have women representatives and occasionally address 'womens issues'. Women and self-organised units are occasionally supported by the Women's Affairs Department (albeit short staffed), as well as from extension officers, social workers and veterinary officers.

National organisations that may be engaged or applied as models include:

- Bokamoso Women's Co-operative
- Mogobane Womens Co-Operative
- Ngwao Boswa Women's Co-operative
- Kgetsi ya Tsie Tswapong Hills Women Resources Enterprise Community Trust
- Putting Women First
- Women Against Rape
- Women Finance House Botswana
- Red Cross
- Somarelang Tikologo (Gaborone)
- Ditshwanelo – The Botswana Center for Human Rights
- Emang Basadi Women's Association
- Botswana National Youth Council

3.6 GENDER BASED VIOLENCE

Gender based violence (GBV) is frequent in Botswana, with 67% of women reporting having experienced some form of GBV in their lifetime⁶⁶. Most gender violence that occurs in Botswana is intimate partnership violence (IPV) with almost two in every three women have experience IPV in their lives. There has also been a stark rise in the number of "passion killings" in the project areas, in which young men kill their female partners who intend to leave the relationship. On average, younger women, aged 18-44, are more likely to experience IPV compared to older women aged 45 years and older⁶⁷. In total, less than 1% of the GBV (including IPV) experienced in Botswana is successfully convicted⁶⁸. Amongst the men and women consulted, many attributed the GBV to also be a perverse outcome of women's increased empowerment and autonomy in recent years disrupting patriarchal systems, with men feeling 'left behind' or emasculated by the progress towards equality (despite women still

66 Available at: <https://www.sddirect.org.uk/media/1843/vawg-helpdesk-report-236-botswana-gbv-factsheet-may-2019.pdf>

67 Available at: <https://www.sddirect.org.uk/media/1843/vawg-helpdesk-report-236-botswana-gbv-factsheet-may-2019.pdf>

68 Available at: https://www.bw.undp.org/content/botswana/en/home/library/democratic_governance/gender-based-violence-indicators-study-botswana.html

being formally and customarily discriminated against in many ways). Income from Ipelegeng, despite being a low amount and often (almost always) going to household spending, was cited in consultations as a 'trigger' for IPV.

This baseline of prevalent GBV is further exacerbated by climate change⁶⁹, as the social and financial stresses due to climate change and weather-related disasters heighten and intensify gender inequalities and gender-based violence. As environmental degradation and ecosystem stress increases, the resulting loss of livelihoods and income can lead to, *inter alia*, depression, anger, social isolation alcoholism and substance abuse, which are known triggers for increased GBV^{70, 71}. In Gobojango, GBV incidences are said to be either very low or they are hidden. However, of those reported, women note being abused by their partners who claim their Ipelegeng earnings and use it for alcohol.

Consultations revealed that sexual exploitation also increases following environmental disasters, when human traffickers take advantage of the insecurity felt by vulnerable groups. Women and girls may resort to extreme coping mechanisms, including transactional sex, to support families. Climate change driven physical migration or displacement exposes women and girls to increased GBV risk. Likewise, food and water shortages require women and girls to travel farther from home to collect resources, putting them at greater risk of GBV.

Climate-driven impacts can have many knock-on health impacts that disproportionately affect women, such as missing HIV treatment medications and experiencing reduced access to maternal health. Additionally, common coping mechanisms to climate-driven stressors include increased (girl) child marriages as families look for ways to relieve the pressures on families and generate income. In nearby Malawai, an alarming increase in child brides was recorded following Cyclone Idai in 2019. Further coping mechanisms includes children, often girls, dropping out of school to help families obtain food, care for siblings, or earn money. In neighbouring Zambia, for example, school drop-out rates are so high in drought-affected districts that dozens of primary schools have closed. Finally, COVID-19 has exacerbated GBV on a global scale. There is an increase of worldwide GBV related to the COVID-19 pandemic⁷² While cases and deaths are still relatively small in Botswana⁷³, it is projected that COVID-19 will intensify GBV in the country.

