



Promoting Beneficiation and Value Addition from Genetic Resources through Enhanced Capacity for Research and Development and the Protection of Traditional Knowledge in Botswana

Part I: Project Information

GEF ID

11035

Project Type

MSP

Type of Trust Fund

GET

CBIT/NGI

CBIT **No**

NGI **No**

Project Title

Promoting Beneficiation and Value Addition from Genetic Resources through Enhanced Capacity for Research and Development and the Protection of Traditional Knowledge in Botswana

Countries

Botswana

Agency(ies)

UNDP

Other Executing Partner(s)

DEA - Ministry of Environment, Natural Resources Conservation and Tourism (MENT)

Executing Partner Type

Government

GEF Focal Area

Biodiversity

Taxonomy

Influencing models, Stakeholders, Gender Equality, Capacity, Knowledge and Research, Focal Areas, Biodiversity, Supplementary Protocol to the CBD, Access to Genetic Resources Benefit Sharing, Transform policy and regulatory environments, Convene multi-stakeholder alliances, Strengthen institutional capacity and

decision-making, Type of Engagement, Partnership, Information Dissemination, Participation, Beneficiaries, Indigenous Peoples, Civil Society, Non-Governmental Organization, Academia, Community Based Organization, Private Sector, Capital providers, Financial intermediaries and market facilitators, Communications, Awareness Raising, Gender results areas, Knowledge Generation and Exchange, Capacity Development, Access and control over natural resources, Participation and leadership, Access to benefits and services, Gender Mainstreaming, Gender-sensitive indicators, Women groups, Sex-disaggregated indicators, Learning, Adaptive management, Theory of change, Indicators to measure change, Innovation, Knowledge Generation, Targeted Research

Sector

Rio Markers

Climate Change Mitigation

Climate Change Mitigation 0

Climate Change Adaptation

Climate Change Adaptation 0

Duration

48 In Months

Agency Fee(\$)

158,268.00

Submission Date

5/17/2022

A. Indicative Focal/Non-Focal Area Elements

Programming Directions	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
BD-3-9	GET	1,665,982.00	8,650,000.00
Total Project Cost (\$)		1,665,982.00	8,650,000.00

B. Indicative Project description summary

Project Objective

To enhance the capacity for genetic resources research and development to promote beneficiation and value addition and to protect traditional knowledge.

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
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Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
1. Strengthening the national framework and institutional capacities for Access and Benefit Sharing (ABS) implementation	Technical Assistance	<p>1.1. Gender-sensitive implementation of ABS enhanced through improved management and operational capacity of government agencies</p> <p><i>Indicated by:</i></p> <p><i>a) ABS regulations developed, endorsed, and guiding ABS bioprospecting and beneficiation from ABS in Botswana.</i></p> <p><i>b) Improved capacity of relevant government agencies as measured using the UNDP ABS Capacity Development Scorecard</i></p> <p>1.2. Local communities capable of effectively monitoring</p>	<p>1.1.1. ABS regulations on Prior Informed Consent (PIC), Mutually Agreed Terms (MAT), and Material Transfer Agreement (MTA) developed to facilitate implementation of the ABS Law to be enacted in 2022.</p> <p>1.1.2. Training programme with a gender focus developed and implemented for advancing the Nagoya Protocol on ABS, including manuals and certified ABS trainers (the certification mechanism will be defined as part of the PPG).</p> <p>1.1.3. National Bioeconomy[1] Strategy developed, promotes bioprospecting and benefit sharing from the economic use of genetic resources.</p> <p>1.2.1. A Community Monitoring programme established and operationalized (with monitors trained and equipped to monitor ABS agreements and regulations under guidance of local leaders [Kgosi]).</p> <p>1.2.2. Standards for developing Biocultural Community Protocols (BCPs) agreed with indigenous and local communities (ILCs) based on the guidelines for obtaining PIC and MAT.</p> <p>1.3.1. One-stop-shop ABS permitting procedure to improve inter-institutional coordination developed and operationalized including:</p> <p>a) E-permitting system (encompassing scientific research, bioprospecting, production development, and associated TK).</p>	GE T	206,688.00	1,020,500.00

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
2. Enhancing capacities for research and product development (R&D) based on GR, associated TK and knowledge management	Technical Assistance	<p>2.1. Documentation of GR (and source species) and associated TK facilitates R&D and protection of GR and TK</p> <p><i>Indicated by:</i></p> <p><i>a) Searchable database of GR and associated TK available via web platforms such as the Botswana ABS dashboard.</i></p> <p>2.2. Capacity for undertaking GR-related R&D enhanced by strengthening the domestic research infrastructure.</p> <p><i>Indicated by:</i></p> <p><i>a) Increased technical research capacity as measured</i></p>	<p>2.1.1. Field surveys/inventories of GR and associated TK compiled, including source species, known uses, known or potential GR value, location, conservation status, etc.</p> <p>2.1.2 National database developed and data collated.</p> <p>2.2.1. National GR R&D Plan developed, adopted and funded.</p> <p>2.2.2 Resourcing Plan and training curriculum (including an internship programme that targets both males and females equally) to advance the R&D agenda developed and activated (including institutional arrangements for coordination).</p> <p>2.2.3. Selected Research Centres and universities better equipped for bioprospecting and product development.</p> <p>2.3.1 Species of interest for R&D and with high potential for commercial value to be included as part of a demonstration project selected and prioritised. .</p> <p>2.3.2. Partnership between national and international researchers established for the implementation of an ABS demonstration project. .</p> <p>2.3.3. Management plan developed for a prioritised species.</p> <p>2.3.4. Sustainable skills transferred to local communities (ABS project and financial management, marketing, negotiation of ABS agreements, biodiversity conservation and sustainable use, access to genetic resources and TK associated</p>	GE T	1,206,191.00	6,337,636.00

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
3. Monitoring and evaluation (M&E)	Technical Assistance	<p>3.1: M&E assesses project impact and guides adaptive management.</p> <p><i>Indicated by:</i></p> <p>a) 100% of the M&E targets are met.</p> <p>b) 100% of plans related to UNDP's environment and social safeguards (SES) are met.</p>	<p>3.1.1. M&E Plan, implemented.</p> <p>3.1.2. Gender Action Plan, Stakeholder Engagement Plan and other management plans related to the SES implemented.</p>	GET	101,650.00	505,500.00

Sub Total (\$)	1,514,529.00	7,863,636.00
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Project Management Cost (PMC)

GET	151,453.00	786,364.00
Sub Total(\$)	151,453.00	786,364.00
Total Project Cost(\$)	1,665,982.00	8,650,000.00

Please provide justification

C. Indicative sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Recipient Country Government	Government of Botswana/Ministry of Environment and Tourism	In-kind	Recurrent expenditures	4,000,000.00
Recipient Country Government	Government of Botswana/Ministry of Environment and Tourism	Grant	Investment mobilized	1,200,000.00
Civil Society Organization	Cheetah Conservation	In-kind	Recurrent expenditures	100,000.00
Recipient Country Government	Companies and Intellectual Property Authority	In-kind	Recurrent expenditures	600,000.00
Other	Botswana International University of Science and Technology	In-kind	Recurrent expenditures	750,000.00
Other	University of Botswana	In-kind	Recurrent expenditures	1,000,000.00
Other	Botswana University of Agriculture and Natural Resources	In-kind	Recurrent expenditures	700,000.00
GEF Agency	UNDP	In-kind	Recurrent expenditures	150,000.00
Civil Society Organization	Birdlife Botswana	In-kind	Recurrent expenditures	150,000.00
Total Project Cost(\$)				8,650,000.00

Describe how any "Investment Mobilized" was identified

Grant USD 1,200,00 from Government of Botswana/ Government of Botswana/Ministry of Environment and Tourism - the mobilised resources were identified through the 11th National Development Plan (2017-2023).

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

Agenc y	Tru st Fun d	Countr y	Focal Area	Programmi ng of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNDP	GET	Botswa na	Biodiversi ty	BD STAR Allocation	1,665,982	158,268	1,824,250. 00
Total GEF Resources(\$)					1,665,982. 00	158,268. 00	1,824,250. 00

E. Project Preparation Grant (PPG)
PPG Required **true**

PPG Amount (\$)
50,000

PPG Agency Fee (\$)
4,750

Agenc y	Trus t Fun d	Countr y	Focal Area	Programmin g of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNDP	GET	Botswan a	Biodiversit y	BD STAR Allocation	50,000	4,750	54,750.0 0
Total Project Costs(\$)					50,000.00	4,750.0 0	54,750.0 0

Core Indicators

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

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	2,000			
Male	1,000			
Total	3000	0	0	0

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

Part II. Project Justification

1a. Project Description

1) The global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description).

Botswana is a semi-arid, landlocked country located in Southern Africa with a total area of 581,730 square kilometres (km²). Botswana shares its borders with Namibia, Zambia, Zimbabwe, and South Africa. The total population is approximately 2.4 million people, making Botswana one of the world's least densely populated nations. Botswana encompasses 7 of the 14 global ecoregions (as defined by WWF) that support an abundance of biological diversity. The country has a remarkably diverse array of ecosystems and one of the greatest unspoilt inland Deltas, the Okavango, in the world. For a country with a semi-arid climate, persistent droughts, little relief, two perennial rivers, and a largely homogenous soil of Kalahari sand, the diversity of habitats and ecosystems that exists is both unique and remarkable.

Botswana is home to a rich biodiversity including 2,800 plant species, 160 mammal species, 587 species of birds, 99 species of fish, 44 species of amphibians, and 131 species of reptiles. Botswana's population utilises genetic resources (GR) for a variety of purposes, which includes medicinal, culinary, and cosmetic purposes. Since time immemorial, the Botswana have developed a wealth of traditional knowledge (TK) over these GR that was essential for their survival

Despite having a strong economy, Botswana continues to have a high unemployment rate, which stands at 23.8%. Poverty is particularly pronounced in rural areas with youth, women, and girls mostly affected. In rural Botswana where poverty is persistent, the economy remains focused on subsistence agriculture and livestock production. The livestock and agriculture sector constitutes less than 5% of the Gross Domestic Product (GDP). Therefore, there is an urgent need to diversify the rural economy with a goal towards sustainable rural livelihoods.