Given the already high rates of GBV in Botswana, combined with high climate change vulnerability and COVID-19 impacts, women are among the most vulnerable members in the proposed project communities. Thus, the necessity to priorities gender-responsive action throughout project design.

In moving forward, projects can ensure that policies, national documents, and awareness-raising materials include sections that provide information about the nexus between climate change and

69 Available at: <https://portals.iucn.org/library/node/48969>

70 A study conducted by the Women's Affairs Department and Gender Links on GBV in Botswana found that approximately a quarter (24%) of men who perpetrated IPV in the 12 months prior to their survey also consumed alcohol in the same period. Available at: <file:///C:/Users/RosannaMcLean/Downloads/GBV%2520Indicators%2520Botswana%2520report.pdf>

71 Available at: <https://www.sddirect.org.uk/media/1843/vawg-helpdesk-report-236-botswana-gbv-factsheet-may-2019.pdf>

72 Available at: https://www.unwomen.org/en/news/in-focus/in-focus-gender-equality-in-covid-19-response?qclid=CjwKCAiAkan9BRAqEiwAP9X6UeT4ej8ASIRTYUrRhx1uUFFY4sgtdr9hTbD1ke36Z0jZ5Dmt7eKhbBoCoe4QAvD_BwE

73 As of late October 2020, the country reported 6600 cases and 24 deaths.

gender, including GBV. These sections should include, for example, information of societal gender roles, gendered divisions of labour, and data on the prevalence of gender inequality and GBV⁷⁴. Although comprehensively addressing GBV is outside of the project outcomes, the project does intend to empower women through the continued Ipelegeng program and the many activities directed at women's economic empowerment and engagement in project activities. As such, the project aims to take proactive steps to ensure that GBV is not adversely exacerbated as a result of interventions. This will include partnered empowerment, working with husbands and male leaders to accompany women-oriented activities. The Grievance Reporting Mechanism will also specifically include considerations for capturing and responding to reports of GBV. Information about the GRM will be shared widely in places where women get information both to ensure that women have full access to the GRM, and to clearly show project-related GBV as something the GRM is meant to capture and is accessible to them. During project monitoring, the project could also include monitoring regarding GBV -- for example informally asking a few questions like "have you heard of any GBV incidents resulting from the project" during community visits.

Patriarchal attitudes and societal norms are a primary driver of the incidence of GBV in Botswana. While women and men affirm gender equality in the public domain this has not translated to their private lives particularly in their intimate relationships⁷⁵. According to the Tshane chief, incidences of GBV are quite low in his village, i.e. low numbers of rape, and beatings between young couples. However, fighting between couples over a baby was common in the past, and the problem was that the male and female misinterpreted the laws that govern the sharing of a child. An extreme example of this scenario is when a young man reports to the police and the police allows the man to take away a baby that is still being breastfed. However, the chief has in the past mediated in these cases by explaining the laws to the couple and ensuring the young man returns the baby to the mother.

In addition to providing information and challenging societal norms that harm both women and men, projects may further aid in knowledge production via adding gender-disaggregated data collection outcomes that link GBV and climate change exposure and vulnerability. This will make visible women's disproportionate vulnerability to GBV and climate change impacts, further highlighting the need for gender-responsive projects.

Projects should focus on engaging men and women in discussions around GBV – the root causes and the routes to eradicating it – in order to achieve a peaceful, sustainable social setting in which people are able to adapt to oncoming climate impacts. At a national level, there are currently gender-transformative programming initiatives that actively engage men, such as *Men in the Kitchen* run by Men and Boys for Gender Equality (MBGE), which engages boys in traditionally female-assigned labour roles and assigns older males as mentors. It was found during consultations that older men in the proposed project areas are currently not stable

⁷⁴Some of this information can be sourced from Gender Links and the Women's Affairs Department in Botswana, which undertook the GBV Indicators Research project in Botswana in 2012. Additionally, a 2019 Violence Against Children Survey (VACS) was recently completed and this includes information on sexual, physical and emotional violence among children, adolescents and young adults. Additionally, data is available on violence reported to the police and court cases—although GBV is widely underreported in Botswana—alongside smaller-scale research studies, such as the Gender Based Violence Indicators Study of 2012 by the Women's Affairs Department (WAD) within the Ministry of Labour and Home Affairs.

⁷⁵ <http://www.gov.bw/globalassets/mlha/gender-affairs/final-gbv-indicators-study-pamphlet---botswana.pdf>

mentors, given their substance abuse or general overexertion and stress – often from crop and livelihood losses due to drought and other climate-related impacts.

Similarly, Men and Boys for Gender Equality (MBGE) has conducted Kgotla meetings in Hatsalatladi, Lobatse, Goodhope and Molapowabojang which served as a form of community engagement in which the members were encouraged to take action to challenge gender based violence, promote gender equality, educate and promote children's rights and preventing HIV. These initiatives could be rolled out in projects sites or used as models from which to base future initiatives. This would have a positive impact of providing young men with mentors who may then become mentors in the future. This empowerment of men, combined with the programme focus on challenging the underlying social norms that lead to much of GBV, may lead to decreased prevalence of GBV in project sites.

Finally, fatherhood programmes, such as MenCare⁷⁶, engage men in non-violent fathering and caregiving. This is particularly impactful when noting that IPV—the most prevalent form of GBV in Botswana—is linked to intergenerational violence, in which 26% of men have witnessed their mothers being abused⁷⁷. In Tshokwe, some young mothers complained of being abandoned by the fathers of their children who claimed lack of employment as the reason for not helping to support their children. Through engaging men in traditionally female tasks, projects may ease women's double burden of caring and income generating activities.

In line with this, by focusing project efforts on climate-resilient practices that reduce women's and girl's time spent collecting water and food resources. This, in turn, will reduce their exposure to GBV. Such measures in an agricultural setting, for example, may include a focus on sustainable and easy-to-access water supplies in communities, as well as empowering women's initiatives that are already engaging in climate-resilient food initiatives, or forming such cooperatives where they are not present or are lacking.

These aforementioned measures align with government-level and NGO key focal areas of: promoting gender equality in and through the media and in all areas of governance; developing policies and conducting effective campaigns for eradicating gender violence, HIV and AIDS; and building the capacity of women and men to engage critically in democratic processes that advance equality and justice.

3.7 INTERGENERATIONAL VULNERABILITY

The context sections above described the varying opportunities and discriminations subject to married, widowed or divorced women under legal and customary authority systems, in Botswana at large and in the project districts in particular. Although single women (and single mothers specifically) lack the social safeguards of male partners or dual incomes, this does create better baseline resilience and independence by necessity, albeit in a way that is highly strained and insecure. For example, although they carry a higher burden with fewer opportunities than single men, single women would have more control and autonomy in household decision-making and spending than married women and may own their house/land/own livestock or smallstock. However, they do tend to be poorer and also more likely to engage in sex work than married

76 Available at: <https://men-care.org/>

77 Available at: <https://www.sddirect.org.uk/media/1843/vawg-helpdesk-report-236-botswana-gbv-factsheet-may-2019.pdf>

women, although such cases do occur, especially if the husband is living/working remotely from the woman. These single women are also less exposed to instances of IPV in the event of their empowerment, and may offer a strategic entry-point for empowering vulnerable beneficiaries without such perverse outcomes, at least in early stages when the success and opportunities of the project are 'untested'. Once the wide-ranging benefits of women's employment and participation in the project can be demonstrated, married women may feel more confident in taking part, or their husbands/partners may see the household benefits to be had.