Threats to Genetic Resources and Underlying Causes

According to the National Biodiversity Strategy and Action Plan (NBSAP) 2016, the main threats to GR and the potential impacts of their loss are: a) **Habitat destruction, habitat conversion, and disturbance**. In addition to being a principal cause for the loss of species and ecosystem services in both aquatic and terrestrial environments, habitat destruction and degradation result in the reduction of livelihood, especially for the rural poor. The main cause for this threat are changes in land use associated with settlement expansion and agricultural expansion. Livestock production supports a significant proportion of Botswana's rural population and crop production remains the most common

subsistence activity in rural areas[1]¹. b) **Unsustainable use of wild plant species.** This threat has localized impacts on GR, putting pressure on plant species with medicinal and cultural value, due primarily to overharvesting of economically valuable plants (for example the Devils? Claw [*Harpagophytum procumbens*]). Veld products, including wild plants, are central to the livelihoods of rural communities in Botswana, particularly the dry land areas as well as the wet ecoregions of Zambebian flooded grasslands and woodlands[2]². The loss of key species will ultimately result in the reduction in availability of resources that are important to rural livelihoods. The main cause for this threat are poverty and insufficient management and enforcement of legislation. c) **Climate change.** Botswana is considered highly vulnerable to climate change. The country has observed considerable temperature increases and since the 1970s and average temperatures have increased 1.5°C, with central, arid parts of the country?s interior observed to have increased by as much as 2°C. Increased temperatures are expected for Botswana, with mean monthly temperature changes expected to increase by 2.5°C by 2050s and by 5.0°C by end of the century. Although trends in precipitation for Botswana remain highly variable, there is indication of overall reduction in precipitation for the southern Africa region, characterized by below normal rainfall and more frequent droughts. While Botswana?s projected precipitation has a high degree of inter-annual variability and high degrees of uncertainty, it is expected that overall, average rainfall will decrease across the country[3]³. Increases in daily temperatures will likely have negative impacts on ecosystems, particularly over the dryland ecoregions, especially the Kalahari xeric savannas. In addition, an increase in extreme weather events (floods during the rainy season and drought during the dry season) will result in the reduction of ecosystem services and natural resource availability, bringing about negative consequences for rural livelihoods; women and children are among the highest at-risk groups[4]⁴. For biodiversity, linkages between wet and dry season ranges will become increasingly important. Botswana is believed to be a net sink for greenhouse gases[5]⁵.

The role of ABS

In 2013, Botswana became signatory to the Nagoya Protocol (NP) on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation (ABS). The NP has subsequently been integrated into the country?s NBSAP (2016), of which the key goals to be achieved by 2025 are to ?secure fair and equitable access to the benefits of biodiversity? and that ?the Nagoya Protocol is domesticated and operational, and specific actions that ensure fair and equitable access and benefit sharing are implemented.? By implementing the NP, Botswana will make progress in the effective implementation of the 3rd objective of the Convention on Biological Diversity (CBD), namely ?the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding.?

There is documented wide use of many species by local communities for culinary and cosmetic purposes, and for healing diseases (such as cancer, common flu, headaches, low libido, allergies, sexually transmitted infections, dislocated bones, acids, diarrhoea, low and high blood pressure, stroke, animal diseases, etc.). These practices are facilitated by, among others, mostly the older generation (as knowledge holders) and traditional healers (which include traditional paediatricians, oncologists, family physicians, veterinarians, obstetricians and gynaecologists, etc). In addition, during the last decade there has been some interest in conducting research on the country's GR; this includes a study undertaken by Botswana International University of Science and Technology (BUIST) that obtained extracts from 621 plant samples representing 214 species from 71 plant families in Botswana and that were qualitatively screened for antibacterial, antifungal, and antiprotozoal activities, as well as for α -glucosidase and protease inhibitory properties. The results offered a first bioactivity profile of medicinal plants in Botswana with close to half of the samples (47%) provided by traditional healers and community members from the Kweneng and Ngamiland Districts.[6]⁶

Despite the government's interest in implementing the NP on ABS, progress has been limited. There is still limited scientific information available on the GR and the associated TK in the country; the NBSAP (2016) indicates that there is deficiency in data on the distribution of species and hence the monitoring of effects of harvesting or other impacts on those species that have been proven to be of use and/or are already in use by communities. Despite these limitations, Botswana's biological richness, together with the associated TK, are considered a valuable basis for providing benefits through access to GR to enable economic growth and development, contributing to the livelihoods and well-being of the country, and opportunities for biodiversity conservation and its sustainable use. The project proposed herein is part of Botswana's efforts to achieve this goal.

Since the accession of NP on ABS, progress in its implementation has primarily happened within the context of the GEF-UNDP Global ABS project *Strengthening Human Resources, Legal Frameworks and Institutional Capacities to Implement the Nagoya Protocol* (GEF Project ID 5731), which among other results included a Draft ABS Bill, which is expected to be adopted into Law in 2022. However, specific regulations for the implementation of the Law have not yet been discussed. Botswana also has legislation on resources management that is relevant to the NP. This includes legislation regarding land tenure (Land Control Act, State Land Act, and the Tribal Land Act), which is important because most of the GR are found on State land, tribal/customary land, and private land tenure systems governed by different pieces of legislation that give rise to varied user and ownership rights; and legislation related to biodiversity conservation and natural resources management, including the Wildlife and National Parks Act (1992), the Forest Act (2005), the Agricultural (Conservation) Resources Act (1972), and the Plant Protection Act, S.I. 85 of 2017. Other pertinent legislation includes the environmental, cultural, and heritage protection legislation such as the Environmental Assessment Act (2011) and the Monuments and Relics Act, which require due diligence for any project and due respect given to TK. Additionally, trade and development legislation is also relevant, particularly the Industrial Property Act (2010) and the Customs and Excise Duty Act.

The baseline assessment conducted for the development of this concept note indicated that there has not been any publicly known information on ABS agreements within the framework of the NP and the

commercialisation of GR with benefit sharing and R&D effort are still incipient. In addition, there are no mechanisms in place to protect TK if GR were to be accessed. Although non-commercial collaboration has occurred between international and national entities and communities, it was with the goal of conservation and use to improve community livelihoods through enterprise development. The most notable public collaboration was under the Useful Plants Project (PPU) with the Royal Botanical Gardens at Kew, which among other things produced a list of 352 species that are useful to local communities. The collaboration also established seed banks in the country and at the Millennium Seed Bank (MSB) administered by Kew Gardens. The PPU is part of the broader Millennium Seed Bank Project (MSBP); projects under the MSBP are governed by legally binding ABS agreements negotiated between Kew and partner organizations and governments.[7]⁷

There is a need to realize the potential that can be developed from Botswana's GR through strengthening the legal framework for implementation of the NP, developing capacity for GR-related ABS, creating opportunities for ABS-related benefit-sharing to support community livelihoods and to protected TK associated with GR.

The long-term solution

The **long-term solution** consists of a strategy for the delivery of multiple global environmental benefits (GEBs) by strengthening the national framework and institutional capacities for ABS implementation and enhancing capacities for product R&D based on GR and associated TK. The dissemination of knowledge and experiences that will result from the implementation of this strategy will contribute to replication and upscaling of best ABS practices. This strategy builds on the opportunities and lessons learned during implementation of the Global ABS Project (GEF Project ID 5731). However, currently there are three barriers that prevent this objective from being reached.

<p>Incomplete regulatory framework and weak institutional and local capacity for the implementation of the NP on ABS</p>	<p>As part of the GEF-UNDP Global ABS project <i>Strengthening Human Resources, Legal Frameworks and Institutional Capacities to Implement the Nagoya Protocol</i> (GEF Project ID 5731) an ABS Bill for Botswana was drafted and is expected to become law in 2022; however, it does not have the regulations in place to fully enforce. Therefore, without the proper regulations there will not be clear guidance, especially for providers and users on certain aspects of the law such as those related to prior informed consent (PIC) and mutually agreed terms (MAT). Knowledge regarding the NP on ABS at the national and district levels continues to be limited. At the GR regulatory and management levels, capacity limitations include legal administrative (including permit/license processing), coordination of key structures, planning and budgeting resources, and the monitoring of biological resources and reporting. There is no training strategy or training tools to strengthen the capacity of key institutional stakeholders such as National ABS Committee, Customs officials, and District Councils for ABS regime implementation.</p> <p>Similarly, there is limited capacity and knowledge about the NP on ABS among local communities and knowledge holders; they are not aware of the country's accomplishments to-date in strengthening the national ABS framework. There is a need for better education and awareness in the area of GR management, accessing relevant biotechnologies, trade/business measures, linkages with conservation programmes, and negotiations on ABS agreements. This limited knowledge affects the ability of local communities and knowledge holders to effectively negotiate with GR users (e.g., research institutions, universities, and private companies) and to monitor implementation of the ABS agreements and regulations. GR and associated TK are still being illegally accessed and utilised without any benefit sharing with the communities and the conservation mandates.</p> <p>Although the country already has some experience developing BCPs under the Global ABS project, (GEF ID 5731), the Kgetsi Ya Tsie Tswapong Hills Women's Resources Enterprise Community Trust BCP (morula tree ? <i>Sclerocarya birrea</i>) and the Matute-a-Mongongo Women's Group (mongongo oil ? <i>Schinziophyton rautanenii</i>), clear guidelines for ILCs to develop BCPs are still lacking and potential users of GR need to be made aware of the role of BCPs in providing clear terms and conditions to regulate access to TK and GR. Finally, the country lacks a mechanism that serves as a single entry point for ABS permitting for GR users and that can facilitate interinstitutional coordination to effectively process and approve permits for monitoring compliance.</p>
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<p>Limited information on GR, skills, and opportunities for R&D and lack of mechanisms for the protection of TK</p>	<p>Despite Botswana's rich GR, there is lack of detailed scientific information about these resources, including the location where the GR are found, potential uses and values, associated TK, conservation status, and most importantly the genetic material that would allow their utilisation (e.g., scientific research, and/or commercial development). In addition, more information about sharing the benefits of such utilisation, which may support economic development, community livelihoods, and strengthen and incentivise conservation is needed. Field surveys and biological/GR inventories and associated TK are lacking, as well as a centralised repository of GR-related information for easy access by different stakeholders (including providers and users of these resources) as well as by environmental authorities to help enforce their use in accordance with the NP on ABS. Current research on GR and their active compounds has been only done at low levels by academia and other research institutions; the country lacks a strategy that will guide and promote R&D. Similarly, there is a need to assess the existing technical and scientific capacities in the country to engage in R&D and to identify training and other resources needed so that the scientific community is well positioned to participate in ABS-related research and/or product development. Although there are several biological research institutions in the country (e.g. Botswana International University Science & Technology, University of Botswana, Botswana University of Agriculture and National Resources, etc.) that need to be better equipped for bioprospecting and conducting associated research and taxonomic studies that will provide scientific information to support the implementation of ABS agreements.</p> <p>Despite the country's interest in R&D, there have been limited opportunities for establishing institutional, scientific and business partnerships that can result in the</p> <p>cooperation needed for the utilisation of GR and sharing of associated benefits. Currently, there are no publicly available ABS agreements in the country. There is a need for developing scientific criteria to guide in the selection of priority species for R&D that can potentially lead to sustainable demonstration projects (value addition) with the aim of supporting community livelihoods and re-investing in biodiversity conservation, including support for implementing management plans for key species.</p> <p>At the local community level, skills and knowledge for participating in ABS initiatives that are gender-inclusive are lacking, including the negotiation of ABS agreements and further understating of the linkages between access to GR and TK and their utilisation and the conservation of biodiversity and the sustainable use of its components. Finally, the country lack mechanism to protect TK.</p>
<p>Lack of mechanisms for sharing knowledge and lessons learned regarding the NP on ABS limits replication and upscaling</p>	<p>There is a lack of mechanisms for the exchange of information concerning experiences and lessons learned from the implementation of the NP on ABS in the country. There is a need to develop information and communication tools that will facilitate knowledge sharing in a systematic and effective manner from the local community level to the national and international levels. These gaps limit the possibility of replication and upscaling of successful experiences locally, nationally, and regionally about ABS and biodiversity conservation and its sustainable use, and gender-related issues, as well as for transboundary cooperation where the same GR may be found within the territory of more than one country in southern Africa.</p>

2) The baseline scenario and any associated baseline projects.

The coordinating lead agency is Department of Environmental Affairs in the Ministry of Environment, Natural Resources Conservation and Tourism (DEA-MENT), which hosts the National ABS Focal Point. DEA's responsibility is to ensure the sustainable use of genetic resources while improving the livelihoods of communities. In addition, the Department of Forestry and Range Resources (DFRR) of MENT is in charge of issuing permits for the utilization of GR and/or associated TK. It also regulates veld products and devolves management and user rights for natural resources to local communities.

The Companies and Intellectual Property Authority (CIPA) of the Ministry of Investment, Trade and Industry plays a supporting role to ensure that ABS regulations (e.g., PIC and MAT) have been adhered to prior to registering of patents and plays a critical supporting role in ensuring that communities are aware that they must protect their TK. CIPA plays a critical supporting role in ensuring that communities are aware that they must protect their traditional knowledge. Furthermore, CIPA ensures that all ABS requirements particularly regarding free and prior consent and mutually agreed terms are in place before patents can be registered

In addition, there are multiple research Institutions (e.g., Department of Research, Science and Technology, Ministry of Ministry of Infrastructure Science and Technology [MIST], Department of Agricultural Research [DAR], University of Botswana: Department of Biological Sciences, University of Botswana, Botswana University of Agriculture and Natural Resources [BUAN], and Botswana International University for Science and Technology [BUIST]) that provide technical and scientific support on indigenous knowledge and information/databases regarding intellectual property for the protection of GR and TK, and conduct research on GR.

The Department of Rural Development of the Ministry of Local Government and Rural Development works for the economic benefit for communities and women's empowerment for the biodiversity conservation and its sustainable use.

Since the accession of NP on ABS, progress in its implementation has primarily happened within the context of the GEF-UNDP Global ABS project *Strengthening Human Resources, Legal Frameworks and Institutional Capacities to Implement the Nagoya Protocol* (GEF Project ID 5731). This 3-year project (October 2017 to March 2020) supported Botswana in the development and strengthening of national ABS frameworks, human resources, and administrative capabilities to implement the NP and which covered the following key aspects:

- ? Draft of an ABS Bill
- ? Establishment of a competent authority
- ? Authority to designate a National Focal Point
- ? Mutually agreed terms (MAT)
- ? Prior informed consent (PIC)
- ? Different forms of benefits, acquisition, and sharing thereof
- ? Registration system
- ? System for access to information

- ? Access permit system and requirements
- ? Export permit system and requirements
- ? Material Transfer Agreement (MTA)
- ? Management of shared transboundary knowledge and genetic resources
- ? Protection of community intellectual property rights
- ? Protection of certain rights of small holdings farmers
- ? Promotion of research and development initiatives and engagement of communities

The Botswana Draft ABS Bill provides a definition of "biological resources" that includes GR, organisms, or part of organism or populations. It defines "genetic resources" to mean any material of actual or potential value, and of plant, animal, microbial, or other origin containing functional units of heredity and the derivatives of such material. These two definitions provide for a GR and associated TK usage in a dynamic manner.

The Global ABS project also strengthened national and local capacities (including those of ILCs) for implementation of the NP on ABS. This included the development of an ABS training manual, a code of conduct on researching TK, a sui generis TK guide, two biocultural community protocols (BCPs), and training on ABS contract negotiation and drafting. In addition, an ABS communication strategy was implemented and several ABS-related conferences and webinars were held as part of actions for building trust between providers and users of GR to facilitate the identification of bio-discovery efforts.

Botswana as party to the Convention of Biological Diversity (CBD) has availed financial support to stakeholders through the National Environmental Fund (NEF). The NEF provides support to NGOs, CBOs and research institutions and registered group of persons with demonstrable community support. Since its establishment in 2010, the NEF has provided financial support to a total of thirty-seven (37) projects. An equivalent of USD \$1,612,752.49 has been directed to projects which are geared towards conserving biodiversity, including the sustainable use of genetic resources. The NEF continues to contribute positively to government efforts towards sustainable Biodiversity conservation. This includes Greening of Mathathane/Zwalamore by Mathathane Village Development Committee Greening of the Mathathane village and provision of environmental education. The project seeks to address the problem of deforestation within the village through re-vegetating the areas that have been cleared of vegetation. Environmental awareness will be done to encourage them to conserve the natural vegetation); Ntsweng Heritage Site Management Project (by Kgosi Sechele 1 Museum trust. The project focuses on the management and development of Ntsweng Heritage site.

3) The proposed alternative scenario with a brief description of expected outcomes and components of the project.

The baseline scenario and programs (described above) aim to support the domestication of the Nagoya Protocol. This is done through awareness and capacity building activities; strengthening governance and institutional mechanisms of resource owners and stakeholders involved in the domestication process.

The GEF increment will complement these programmes by strengthening the national framework and institutional capacities for ABS implementation and building national and local capacities for R&D.

The objective is to enhance the capacity for genetic resources-related for research and development to promote beneficiation and value addition and to protect traditional knowledge. The identified barriers and causal pathways are as follows:

Barrier 1: Incomplete regulatory framework and weak institutional and local capacity for the implementation of NP on ABS. *Causal Pathway 1:* improved management and operational capacity in government agencies and local communities, including a functional national permitting system for compliance with ABS regulations by providers and users of GR, leads to more effective and gender-sensitive implementation of ABS and increased awareness about the importance of GR, TK associated with GR, and the linkages between ABS and biodiversity conservation and its sustainable use.

Key assumptions: 1a) the ABS law will be approved in time to facilitate development of regulations; 1b) there is stability in human resources within government agencies who benefit from training activities and they satisfactorily apply their new knowledge and skills; and 1c) there is continued interest from potential providers and users of GR to engage in ABS-related activities proposed by the project.

Barrier 2: Limited information on GR, skills, and opportunities for R&D. *Causal Pathway 2:* Availability of ABS-related data guided through documentation of GR and associated TK together with increased capacity of national research institutions and local communities? skills and alliances with national and/or international partners result in a viable opportunity for research and product development based on GR and associated TK, and for the conservation of biodiversity in selected landscapes of the Ghanzi District of Botswana.

? Key assumptions: 2a) information on GR and associated TK are available in a timely manner; 2b) conditions (legal clarity, training, equipment, etc.) are conducive for research institutions to engage in bioprospecting activities and establishing partnerships for R&D; and 2c) technical and commercial feasibility exists for the development of one demonstration R&D project with women's participation.

Barrier 3: Lack of mechanisms for sharing knowledge and protecting TK and lessons learned regarding NP on ABS limits replication and upscaling. *Causal Pathway 3:* Improved information exchange mechanisms and systematisation and dissemination of lessons learned and knowledge about the implementation of NP on ABS leads to more informed and aware local communities about GR and about biodiversity conservation and the sustainable use of its components, and to active ABS dialogue and collaboration among countries in southern Africa.

? Key assumptions: 3a) there is willingness to share ABS-related information in a broad and timely manner; 3b) new knowledge and sharing of lessons learned among local communities contribute to their effective participation in the project and support for future R&D on GR and TK and for the replication and scaling-up of successful project experience; 3c) the project team and the implementing agency are effective in engaging local communities and other stakeholders, including women and other vulnerable groups.

It is also assumed that climate change and variability will be within ranges that do not significantly affect the outcomes of the project and that the COVID-19 pandemic will recede. The proposed

pathways are based on the analysis of structural/root causes and barriers. The supporting outputs and outcomes for each pathway are illustrated in Figure 1, which illustrates the Theory of Change (ToC) for this project. These links, and the assumptions that they are built upon, are sufficiently explicit and properly address the problems and barriers, as described above.

The project's ToC has been constructed following the recommendations of the Theory of Change Primer (STAP document 2019). The ToC will serve multiple objectives, such as: a) improving the project's design during the PPG phase and supporting adaptive management during implementation; b) engaging all stakeholders and developing ownership during project design and implementation; c) communicating the rationality of the project's goals, outcomes, and outputs to relevant internal and external audiences; and c) ensuring that adequate data are collected to enable sound M&E throughout the life span of the project and beyond. The ToC will be further refined as part of the PPG and as a result of a consultation process with key stakeholders, including women and other special interest groups such as traditional healers etc.

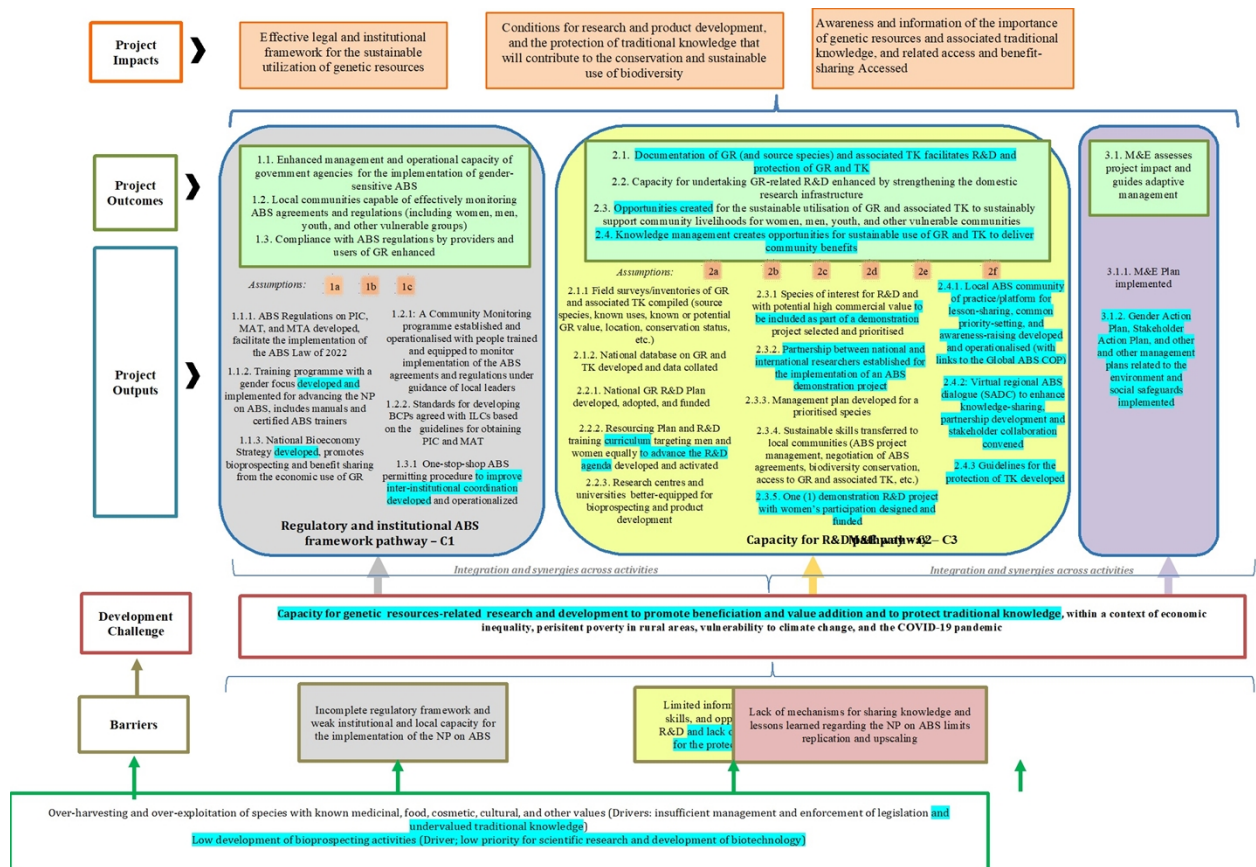


Figure 1. Theory of change (for assumptions please refer to text).