On the other hand, older (middle aged) women are more likely to be widows, and have many dependents including unemployed grown children, grandchildren, or elderly relatives. Although older women receive pensions, this amount is not necessarily sufficient to sustain a large household of dependents. During consultations, older women were often quieter or slower to speak/contribute, showing more deference to men and critiquing the young women who dominated discussion in the focus groups.

4 WOMEN AND MEN'S DIFFERENTIAL EXPERIENCES OF CLIMATE CHANGE

Agricultural-based livelihoods and forms of diversification are associated with particular gender roles. Climate change in drylands is shifting the nature of responsibility sharing and cooperation in the household across gender and generations⁷⁸. Increasing temperatures and changing rainfall patterns are contributing to ecosystem degradation, poor animal condition, disease outbreaks, and market exclusion. These factors create a vicious cycle of degradation, increased livestock emissions, reduced habitat sequestration potential, and reduced livelihoods for the most vulnerable populations in Botswana living in last-mile communities. As in other contexts, these impacts have significant inter- and intra-gender differences in how men and women are affected, and how they adapt.

Under increased ecosystem degradation, poor animal conditions and disease outbreaks, women (and poor, single women in particular) in the target districts tend to carry a higher burden of impact, due to i) women's pre-existing household child- and elderly-care responsibilities; ii) limited options to pursue alternative livelihoods through migration, due to care responsibilities and other gendered constraints on mobility, personal security/safety, and autonomy; iii) a patriarchal 'devaluing' of traditional women's activities in smallstock, backyard gardens, secondary industries or care work, that leads to diversion of household resources (financial, or in-kind like water) towards supplementing losses in male-dominated activities/livelihoods; iv) supply impacts on water- and woodfuel- collection, typically youth and women's roles, which create additional time burdens and may expose women and girls to safety risks (in the event of travelling far for resources); v) limited provision of social protection for secondary industry and/or care responsibilities ('a hole in the social protection net').

The ASSAR research highlighted gender as one of many social factors influencing responses to climate change. For instance, gender, age and marital status interact to shape how households manage risks⁷⁹, as described above. As a result of frequent droughts, as well as the human and wildlife conflict that ensued, women and men in the project districts employ the following ways to adapt and survive the negative impact of climate change on their livelihoods.

4.1 HOW WOMEN ARE IMPACTED BY, AND ADAPT TO DROUGHT

4.1.1 Livelihoods

Consultations revealed that, regardless of status (married, single, FHH, MHH) women were largely responsible for the finances and management of the household and dependents if present. This includes groceries and water, as well as clothing and school fees. In the event of reduced women's income or poor performance of crops/smallstock, women described self-sacrifice or taking on additional burdens to continue to provide for the household's needs. Meanwhile, loss of male income (death of livestock, for example) was dispersed across the household, with women carrying additional burdens in that case as well.

Some women depend on Government programmes such as Ipelegeng and the food Basket, both of which are government poverty alleviation programmes, while others receive remittances from

⁷⁸ University of Cape Town, South Africa, Adaptation at Scale in Semi-Arid Regions (ASSAR), 2014–2018, "Gender Is One Of Many Social Factors Influencing Responses To Climate Change An Assar Cross-Regional Insight" <http://www.assar.uct.ac.za/social-differences>

⁷⁹ *ibid* ASSAR

relatives for food, clothing and school fees. Consultations showed that where men are more mobile or societally enabled to transfer to new livelihoods, women tended to have fewer opportunities as such, and more often ended up relying on social protection schemes. Some (often poorer/FHH) women use donkeys for draught power as they cannot afford diesel for tractors. Such women are outside of the net of social protection, as the government pays the tractor owner (after the crops have germinated) as part of the ploughing assistance scheme. Those that use donkeys cannot benefit from the government ploughing assistance programme, as this method of planting does not meet the required standards. This gap tends to regressively impact poorer men and women, as well as single parents or widows.