Project components

Component 1: Strengthening the national framework and institutional capacities for ABS implementation.

This component will address capacity barriers that currently constrain successful domestication of the NP on ABS. With support of the GEF (GEF Project ID 5731), Botswana has developed a Draft ABS Law that is expected to be adopted in 2022; however, the law lacks operational regulations. To effectively implement this legislative instrument, the project will support development of regulations that will provide operational clarity on key aspects such as PIC, MAT, Access Permits, and MTA, among others. Therefore, the aim is to enhance institutional capacity and put into place measures and mechanisms to operationalise the ABS Law of Botswana. At the institutional level, understanding of the NP among key government institutions is still poorly developed (e.g., Department of Wildlife & National Parks, Department of Forestry & Range Resources, Companies Intellectual Property Authority, Department of Agricultural Research, Department of Trade, Botswana Unified Revenue Service, and District Councils). The project will focus on enhancing awareness and understanding of the NP and the ABS Law among government stakeholders who are mandated to lead the domestication process. This process will not only enable them to improve operational efficiency but will also position them to adequately assist providers and users of GR.

In addition, a broad-base National Bioeconomy Strategy (NBS) will be developed through a coordinated effort among key government agencies, including the Botswana Institute for Technology Research and Innovation (BITRI), the National Food Technology Research Centre (NAFTEC), the Department of Agricultural Research and the Department of Agribusiness Promotion of the Ministry of Agricultural Development and Food Security, the MENT Research & Development Unit, and the Department of Research Science and Technology (DRST)/Ministry of Tertiary Education, Research, Science and Technology, and Ministry of Trade and Industry, among others. The NBS will result from a countrywide consultation process with the economic sectors (agriculture, agro-industry, pharmaceutical industry, nutraceuticals industry, etc), the academic sector, civil society, and holders of traditional knowledge, among others. It will be an important contribution to promoting Botswana's economic growth and sustainable development focusing on innovation and value addition, the development of new biotechnologies and biotechnology products, bioprospecting and economic use of the genetic resources, and the protection of the environment. The NBS will follow principles of social inclusion (inclusion women, youth, indigenous peoples, and other vulnerable groups) to ensure participation and the equitable distribution of economic benefits and will promote a favourable business environment favouring the marketing and the commercialization of products. Interagency coordination and consultations will begin during the PPG and details regarding the specific objectives and plan of action for the development of NBS will be defined.

At the local level, this component will enhance the capacity of local communities, giving special attention to women and youth and other vulnerable people, to participate in monitoring and to enhance transparency about the utilisation of GR. Specifically, the project will operationalise a community monitoring programme with people trained and equipped to monitor ABS agreements, when these are established, and the implementation the regulations to be developed by the project. This will include guidance of local leaders (Kgosi) and the use of local communication tools so that monitoring information is effectively shared to support local decision-making and used by national ABS

authorities as part of the monitoring and reporting of the implementation of the country's obligations under the NP. In addition, this component will develop, with the active participation of local community leaders and representatives (including women leaders), guidelines for documenting BCPs. These guidelines will enable users of GR to be aware about how customary laws, values, and local decision-making processes, particularly those concerning stewardship of their territories and natural resources, must be considered when accessing TK associated with GR and the fair and equitable sharing of benefits arising out of the use of such knowledge, in line with Articles 12 (Traditional Knowledge Associated with Genetic Resources) and 21 (Awareness Raising) of the NP.

Finally, this component will develop a centralized ABS permitting procedure that enhances compliance and efficient operationalisation of the ABS Regulations to be developed under the project. An electronic permitting system accessible to all stakeholders will be developed to facilitate ease of interaction between users of GR and/or TK (e.g., research institutes, universities, and private companies) and environmental authorities (e.g., DEA and District Councils). This will also serve to facilitate participation by international participants, ultimately strengthening efficiency in the ABS regulatory domain in Botswana. Through an electronic interface with the CIPA, an online registration system for registering TK will be made available. CIPA, a parastatal under the Ministry of Trade and Industry, is mandated to register businesses and protect intellectual property rights; thus, this will contribute to clarifying terms on benefit-sharing in relation to intellectual property when accessing GR and in line with ABS regulations.

Component 2: Enhancing capacities for research and product development based on genetic resources and associated traditional knowledge.

This component will overcome the barriers related to lack of capacity and opportunities to conduct R&D and benefit-sharing in Botswana. To this end, the project will invest in field surveys and inventories of biological resources and associated TK (i.e., species, known uses, known or potential GR value, location, conservation status); this will be done in consultation with potential providers (e.g., local community members and local leaders, particularly from the Ghanzi District) and users of GR (e.g., research institutions, universities, and private companies). There are currently some inventories of GR and TK in the country. The literature stemming from ethnobotany, scholarly articles, and other studies have documented different species and associated indigenous/traditional and community knowledge about the resources, as well as areas where these are located. For example, the *Study on the Valorization of Genetic Resources and Associated Traditional Knowledge (ABS) in Botswana, Business Case Report, 2019* found that communities studied in the Ghanzi District make extensive use of faunal and floral species and that there is a significant local demand for medicinal products; however, when products are commercialised, this is done only within the framework of biotrade. In addition, as part of the baseline assessment conducted during the development of this concept note, 36 species of plants with known uses, geographic distribution, and associated TK were identified. The information available will be complemented with the information obtained through the surveys and inventories of biological resources and associated TK, focusing on the Ghanzi District, and will be collated in a national database that is made available to all potential providers and users of GR. The Ghanzi District was selected as the target area since: a) is an area rich in biodiversity; b) is an area where communities are dependent on biodiversity; and c) is an areas where local communities use their TK on GR for their livelihoods.

There is minimal information about the compounds or extracts within the country's GR; among the 36 species of plants identified in the baseline assessment, only three species (*Harpagophytum procumbens*, *Adansonia digitata*, and *Croton megalobotrys*) are being actively researched in Botswana and have known active compounds.[8]⁸ To enhance the country's capacity for undertaking R&D, as part of this component a National GR Research Development plan will be developed and funded to increase opportunities for bioprospecting and/or commercial application. Capacities will be further enhanced through a resourcing plan and R&D training curriculum (including an internship programme that targets both women and men equally); the resourcing plan will include institutional arrangements to improve coordination and complement R&D efforts and to share R&D results and scientific information. In addition, research centres and universities that provide institutional knowledge about GR (e.g., Botswana International University of Science & Technology, University of Botswana, University of Botswana-Okavango Research Institute, Botswana University of Agriculture and National Resources, and Botswana Institute for Technology Research and Innovation) will be better-equipped for bioprospecting and product development. During the PPG a needs assessment will be conducted to determine the most cost-effective approach to strengthen research institutions.

The project will support the establishment of partnerships for R&D and the sustainable utilisation of GR and associated TK. Based on the information obtained from field surveys and inventories of GR and associated TK, one species within the Ghanzi District with known GR and exploitable properties will be selected and prioritised for future R&D. A species will be chosen that has not already been subject to R&D elsewhere and for which there are already competitive, commercialized products. The project will identify international partners with interest in supporting R&D working closely with national research partners for the future commercialisation of an ABS product from the prioritised species/GR. To support R&D activities for the conservation and sustainable use of the selected priority species, a R&D demonstration project will be developed with women's participation. The project team and MENT (i.e., Executing Entity) will conduct a funding campaign to ensure the required resources are in place for the project's implementation. To ensure the conservation and sustainable use of the selected priority species, a management plan will be developed through a consultative process involving all relevant stakeholders; the management plan will be endorsed with the involvement of local communities.

Local communities from the Ghanzi District, including women and other vulnerable groups, will be trained in ABS project management, negotiation of ABS agreements, biodiversity conservation, access to GR and associated TK, among other topics. The skills developed will allow local communities to be active participants in the R&D demonstration project and create an opportunity for the sustainable utilisation of GR and associated TK to sustainably support their livelihoods.

This component will also support the implementation and strengthening of mechanisms for exchanging ABS-related information and knowledge. This will include the publication of at least one document about experiences and lessons learned from project implementation using a language that is gender-sensitive. A local ABS COP/platform for lesson-sharing, common priority-setting, awareness-raising (with links to the Global ABS COP) will be developed and operationalised; the platform will be designed through a participatory consultation process, addressing the needs of local communities in

terms of information-sharing and using a format that is community-friendly and in both English and the local language(s). Local community users will be informed periodically about information updates through social media (Facebook, WhatsApp, etc.), text messages, and other mechanisms that are commonly used. The platform could also be a space for discussion and for sharing information about the progress of the project.

In addition, this component will convene a virtual regional ABS dialogue among the SADC countries to enhance knowledge-sharing, partnership development, and stakeholder collaboration. As a first step, countries within the SADC implementing or developing ABS projects or implementing the NP on ABS will be identified. Second, under the leadership of MENT and support from the project team, discussion group(s) will be created and virtual meetings will be held periodically (at least twice a year) to discuss issues related to the implementation of the NP on ABS, and areas for cooperation/exchange of information and lessons learned between projects. Links with the ABS Clearing-House platform and the Global ABS Community, a virtual platform oriented to provide support for the implementation of the NP on ABS and making use of South-South cooperation mechanisms developed under the ABS Global Project (GEF ID 5731), will be established to enhance discussion and sharing of information. Finally, guidelines protect TK will also be developed to ensure that access takes place with the PIC of the TK holders, and that benefits are shared.

Component 3: Monitoring and evaluation (M&E). The Project Monitoring Plan and the budgeted M&E Plan will guide M&E at the project level for the duration of project implementation. Through the Monitoring Plan Project outcomes as described in the project results framework (PRF; refer to Section B: Indicative Project Description Summary) will be monitored annually and evaluated periodically to ensure they are achieved; these outcomes will be further analysed and validated with key stakeholders during the PPG phase. Potential new indicators that are considered beneficial may be added during the PPG phase and during project implementation. In addition, the GEF Core indicators targets established at the project concept stage will be updated during the final stages of project completion (because this is an MSP GEF Core indicators do not need to be updated at the mid-term).

The budgeted M&E Plan will be developed during the PPG phase in accordance with UNDP and GEF policies and requirements for project M&E. Project implementation will be launched through a project inception workshop to familiarize key stakeholders with the project strategy and to review the PRF and monitoring plan, among other things. The Gender Action Plan, the Stakeholder Engagement Plan, and other social and environmental safeguard-related plans will be monitored annually as part of the PIR. Implementation progress will be monitored and reported on quarterly and annually in line with UNDP and GEF policies and procedures. An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities

UNDP's SES underpin its commitment to mainstream social and environmental sustainability in projects to support sustainable development. The SES require that all UNDP projects offer positive social and environmental opportunities and benefits as well as ensure that adverse social and environmental risks and impacts are avoided, minimized, mitigated, and managed. The project has been categorized as substantial risk based on the UNDP Social and Environmental Pre-Screening completed during PIF design; details of this assessment are presented in the section on risk. In addition, and in compliance with SES requirements, a Gender Action Plan and a Stakeholder Engagement Plan will be developed through this component to ensure gender mainstreaming and stakeholder participation in the

project. Both plans will be developed during the PPG phase and will be based on a detailed gender analysis that assesses the different needs, roles, impacts, risks, and differential access and control of GR for women and men, as well as a stakeholder analysis to identify the different interests of stakeholders in the project and in the implementation of the NP on ABS in general. Additional target plans will be developed as part of the PPG (e.g., Community and/or Special Interest Group Planning Framework(s); Livelihoods Recovery Plan [potential]; and Cultural Heritage Management Plan [potential], in compliance with SES Policy Guidelines).

4) Alignment with GEF focal area and/or Impact Program strategies.

The project is aligned with the GEF Biodiversity Focal Area, more specifically with Objective BD-3-9: Further development of biodiversity policy and institutional frameworks through the implementation of the NP on ABS. The project will also contribute to the following Sustainable Development Goals (SDGs): 5 (Gender Equality), 8 (Decent work and economic growth), 9 (Industry, Innovation and Infrastructure), and 15 (Life on Land).

5) Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, and co-financing.

The project is timely as it builds on past investments, in synergy with ongoing interventions, to catalyse the process of ensuring that there is full adoption of the NP, with tangible conservation and socio-economic benefits.

The baseline and alternative scenarios are summarized in the following table. The baseline interventions that are considered here correspond with activities that the relevant Government and non-government agencies (e.g., Department of Environmental Affairs, Department of Forestry and Range Resources, Department of Wildlife and National Parks, and BirdLife Botswana) will implement with local resources and donor funding.

Baseline Scenario	Alternative Scenario
Component 1. Strengthening the national framework and institutional capacities for ABS implementation	

<p>Without GEF support, the Government would promote the adoption of the ABS Law, which was developed and submitted as part of the national pilot initiative under the Global ABS Project. Although the ABS Law is expected to be adopted in 2022, there are no regulations in place to ensure its implementation.</p> <p>In addition, the capacity in the country to implement the NP on ABS would remain limited. In particular, there will continue to be reduced management and operational capacity among government agencies beyond the MENT and at the District level. At the local level, communities will continue to lack the skills necessary to effectively monitor ABS agreements and regulations or to develop BCPs. In addition, the participation of women and other vulnerable groups would not be considered.</p> <p>Finally, the ABS permitting process would continue to be dispersed among different agencies, hindering the ability of potential providers and users of GR to comply with ABS regulations; as such, inter-institutional coordination will continue to be limited.</p>	<p>With GEF support, the country would make significant progress towards having a legal framework in place, as well as the knowledge and tools to implement the NP on ABS. This includes regulations on PIC, Mutually Agreed Terms (MAT), and MTA, and an ABS training programme with a gender focus for the relevant government agencies. This will greatly enhance awareness and understanding of the NP and the ABS Law among decision-makers at the national and district levels.</p> <p>A monitoring programme would allow local communities to enhance transparency about the utilisation of GR, including monitoring ABS agreements and the implementation of ABS regulations. With the participation of local leaders and using local communication tools, monitoring results would be used to inform local decision-making and would support reporting of ABS implementation at the national level. The development of guidelines for BCPs would raise awareness among users of GR about how customary laws, values, and local decision-making processes should be considered when accessing TK associated with GR.</p> <p>The operationalisation of a centralised ABS permitting procedure, including an electronic permitting system and an online registration system for registering TK, would allow a more efficient and transparent permitting process to access GR and to further protect intellectual property rights.</p>
<p>Component 2. Enhancing capacities for R&D based on GR, associated TK, and knowledge management</p>	

<p>Without GEF support, the country would make limited progress in R&D and benefit-sharing for the utilisation of GR. There would continue to be important gaps in knowledge about biological resources and associated TK, and the available information would continue to be dispersed and difficult to access by stakeholders who are interested in conducting R&D. In addition, the capacity of research institutions for bioprospecting would continue to be limited, as well as funding, appropriate equipment for conducting research, and opportunities for establishing long-term partnerships with researchers outside of the country. Similarly, local communities would lack the skills and tools for participating in the implementation of ABS-related initiatives and negotiation of ABS agreements.</p> <p>Overall, Botswana would make limited progress in bioprospecting and in establishing ABS agreements within the framework of the NP for the commercialisation of GR with benefit-sharing.</p> <p>Without GEF support, project efforts for the implementation of the NP on ABS in Botswana would not be supported by a mechanism for sharing knowledge within and outside the country or for learning from the experiences of other countries in the region. In addition, efforts would not include considerations for gender and social and environmental safeguards.</p>	<p>With GEF support, a demonstration/pilot R&D project with women's participation would be designed and funded. This would be possible because there would be: a) more information available about GR and associated TK in the country; b) a national plan to guide bioprospecting and product development and to secure funding; c) enhanced capacities among research agencies for bioprospecting; d) established partnerships with international research centres and companies for R&D and the sustainable use of GR and associated TK; and e) capacity among local communities to participate in the implementation of ABS projects, including the capacity to negotiate ABS agreements.</p> <p>To ensure the conservation and sustainable use of the selected priority species for the demonstration R&D project, a management plan would be developed through a consultative process and endorsed by local communities.</p> <p>With GEF support, the project will implement a knowledge management strategy that includes a local ABS COP/platform for sharing lessons learned and awareness-raising and virtual regional ABS dialogue with Southern Africa countries, which would allow knowledge-sharing, partnership development, collaboration, and scaling and replication.</p>
<p>Component 3. M&E</p>	

Without GEF support, the country's work on ABS would rely on limited efforts in M&E and agreed-upon indicators.	<p>With GEF support, the M&E plan would be implemented to provide regular assessment of progress towards achieving the targets as defined in the project results framework and the GEF core indicators.</p> <p>In addition, a gender strategy (Gender Plan) would be implemented to ensure that gender is mainstreamed into project actions. Effective stakeholder participation would be ensured through the implementation of a Stakeholder Engagement Plan. Finally, the project would also ensure that any social and environmental risks are well managed and mitigated.</p>
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6) Global environmental benefits (GEFTF)

This project is being developed to ensure that Botswana is fully compliant with the obligations of the NP on ABS. Therefore, the project responds to the resolutions of the CBD CoP 10 Decision X/1, which urges parties to fully implement the NP.

This project will address the main barriers that prevent the full domestication of the NP. Support for local communities is a key tenet of the CBD. Through this project, the capacities of communities and stakeholders will be strengthened. Consequently, communities will be made aware of the value of GR and associated TK, which will spur the conservation of their GR and associated TK.

The implementation of the basic measures of the NP in Botswana will unleash a wide range of future monetary and non-monetary benefits for providers of genetic resources. Some of these benefits should be reinvested in the conservation and sustainable use of the biological resources from where the genetic resources were obtained. This will fulfil the three objectives of the Convention on Biodiversity (CBD).

7) Innovation, sustainability and potential for scaling-up.

Innovation. This project is innovative in several ways, and the following will be undertaken for the first time in Botswana: a) ABS Information system on national GR and associated TK will be in place; b) an e-based permitting system will be developed; c) a National R&D Plan will be adapted and funded that will guide priorities for scientific research based on the GR and product development with local participation; d) and a local ABS COP/platform will be in place for knowledge and lesson-sharing, and increase awareness about to support the implementation of the NP and the conservation and sustainable use of biodiversity.

Financial sustainability. First, the transition from a paper-based to a web-based system is expected to cut operational costs for all relevant stakeholders; this should further enhance the financial

sustainability of this project. Finally, the a fully-funded demonstration R&D project will serve a direct means for the sustainability of project outcomes, especially those directed to bioprospecting and product development based on GR and associated TK. .Second, all participating government agencies and NGOs may leverage additional funds (from national or international sources) for national or local action respectively, as part of their work plans for project implementation. This will not only bring in additional funds during the project, but it will also practically enhance their capacities for project proposal development, writing, budgeting, and marketing. Furthermore, it will boost networking with their national donor communities and potentially elsewhere, thus making their organizations more sustainable.

Environmental sustainability. Stronger regulations (PIC, MAT, and MTA) and monitoring of bioprospecting will contribute to environmental sustainability. In addition, the project will create awareness about the relationship between access to GR and their utilisation and the conservation of biodiversity and the sustainable use of its components. It will showcase the linkages involved in community livelihoods and GR. The project will also impart knowledge on ABS across all stakeholders. Through the project, a list of high-value and important species will be identified and prioritized for sustainable conservation measures, without being over-utilised. As an example, a species management plan will be developed to sustain projects, even after GEF support ends. The transition from a paper-based to electronic-web-based system is expected to reduce on printing paper demand and associated GHG emissions avoided further enhancing environmental sustainability.

Replicability. This project is highly replicable. The project outputs and outcomes can be replicated by any country and some by any entity in Botswana. The ABS information system on GR and associated TK, e-permitting system, legislative frameworks, and capacity development approaches are replicable and can be used as case studies to assist other parties. The Training Manual can be used in other countries, as well as the process/methodology of developing biocultural community protocols. During this proposed project, knowledge materials will be continuously developed. They will be shared, for ease of access, through web-based platforms, and through established platforms for local communities. There will be opportunities for exchanges with regional and global interested entities to showcase the process and achievements of this proposed project.

[1] National Biodiversity Strategy and Action Plan (NBSAP) 2016.

[2] Ibid.

[3] Climate Risk Profile: Botswana (2021): The World Bank Group

[4] Climate Risk Profile: Botswana (2021): The World Bank Group.

[5] <https://www.adaptation-undp.org/explore/africa/botswana>

[6] Andrae-Marobela, K., Ntuny, A. N., Mokobela, M., Dube, M., Sosome, A., Muzila, M., Sethebe, B., Monyatsi, K. N., & Ngwenya, B. N. (2012). "now i heal with pride"-The application of Screens-to-Nature technology to indigenous knowledge systems research in Botswana: Implications for drug discovery. In Drug Discovery in Africa: Impacts of Genomics, Natural Products, Traditional

Medicines, Insights into Medicinal Chemistry, and Technology Platforms in Pursuit of New Drugs (Vol. 9783642281754, pp. 239-264). Springer-Verlag Berlin Heidelberg. https://doi.org/10.1007/978-3-642-28175-4_10.

[7] Thomas Greiber, Sonia Peña Moreno, Mattias Þhrþn, Jimena Nieto Carrasco, Evanson Chege Kamau, Jorge Cabrera Medaglia, Maria Julia Oliva, Frederic Perron-Welch in cooperation with Natasha Ali and China Williams 2012. An Explanatory Guide to the Nagoya Protocol on Access and Benefit-sharing IUCN, Gland, Switzerland. xviii + 372 pp.