Women say they are more likely to dispose of their assets, for instance sell all livestock, and borehole (using the children's inheritance). This is done with the intention to restock when conditions improve, but the money is normally used to support families or buy food and it is never recovered to restock. Goats generally do not have a market, except within Poverty Eradication and LIMID and these two programmes can no longer cope, i.e. cannot absorb all the small stock as the supply outstrips the demand. Additionally, goat meat is said to be expensive, and cannot be eaten everyday due to its strong taste, unlike beef, hence the slow sales. However, many people consume goat milk. Some farmers have large numbers of goats and cannot offload due to lack of market access.

Some women are said to migrate in search of employment, while some resort to sex work as a means survival, which exposes them to various risks. Women in semi-arid regions of Africa are not lacking in their sense of agency, but in the context of stress and few livelihood options, their agency is directed towards short-term survival and coping⁸⁰. The challenges presented by frequent droughts in the project districts have made many able bodied women to turn to the main source of income available in Botswana's rural areas which is Ipelegeng. Ipelegeng is labour intensive, and is seen as demeaning by others. Some women are said to turn to sex work to earn income. Since women need to support their families, they tend to overlook some of the negative issues and keep their eye on the ball, i.e. short term survival of themselves and their families.

Respondents mentioned that the hardships brought about by loss of livelihoods from livestock has led to some men deserting their families in search of work and sometimes never coming back. Some women also migrate looking for work while others turn to sex work to make ends meet. The vulnerabilities induced by climate change and the responsibilities regarding domestic care work, including looking after children, means that women, more than men turn to Ipelegeng as their main source of income. The additional burden of providing food and other necessities for the family shows that women in the project sites struggle with poverty more than men. Some say ploughing fields where they used to regularly produce crops for the households are now lying fallow.

If household income is reduced, such that mothers can no longer afford school or creche childcare, the mothers will either stay home with the children (missing work, or duties outside of the home) or transfer the burden of care to elderly relatives. The project team observed young children being brought with to Kgotla meetings, by older family members, for instance.

⁸⁰ University of Cape Town, South Africa, Adaptation at Scale in Semi-Arid Regions (ASSAR), 2014–2018, "Gender Is One Of Many Social Factors Influencing Responses To Climate Change An Assar Cross-Regional Insight" <http://www.assar.uct.ac.za/social-differences>

A project such as the GCF Botswana project will support safe and remunerative livelihood diversification, thus making the women agents of longer-term adaptation in the three districts.

4.1.2 Livestock

Women in Bobirwa said they utilise their indigenous knowledge to estimate when goats are about to give birth, and keep and feed them within the yard until they do so. The same is done with new born goats, and this has reduced the number of mortalities caused by predators. They also supplement feed from their own resources i.e. those who can afford to do so. Sometimes there is no market for livestock due to the Foot and Mouth Disease outbreak.

Women in Sehithwa have migrated some goats to the nearby forests and purchase water from bowsers which is unaffordable. Women in the Kgalagadi are participating in the Department of Agriculture Research project that produces livestock feed by grinding acacia pods.

4.1.3 Water

Livestock is watered from boreholes. Women, as well as men farmers, have dug wells on river beds for the livestock. *Lesoko* (a hand dug well) is made by both women and men on the riverbeds. To make this, a bucket is lowered into the well to collect water for the livestock. Others request from neighbours when the hand-dug borehole runs dry. Many goats are watered from potable water from household or public standpipes in all the three districts. Some pay monthly rental for boreholes, which they say are sometimes low yielding. Some women mentioned that if they had resources they would drill their own boreholes, fence, fodder and keep livestock in the collective grazing areas proposed. In Kgalagadi a group of women and men syndicate have received assistance from the Government to reticulate water for the benefit of their livestock.

4.2 HOW MEN ARE IMPACTED BY, AND ADAPT TO DROUGHT

4.2.1 Livestock

Men do the following to ensure that their livestock survives until the next the drought has passed:

- A few men particularly in Bobirwa say they have relocated their livestock to better rangelands. One farmer in Bobirwa, out of desperation, mobilised his livestock to an area within a reserve, but faced risk of FMD. Rich rangelands (good rangeland area) also have a lot of elephants, as well as Zimbabwean farmers/herders who are said to steal cattle.
- Undertake supplementary feeding and fodder production such as lablab. Some use crop residue and natural vegetation to feed livestock.
- Reduce stocking capacity through sale of non-productive animals (destocking). This is not the preferred choice for many.
- Resort to small stock production.
- Those with vegetable gardens patrol all day and night to keep elephants away, since the elephants come into the village.
- Grow drought resistant crops with early maturity.

4.2.2 Water

To adapt to water scarcity for the livestock the men:

- Use boreholes which are used by both households and livestock which can create risk of disease. The minerals from the groundwater (from the borehole) are said to cause diarrhoea in some cases.
- Others dig temporary wells in rivers for households and livestock — these are sometimes washed away by rain.
- They also collect rainwater in Jojo tanks that were received from a government programme for backyard gardens. When water is low, they fill up the Jojo tanks and take them to the cattlepost, but they are charged for this at the end of the month and overdrawing that borehole increases the water pressure for the whole village.
- In Bobirwa during drought some migrate livestock or take water out of the river using pumps.
- Join syndicates to access water for livestock.
- Those with financial resources buy water from bowser owners.

5 CONCLUSIONS

This gender analysis was conducted to assess implications of the changing climate, particularly with regard to frequent drought, on women and men's current roles in households, access to, and control of, resources as well as their ability to make decisions in the households and communities within the project sites. The patriarchal nature of Botswanan society has led to restrictions on women's' abilities to influence decision-making, their ownership/control of land and assets, and access to improved livelihood opportunities. It has also resulted in widespread gender based violence (GBV).

Discussions during the gender assessment indicate that women are more vulnerable to climate change as a result of their gender roles — which are highly focussed on looking after children and other family members, while they depend on subsistence agriculture to meet the family's needs. Frequent droughts which have led to poor crop harvests have in-turn led to food insecurity and a high reliance on Ipelegeng — a government poverty eradication scheme which is rotational in many of the villages, pays ~US\$ 50 per month and, at times, with payment delays. As crops fail due to drought, children can suffer from malnutrition. For instance, women in Bobirwa have indicated that their children currently do not have enough to eat and rely on school meals during term.

Veld products (wild fruit and herbs) that some women and men used to harvest and sell have also become scarcer. Similarly, the mophane caterpillar, which is a source of protein and income for many communities in Bobirwa and some northern parts of the country, has also been greatly affected by poor rains, which have led to the tree species (mophane tree) that carry the caterpillar becoming unproductive. Additional stressors for women can also be seen in increased workloads for those who own goats, as they have to collect additional water for the goats from public standpipes.

As men rely a great deal on cattle production as a means of generating income, they are exposed to loss of large numbers of cattle, particularly in the last three years due to reduced communal grazing land and lack of water for the livestock. Male farmers, who are the main managers of cattle are greatly affected by the reduced grazing land while women, who mainly manage small stock such as goats may not be as negatively impacted as goats are browsers. Men's incomes from cattle-based livelihoods, have been dented as much of the income has to be ploughed back into cattle production in the form of supplementary feed. Spending on supplementary feed and water for the cattle at the expense of the family is said to lead to potential conflict (including GBV) in the home. It also leaves the wives with the responsibility to generate income via Ipelegeng, for instance, to support the family with groceries. The impact of climate change, resulting from loss of cattle due to never ending droughts has made many male farmers, who are also considered to be bread winners in their families to become vulnerable, leading to mental health issues such as stress and anxiety. This can cause alcohol-related issues as well as GBV.