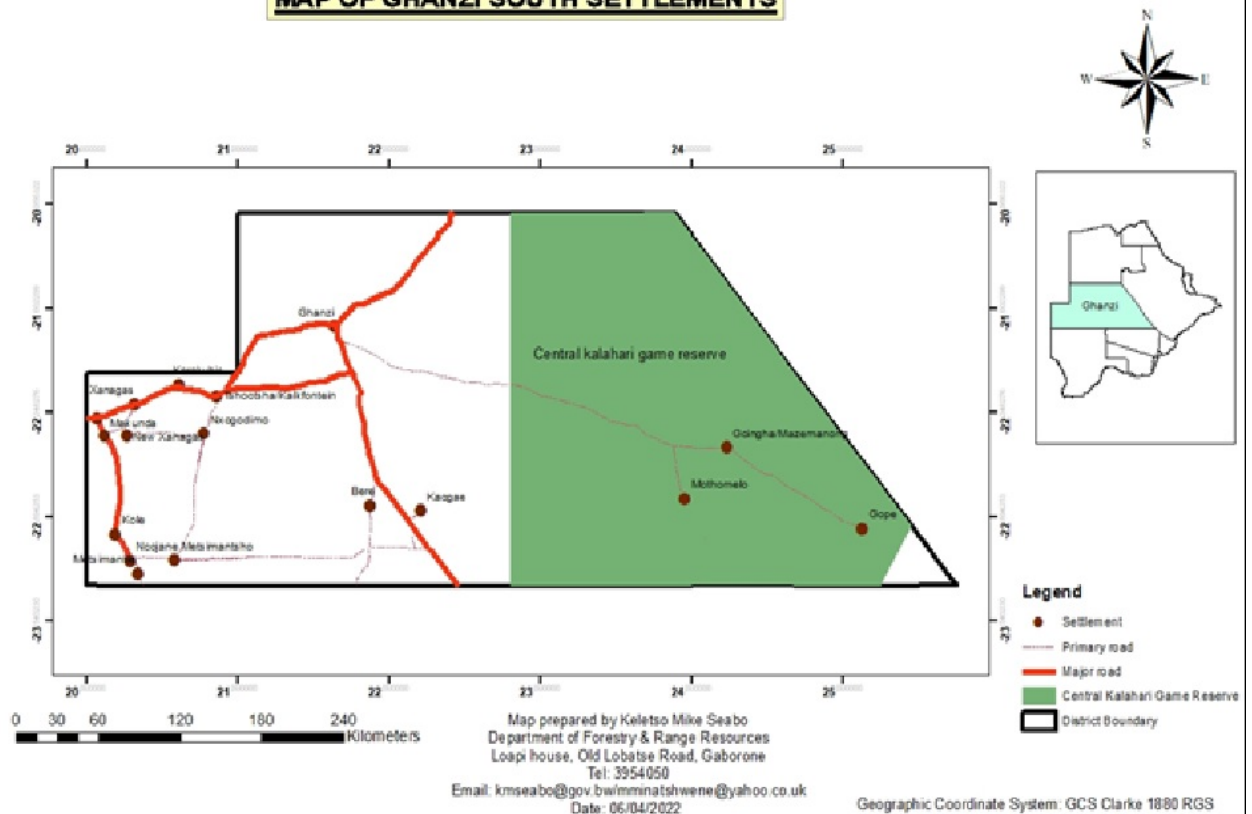
[8] These species have been research extensively elsewhere; thus, there are limited opportunities for the identification of additional active compounds or extracts that may lead to innovative R&D and benefit-sharing.

1b. Project Map and Coordinates

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

(Latitude:21 41' 45.9564" S; Longitude:21 38' 53.4696" E). Please provide geo-referenced information and map where the project interventions will take place.

MAP OF GHANZI SOUTH SETTLEMENTS



2. Stakeholders

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

Indigenous Peoples and Local Communities Yes

Civil Society Organizations Yes

Private Sector Entities Yes

If none of the above, please explain why:

In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement

Stakeholder participation will follow UNDP SES requirements regarding Stakeholder Engagement. An initial stakeholder analysis is presented in the table below; an updated stakeholder analysis will be conducted as part of the PPG which will allow to identify additional interested and potentially affected stakeholder groups and that will provide the basis for the development of a Stakeholder Engagement Plan. In addition a meaningful, effective and informed consultation process will be ensured. In addition, culturally appropriate consultation will be carried out with the objective of achieving agreement, and activities will be identified that require prior consultation and free, prior and informed consent FPIC from indigenous peoples. Initial stakeholder consultations has identified key partners who will be engaged in its project design as shown in the table below:.

Stakeholder	Role	Means of Engagement
National Competent Authority (DEA)	The Department of Environment Affairs (DEA) will oversee the overall preparation of this project in its capacity as the National Competent Authority.	Secretary to the TRG
MENT Research & Development Unit Department of Wildlife and National Parks (DWNP) Department of Forestry and Range Resources (DFRR) Department of Agricultural Research	As these stakeholders have a mandate to manage GR in Botswana, they will be involved in all stages of the project preparation. They will be members of the Technical Reference Group (TRG), which will be mandated with the preparation of the detailed project document.	Members of the Technical Reference Group that will be overseeing the ProDoc preparation

Stakeholder	Role	Means of Engagement
Department of Rural Development (DRD)	The DRD will be involved in the project preparation in terms of organising community consultations, especially in the remote rural areas.	TRG membership and facilitating community consultations during ProDoc development
National Food Technology Research Centre (NAFTEC)	NAFTEC will provide technical inputs in the preparation of the ProDoc, especially on providing inputs on how the Bioeconomy strategy will be developed as well as inputs on the preparation of the R&D component of the ProDoc	Through the TRG, as members.
Botswana Institute for Technology Research and Innovation (BITRI) Botswana Innovation Hub	The Institution will provide technical inputs in the overall preparation of the ProDoc. They will be members of the TRG, and will also be involved in the ProDoc drafting process.	TRG member
Companies and Intellectual Property Authority (CIPA)	CIPA will provide technical inputs during the ProDoc preparation.	TRG membership
Department of Research Science and Technology (DRST)	DSRT will support the preparation of the ProDoc, especially providing guidance on the drafting of Component 3 of the ProDoc, in line with their mandate.	Member of the ProDoc development TRG
Department of Information Technology (DIT)	DIT will provide technical inputs during the ProDoc preparation phase. They will be consulted during the preparation stage.	Face-to-face consultative meetings
Local governments including traditional authorities being village chiefs, MPs and Councillor(s) Village Development Committees (VDC), District Land Use Planning Unit (DLUPU), Technical Advisory Committees (TAC), etc.	These are the authorities responsible for governance and management of natural resources at the local level. They will be consulted during the project preparation phase for inputs and guidance.	Face-to-face/Virtual meetings; workshops

Stakeholder	Role	Means of Engagement
<p>NGOs: e.g., Cheetah Conservation Botswana (CCB), Kalahari Conservation Society (KCS), Birdlife Botswana (BLB),</p> <p>Community Based Organisations (CBOs): Permaculture Trust; Ncojane Community Trust; Kuru Development Trust, Xwiskurusa Trust & Letloa Trust, Au Shee Xha Ulu Trust;</p>	NGOs and CBOs, will be consulted during the project preparation stage for inputs and ownership as resource custodians and owners. Additional NGOs will be identified as part of the PPG, as appropriate.	Face-to-face meetings; workshops
Local communities (as knowledge holders and as resource owners)	Communities are instrumental not only in the development of the project document and will be consulted accordingly for inputs into the ProDoc. FPIC will be required for any on-ground interventions.	Face-to-face meetings and focused group discussions
Educational and Research institutions	Institutions that conduct research on GR will be engaged into the TRG to provide technical inputs during project preparations. This includes University of Botswana (UB), Botswana University of Agriculture and Natural Resources (BUAN), and Botswana International University of Science and Technology (BIUST).	TRG members
Centre for Scientific Research, Indigenous Knowledge, and Innovation (CesrIKi)	CesrIKi will participate in the project preparation as member of the TRG ? to provide technical inputs and guidance.	TRG members
Private sector	As investors, users, and traders of GR, the private sector will be consulted during project preparation. They will be consulted through their national association, Business Botswana, and they will also be mobilised to provide co-financing for the project.	Virtual/Face-to-face meetings, workshops

Stakeholder	Role	Means of Engagement
Dingaka tsa Setso Association (traditional doctors)	These stakeholders will be consulted during the project preparation stage, especially on aspects relating to species selection and related technical inputs.	Face-to-face meetings Workshops Focused Group Discussions Field Surveys
UNDP	UNDP will form part of the TRG, and will provide technical advice during the project preparation stage.	Virtual/Face-to-face meetings

3. Gender Equality and Women's Empowerment

Briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis).

According to the United Nations Human Development Report 2019, Botswana is ranked number 100 out of 189 countries within the Gender Inequality Index.[1] Botswana is a patriarchal society, and this is entrenched in the culture where men are perceived as breadwinners and therefor the head of the family in the case of married couples. The country's customary law, an unwritten law, has perpetuated gender stereotypes and discrimination against women and girls. Notwithstanding the above, Botswana has to some extent, followed regional and international gender treaties and protocols (e.g., The Beijing Platform of Action, 1996; the Southern African Development Community (SADC) Protocol on Gender and Development conceived through the SADC Declaration on Gender and Development of 1997), in order to reduce gender inequality in the country.

In order to address unequal participation and benefit between women and men in many facets of development and economy, the Government of Botswana put in place several measures to empower women. In 2015, in the advent of Beijing Platform of Action, the Botswana Government endorsed the National Policy on Gender and Development (NPGAD). An enabling environment, adoption of affirmative measures and capacity building on the integration of gender in all sectors of sustainable development is highly encouraged. An institutional arrangement, within the Department of Gender Affairs, established through NPGAD, comprises district gender committees, as well as civil society, for the policy coordination and management of gender responsive programmes.[2] In addition, all line Ministries are required to mainstream gender in

sector policies and programmes. The Department of Gender Affairs supports Ministries as much as possible to develop sector specific gender strategies and action plans. In addition, 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.

Botswana is also ruled by customary law, which applies mainly in the rural areas and is enforced by tribal structures and customary courts. Common Law takes precedence over Customary Law in the case that the two systems are used; thus, Common Law protects the rights of women from discriminatory laws and practices.

^[1] <https://hdr.undp.org/en/content/gender-inequality-index-gii>

^[2] Republic of Botswana, National Policy on Gender and Development 2015, Department of Gender Affairs

The following gender-sensitive indicators have been included in the project's results framework:

- ? Number of Community Monitoring teams (comprising an equal number of women and men and with equitable representation of vulnerable groups, such as remote-area rural dwellers) trained and equipped and implementing the Monitoring and Reporting Framework.
- ? Increased technical research capacity as measured through a gender-sensitive survey.
- ? One (1) demonstration R&D project with women's participation designed and funded.
- ? Number of local community members (50% women and 50% men) with improved skills measured by an ILCs ABS Capacity Development Scorecard (or survey).
- ? 100% of plans related to UNDP's environment and social safeguards (SES) are met (this includes the Gender Action Plan)

In addition, a detailed Gender Analysis will be undertaken and a Gender Action Plan will be developed during the PPG phase to ensure gender mainstreaming in the project and additional specific gender-based indicators will be defined. Initial gender gap analysis has been undertaken in preparation of the project concept (Annex E).

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

closing gender gaps in access to and control over natural resources;

improving women's participation and decision-making; and/or Yes

generating socio-economic benefits or services for women.

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

Yes

4. Private sector engagement

Will there be private sector engagement in the project?

Yes

Please briefly explain the rationale behind your answer.

As important stakeholders in the successful delivery of the project, especially at implementation phase, the private sector will be continuously engaged. As investors, users, and traders of GR, the private sector will be consulted and made aware of new regulations and tools (e.g., e-permitting system), which will facilitate their involvement in the implementation of the NP on ABS in Botswana, particularly in future R&D and establishing research collaboration agreements. The private sector will be consulted through their national association, Business Botswana.

The private sector plays a key role in access to genetic resources especially with respect to technology transfer. Engagement with the private sector is critical because it will ensure long-term and substantive impact on private enterprises for commercially viable activities that will generate economic activity through stimulating the development, dissemination and implementation of new technologies. To create an enabling environment for private sector engagement in genetic resources and in particular in R&D, the project team will consult with different private sectors (e.g., agriculture, pharmaceutical, food industry, cosmetics, etc.) and involve them in policy dialogues (e.g., development of PIC, MAT, MTA regulations) in the interest of transparency and to build trust. Private sector representatives will be invited to participate in key PPG events such as the inception and validation workshops, as well as one-on-one meetings. In addition, the project will promote knowledge and information sharing, including the development and systematization of ABS best practices, new methods, and innovations related to ABS. The project will contribute to capacity development and may provide technical assistance in ABS for national companies interested in bioprospecting. Finally, during the PPG, incentives such as tax breaks or deferrals to promote involvement in R&D will be explored. During the project preparation phase, the private sector will be consulted with a view towards also engaging them

as co-financiers. UNDP's Private Sector Partnership Risk Screening and Due Diligence Procedures will be strictly applied during the PPG (and during implementation, if relevant) in selecting private sector partners for engagement in the project or as co-financiers.

5. Risks to Achieving Project Objectives

Indicate risks, including climate change, potential social and environmental risks that might prevent the Project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the Project design (table format acceptable)

The risks are indicated in the following table, which brings together: a) the risks to project implementation and b) the social and environmental risks potentially posed by the project requiring management. Social and environmental risks were identified in part based on the UNDP's Social and Environmental Screening Procedure (SESP) for project concept (pre-screening). Accordingly the project has been categorized as substantial risk; substantial risks are: a) The project entails the use of GR-related traditional knowledge and practices (including for commercial benefit by external parties), which could erode or have adverse impacts on the cultural heritage and identity of affected people; and b) The outputs of the project will have impacts on the rights, lands, natural resources and traditional livelihoods and practices of peoples and resource-user collectives who fit with the definition of 'indigenous peoples', including through collection and commercialization of resources on their lands and their traditional knowledge. In addition, there were five risks identified as moderate, which are detailed below.

During the PPG phase, project risk and the screening (SESP) will be revised based on further assessments and information/details gathered during the course of project development. The following will be prepared during the PPG phase to meet social and environmental screening requirements revealed in the pre-screening:

- ? Stakeholder Analysis
- ? Gender Analysis
- ? Cultural Heritage/Traditional Knowledge initial assessment
- ? Comprehensive Stakeholder Engagement Plan
- ? Gender Action Plan
- ? Community and/or Special Interest Group Planning Framework(s)
- ? Livelihoods Recovery Plan (potential);
- ? Cultural Heritage Management Plan (potential)

Risk	Type	Level	Mitigation Measure
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<i>Risks to project implementation</i>			
Lack of coordination between different stakeholders	Institutional	M I = 3 P = 3	The project will require a high level of understanding, interaction, joint planning, and collaboration among the Project Management Unit, Implementing Agency, government agencies, NGOs, communities, research institutions, and private sector entities. The project preparation will emphasize the building of partnerships, common agenda, and alignment of objectives and interests among likely partners. The institutional arrangement of the project will reflect this. A fully representative Stakeholder Forum may be established.
Limited commitment of funds by Government and other lead agencies (due to changes in macro-economic climate, global economic drivers, competing priorities, lack of investor interest, etc.) may limit the amount of funds available to scale up implementation post-project	Financial	M I = 3 P = 3	During the PPG, additional steps will be taken to ensure greater co-financing and the sustainability to ensure the scaling up of implementation post-project. This may include increasing current co-financing commitments and identifying and securing commitments from other sources including the private sector.
Delayed approval of the ABS law and regulations	Political	M I = 3 P = 2	Botswana enjoys a stable democratic environment which is good for the implementation of the project. The project directly addresses national priorities and as such it will increase the political will to see it through. Importantly, political structures, especially parliamentary committee on Environment and Climate, will be continuously engaged through different means of communication throughout the project. In addition, future parliamentary elections may result in delays approval of the ABS law and regulations and overall project implementation. High level engagement of decision-makers via MENT and UNDP and dissemination of existing and new drafts among key stakeholders will aim to secure the adoption of the national ABS law and related regulations.

Local communities not willing to participate in the project	Social	M I = 3 P = 2	During consultations, local communities (annex report or list) showed interest, willingness, and are eager to engage in the project; however, through the project awareness will be raised, information made available, and community structures strengthened for effective participation in the decision-making process and implementation. During the PPG phase, a stakeholder engagement plan will be developed and consultations will be held with community leaders and members to ensure their participation in the project design and during its implementation. The project must ensure that a Grievance Redress Mechanism (that meets the standards specified in the UNDP SES Policy and guidance on GRMs), is put in place within two months of project inception. In additional FPIC may be required.
Climate change may impact project outcomes	Environmental	M I = 2 P = 3	Botswana is considered highly vulnerable to climate variability and change due to its high dependence on rain-fed agriculture and natural resources, high levels of poverty?particularly in rural areas, and a low adaptive capacity to deal with these expected changes. Primary challenges are centred around water resource availability, changing precipitation patterns, and increasing population demands.[1] Climate change considerations will be incorporated into the project design based on a climate risk screening to be conducted during the PPG phase. This risk will be fully assessed as part of the UNDP SES; however, it was initially assessed that this risk will be low as project activities are primarily directed to strengthening the country?s legal and institutional framework for the implementation of the NP on ABS; field-level activities will be directed primarily to strengthen the skills of local communities (ABS project management, negotiation of ABS agreements, access to genetic resources and TK associated with GR, etc.) and the documentation of GR and associated TK.
COVID-19 pandemic may result in delay in project design and implementation	Health	M I = 3 P = 3	The COVID-19 pandemic may not be under control during project development and implementation. Project design activities may need to be carried out remotely, as feasible (telephone communications, forums, online/Website, network exchanges, etc.). UNDP corporate tools for COVID-19 risk management, including UNDP?s response offer on green recovery, will be applied. Also, GEF Guidelines regarding Project Design and Review Considerations in Response to the COVID-19 Crisis and the Mitigation of Future Pandemics will be considered.
<i>Social and environmental risks that may arise from implementation of the project</i>			