Data and information collected during the gender assessment shows that both gender groups are struggling to adapt to the frequent droughts. They have lost some or all of their livestock (cattle and goats). Wildlife and human conflict has also increased, e.g. in the past five years elephants have invaded communities in Bobirwa (Bobirwa sub-District) and Ngamiland as they look for water, eating and destroying crops and sometimes causing injuries and even death during the invasion. Livestock predators have also encroached communities and can maim or

kill livestock. This has left many members of communities in the project sites concerned about their safety, feeling vulnerable, and in some communities herding of cattle has been stopped completely because of the human, wildlife and livestock conflict. The invasion of the wildlife has also led to an increased workload for some male farmers as they have to spend more time guarding crops and livestock or chasing elephants away.

Discussions also revealed that the intense heat from increases in temperatures and heat waves have led to more mosquitos and an increase in malaria incidences, even out of malaria season. The high temperatures have also led to some skin-related medical issues and death from heat stroke. Those working in Ipelegeng say they are affected the most by the heat as they walk home after Ipelegeng or to the cattle post to kraal in the afternoons. Some say the year 2019 has been the worst.

Women are more likely to worry about what the children are going to eat, hence have two jobs, Ipelegeng and keeping livestock, in particular goats. Relocating livestock to better pastures is evidence of mobility and security of the men. Women cannot relocate their goats, cattle nor their children. Digging boreholes by hand is an added physical burden on women. Dual-income, or diversified households, may have more adaptive capacity in the face of climate change. Single women tend to be poorer, but were also notably more independent by necessity and so more resilient to baseline challenges but not climate change.

Women, could be said to be more affected than men by climate change impacts such as drought as they have added responsibilities for feeding their families. Culturally women are responsible for taking care of children, the elderly and sick and their dependence on groceries purchased on credit and an insufficient Ipelegeng salary means they will be unable to improve their own lives. HIV/AIDS has also put a lot of strain on women, who are the main care givers to the sick. Many women face the additional burden of acting as a 'nurse' to an HIV/AIDS relative, while continuing to take care of the rest of the family. Hospices, and the introduction of antiretroviral treatments, have reduced this workload. Women are also more vulnerable to GBV, with almost two thirds of women having already experienced GBV –predominantly as Intimate Partner Violence (IPV) – in their lifetime. This has a compounding affect and further decreases women's overall resilience to the projected impacts from climate change.

Because women are more likely to be employed in Ipelegeng, and work from morning until noon or 1pm, they are also likely to be vulnerable to loss of livelihoods as they are unable to take better care of their livestock and crops while they are working at Ipelegeng. The women are also highly vulnerable should Government decide to end the Ipelegeng programme. The proposed project provides a lifeline for many of the poor women in the project sites who will have the opportunity to be employed as Ecorangers (trained herders) as well as find ways to diversify from Ipelegeng by starting some income generating activities from the main grazing/herding programme.

Men are likely to worry about their livestock and would want to put in place measures to ensure that their herds survive. Discussions with members of the community who own livestock revealed that both women and men have lost some livestock as a result of drought or disease caused by the aftermath of heavy rains in 2017. From both the women and men's experiences, it is clear that drought is becoming more frequent and this is taking a toll on livelihoods.

Many women in rural areas do not own productive land and rely on ploughing fields (when the rains are good) to produce crops. Some women in in the project districts have suggested that

ploughing fields that are lying idle could be leased to the proposed project for collective grazing zones as well as to grow fodder. Women who own ploughing fields will benefit if they could lease the land to the project and earn income as a result. Men say the 6 km radius that the law allocates to borehole owners has also added to reduced grazing land for communal farmers. The project will also help farmers who are experiencing reduced grazing land through grazing agreements and better livestock management, such as destocking, to ensure that the available land's carrying capacity is able to support their livestock.

The already inadequate grazing land is said to also have been reduced by the invasion of wildlife. Conflict between wildlife and people has become a major issue recently in Ngamiland and Bobirwa. In Gobojango, in Bobirwa, there are stories of elephants ruining ploughing fields, and students failing to attend evening studies as elephants camp at the school at night. Additionally, the women no longer herd due to the possibility of elephant attacks and increased human wildlife conflict has led to a reduction in safety for all members of the community.