<p>1. By promoting commercialization of genetic resources, and introducing tighter regulation of bioprospecting and harvesting of source materials, the project could inadvertently lead to adverse impacts on human rights, and restrictions on access to resources by the local communities that are custodians of GR and its associated traditional knowledge (TK). These impacts and restrictions may differentially impact marginalized and vulnerable groups, such as remote area rural dwellers and other specific community groups, women, the elderly, and other special interest groups such as traditional healers and collectors and traders of veldt products of health, cosmetic, spiritual or cultural value;</p>	<p>Social</p>	<p>Moderate</p> <p>I = 3</p> <p>P = 3</p>	<p>This risk will be addressed through the development of the following during PPG :</p> <p>a) A Stakeholder Analysis and Comprehensive Stakeholder Engagement Plan, including Free, Prior and Informed Consent.</p> <p>b) Gender Analysis and Gender Action/Mainstreaming Plan</p> <p>c) Community Planning Framework</p> <p>Further, during the implementation phase, Strategic Environmental and Social Assessment (SESA) will be built into the scope of work undertaken to develop all project outputs that may have upstream impacts on the full enjoyment of human rights by all stakeholders. The full SESP developed during the PPG will confirm which outputs will require SESA.</p>
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<p>2. The holders of genetic resources and associated traditional knowledge might not have enough knowledge of the provisions of the Nagoya Protocol to claim their rights in relation to GR and associated TK, and government agencies and other duty bearers may not have the knowledge or operational experience to recognize these rights or ensure that they are upheld in the development and implementation of the project outputs</p>	<p>Social</p>	<p>Moderate</p> <p>I = 3</p> <p>P = 3</p>	<p>In keeping with Article 22 of the Nagoya Protocol, the project will ensure that the design and implementation of training programmes to be provided under Outputs 1.1.2, 1.2.1, 2.2.2 and 2.3.4 will effectively enhance the knowledge and understanding of local communities and specific resource-user collectives to empower them to exercise their rights, and that government officials will be able to effectively implement the ABS Laws in support of this. The Stakeholder Engagement Plan will include guidelines for ensuring that all stakeholders are able to benefit equitably from access to the training provided through the project.</p> <p>Further, the analyses, plans and frameworks described under Risk 1 will ensure that all relevant stakeholders are properly engaged during the design phase to inform/lead, at least:</p> <ul style="list-style-type: none"> (i) the development of appropriate regulations and standards to protect the rights of GR custodians and knowledge holders (Outputs 1.1.1, 1.2.1 and 1.2.2) and equip them to monitor implementation (Outputs 1.2.1 and 2.3.4) (ii) Establishment of the ABS Community of Practice to ensure ongoing learning and lesson-sharing (Output 2.4.1) (iii) Development of Guidelines for the protection of GR-related Traditional Knowledge (Output 2.4.3) <p>During implementation, the TORs for developing project outputs with upstream impacts (Outputs 1.1.1, 1.1.3, 1.2.2, and 2.2.1 and 2.4.3 ? full list to be confirmed during PPG) must include Strategic Environmental and Social Assessment, to ensure that measures for protecting the rights of GR custodians and knowledge holders is hardwired into their design and implementation.</p> <p>Further, the design of the demonstration R&D project (Output 2.3.5) to be implemented after this MSP, must be subjected to screening for social and environmental safeguard risks, and must include appropriate guidelines measures for further risk assessment and mitigation ? more detailed requirements to be determined during PPG for this ABS MSP.</p>
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<p>3. Women may not be able to participate fully in decision-making around use, benefit-sharing and protection of the natural resources from which GR are sourced, taking into account the differential roles of men and women in accessing environmental goods and services. They may also become more vulnerable to gender-based violence as a result of their participation in the project and realization of benefits from ABS agreements.</p>	<p>Social</p>	<p>Moderate</p> <p>I = 3</p> <p>P = 2</p>	<p>Consistent with Article 5 of the Nagoya Protocol, and with UNDP's SES Policy, during the PPG phase the project must carry out a detailed Gender Analysis and develop a Gender Action/Mainstreaming Plan to ensure that the needs and rights of women are fully addressed and built into all project activities, and to ensure that the project outputs better enable women to participate meaningfully in decision-making around use, benefit sharing and protection of the natural resources from which GR are sourced.</p> <p>The gender analysis and action/mainstreaming plan must be developed following the recommendations in the UNDP Guidelines for Mainstreaming Gender into ABS (? Mind your Step?), which can be accessed at:</p> <p>https://www.undp.org/publications/mainstreaming-gender-abs-value-chains-gender-toolkit</p> <p>The Gender Action Plan should also: (i) include measures for avoiding or mitigating the risk of women becoming targets of gender-based violence as a result of being project beneficiaries or benefiting from future ABS agreements; (ii) Specify gender dimensions that should be built into the SESA(s) to be undertaken during project implementation.</p> <p>The Gender Action/Mainstreaming Plan (to be appended to the Prodoc) must also be used to inform the identification of appropriate indicators and gender disaggregated targets to be built into the Project Results Framework and the Monitoring and Evaluation Plan.</p>
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4. Stakeholder consultations may not be fully inclusive, especially of marginalized groups and other vulnerable individuals, or special interest groups (such as traditional healers, collectors and traders of veldt products, the elderly), or may not be culturally appropriate, and this could result in grievances or objections from these stakeholders.	Social	<p>Moderate</p> <p>I = 3</p> <p>P = 2</p>	<p>Fully inclusive and meaningful stakeholder engagement must be ensured through:</p> <ul style="list-style-type: none"> - a Stakeholder Analysis and development of a Comprehensive Stakeholder Engagement Plan to be included in the ProDoc package, following the UNDP SES Policy Supplemental Guidance on Stakeholder Engagement and consistent with the requirements of an IPPF under SES Standard 6. The SEP may also include specific provisions for engagement with specific resource-user collectives such as traditional healers. Stakeholder engagement both during the PPG and project implementation must follow the principles of Free, Prior and Informed Consent and FPIC consultations carried out during PPG must be documented in the Annexes to the ProDoc ? either as part of the Stakeholder Engagement Plan or as a stand-alone Annex. - A Gender Analysis and development of a Gender Action/Mainstreaming Plan <p>Further, the project must ensure that an appropriate Grievance Redress Mechanism is in place to provide an avenue for stakeholders to voice any concerns or objections that may have related to the project. The TORS for this must be clarified during the PPG phase and it must be operational within the first two months of project implementation.</p>
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5. The project outputs will promote the collection/harvesting and commercial development of genetic resources from naturally-occurring species, which might result in over-exploitation, with adverse impacts on biodiversity, species and ecosystems. This is of particular concern for species that may be rare or threatened, or may occur in or adjacent to critical habitats or environmentally sensitive areas (including legally protected areas or areas proposed for protection or recognized as valuable or deserving of protection by local communities).	Environmental	Moderate I = 3 P = 2	<p>It is not possible to assess this risk more fully at this stage since the species that might be selected for R&D of GR are not yet known, and may only become known during implementation.</p> <p>The future risk that might arise from over-harvesting, and its knock-on impacts, will be managed through development of a model climate-smart Species Management Plan for a prioritized species (Output 2.3.3) ? this will serve as a prototype to guide the development of management plans for all species selected in future for bioprospecting, R&D and commercialization of ABS products.</p> <p>The ProDoc should provide clear guidelines on criteria for selection and prioritization of species for selection for R&D, and for development of the species management plan, which could be based on the template for a Biodiversity Management Plan in the UNDP SES Toolkit (https://info.undp.org/sites/bpps/SES_Toolkit/Pages/Homepage.aspx), and any applicable national guidelines that may exist.</p> <p>The demonstration R&D project to be developed under Output 2.4.3 should make provision for development of a species management plan for the targeted species, if this is different from the species selected for Output 2.3.3) ? details to be fleshed out during the PPG.</p>
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<p>6. The project entails the use of GR-related traditional knowledge and practices (including for commercial benefit by external parties), which could erode or have adverse impacts on the cultural heritage and identity of affected peoples (including those that fit with the characteristics described under UNDP SES Standard 6).</p> <p>This risk cuts across all project components.</p>	Social	<p>Substantial</p> <p>I = 4</p> <p>P = 4</p>	<p>The baseline assessments to be undertaken during the PPG phase must include at least a preliminary Cultural Heritage Impact Assessment* (incorporating traditional knowledge related to potential GR), which should incorporate at least: early and meaningful consultation with relevant stakeholders; desktop review of any relevant inventories, maps or survey; and a review of relevant national legislation and regulations relating to management of Cultural Heritage (including traditional knowledge). This assessment will also inform the development of Output 2.4.3, Guidelines for the Protection of GR-related Traditional Knowledge, so that the risk can be at least partially managed through project design.</p> <p>Based on the findings of this assessment: i) where the risks and impacts are well understood and limited, and of low-moderate impact and likelihood, simple mitigation measures as per international best practice should be built into the full SESP and the Prodoc (in the design and description of project activities, and any relevant TORs); (ii) where the risks are rated as Moderate but are complex or less well understood, the full SESP should detail if any further targeted Cultural Heritage Impact Assessments or Management Plans must be developed during project implementation; (iii) if the risks to cultural heritage are determined during the baseline assessments to be High or Substantial, the SESP should specify whether a targeted or full Cultural Heritage Impact Assessment and Management Plan is needed as part of a scoped or full ESIA during implementation.</p> <p>*All consultations with communities regarding cultural heritage and traditional knowledge or practices must observe the rights of communities to withhold information they regard as sensitive if disclosure may pose any risks to the holders of information or the cultural resources themselves. All requests to observe confidentiality must be observed.</p>
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7. The outputs of the project will have impacts on the rights, lands, natural resources and traditional livelihoods and practices of peoples and resource-user collectives who fit with the definition of 'indigenous peoples', including through collection and commercialization of resources on their lands and their traditional knowledge.	Social	Substantial I = 4 P = 4	<p>The Stakeholder Analysis undertaken during PPG must assess and map the presence of all communities and resource-user collectives to whom the provisions of UNDP SES Standard 6 applies, and provisions for meaningful and culturally appropriate engagement must be built into the Comprehensive Stakeholder Engagement Plan.</p> <p>Stakeholder engagement must meet the requirements of Free, Prior and Informed Consent, as appropriate (following the guidance in the UNDP SES Supplemental Guidance on Standard 6 ? available at https://info.undp.org/sites/bpps/SES_Toolkit/Pages/Homepage.aspx</p> <p>and the process and outcomes of these consultations must be documented as part of the Stakeholder Engagement Plan annexed to the ProDoc.</p> <p>The project must ensure that a Grievance Redress Mechanism (that meets the standards specified in the UNDP SES Policy and guidance on GRMs), is put in place within two months of project inception.</p>
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<p>8. The implementation of Benefit-sharing agreements between providers and users of genetic resources, and of restrictions on access to resources through tighter bioprospecting regulations and species management plans-which the project aims to ?lead to??may result in economic displacement for some communities or individuals or changes in community or customary rights to GR-related resources</p>	<p>Economic Social</p>	<p>Moderate I = 3 P = 2</p>	<p>The likelihood and impact of this risk must be re-assessed during PPG during development of the SESP. The SESP will also determine if a targeted plan is required to mitigate these risks (e.g. a Livelihoods Action Framework/Plan).</p> <p>Further, the SESA(s) to be undertaken during implementation will assess, <i>inter alia</i>, the socio-economic status and vulnerability of affected persons, and who the relevant rights-holders are for specified GR and what their current livelihoods options are and how they might be affected. The findings will be used to ensure that risk mitigation is built into the regulations for PIC, MAT and MTA, and other relevant project outputs that will influence the establishment of benefit-sharing agreements in future.</p> <p>Mitigation of this risk will also be through:</p> <ul style="list-style-type: none"> - ensuring Free, Prior and Informed Consent (FPIC, as per the UNDP SES Policy) of project-affected communities for activities to develop project outputs that will inform/govern the development of benefit-sharing agreements (e.g. inventories of species with GR value, and their associated TK; the national permitting system) - ensuring that communities and other custodians of GR are properly trained in relevant provisions of the Nagoya Protocol (Prior and Informed Consent, PIC; Mutually Agreed Terms, MAT, and Material Transfer Agreements) and are fully empowered to exercise their rights during negotiation of agreements.
<p>9. The outcomes and realization of the broader development objective of the project may be vulnerable to/undermined by the impacts of climate change, due to the threats climate change may pose to the survival of the species from which GR are sourced.</p>	<p>Environmental</p>	<p>Moderate I = 2 P = 3</p>	<p>Climate risk screening should be carried out during PPG, applying the STAP Guidance on Climate Risk Assessment, with the results presented in an Annex to the ProDoc.</p> <p>During PPG attention should be given to including climate vulnerability as a criterion for the selection of species for R&D and the model species management plan should be ? climate smart.?</p>

10. COVID-19 could pose a risk to the health of project duty bearers and beneficiary communities during project development and implementation, especially for activities that involve community consultation	Environmental	Moderate I = 3 P = 3	<p>The project will be designed to use agreed COVID-19 protocols (in line with measures stipulated by the Government of Botswana and UNDPs Duty of Care Guidelines), as necessary ? for example, use of masks, smaller sized meetings, social distancing, and giving the option to communities to decide if they are comfortable with participating. If the COVID-19 pandemic resurges such that face-to-face meetings are not possible, or travel restrictions are re-imposed, the project will employ virtual means of engagement ? adequate budget provisions should be made for this.</p> <p>During the PPG an analysis should be made of the prevailing COVID-19 situation, and likely future scenarios, and appropriate measures for avoiding disease transmission and mitigating risks arising from COVID-19 will be built into the Prodoc under the Risk Management section, and the activities</p>
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[1] Climate Risk Profile: Botswana (2021): The World Bank Group.

6. Coordination

Outline the institutional structure of the project including monitoring and evaluation coordination at the project level. Describe possible coordination with other relevant GEF-financed projects and other initiatives.

The project will be implemented within the context of the Botswana United Nations Sustainable Development Cooperation Framework and UNDP Country Programme 2022-2026, aligned with the National Objectives of Vision 2036 and the SDGs. The project implementation will be the National Implementation Modality (NIM), led by the Ministry of Environment, Natural Resources Conservation and Tourism (MENT) through the Department of Environmental Affairs (DEA) on behalf of the Government of Botswana, and which hosts the National ABS Focal Point.

The UNDP Country Office (CO) in Botswana will provide quality assurance and first line oversight, in accordance with the requirements of the GEF and UNDP Policies and Procedures. Most of UNDP's work for the project will be based in its CO in Gaborone under the supervision of the Programme Officer and other senior programme staff, including the UNDP Resident Representative and Deputy Resident Representative as warranted. UNDP will also engage contractors to carry out the Final Evaluation of the project; although a n Midterm Review is not a requirement in an MSP, the project may elect to do one, budget permitting, to assess progress and gather recommendations for adaptive management. The relevant UNDP Regional Technical Advisors, Ecosystems and Biodiversity, will provide technical support in terms of project cycle management and oversight, to ensure consistency with expectations from UNDP and GEF.

National Implementing Partner: The MENT/DEA will be the government institution responsible for the implementation of the project in accordance with the UNDP NIM, implying full ownership of the project. This is in line with the Standard Basic Assistance Agreement (SBAA) of Botswana (signed on 14 May 1975). and the UN Partnership Framework for the Republic The MENT/DEA, as the Implementing Partner for this project, will be responsible for the overall coordination of project implementation, efficient use of project resources, and achievement of the planned project objectives. At the same time, MENT is the GEF Focal Point Agency of the Republic of Botswana. The complete institutional structure of the project will be defined during the PPG phase, including the composition of the Project Board and the Project Management Unit.

The project will be fully coordinated with a number of ongoing relevant GEF-financed initiatives to avoid duplication and increase synergies and effectiveness. Botswana is currently implementing the following ongoing and planned projects that this project will coordinate with;

The project will build on the Global ABS project *Strengthening Human Resources, Legal Frameworks and Institutional Capacities to Implement the Nagoya Protocol* (GEF Project ID 5731) to assist countries in the development and strengthening of their national ABS frameworks, human resources, and administrative capabilities to implement the NP. This will include developing specific regulations for the implementation of the ABS Law drafted as part of the Global ABS project, defining guidelines for developing BCPs considering the experiences for the Kgetsi Ya Tsie Tswapong Hills Women's Resources Enterprise Community Trust BCP (morula tree ? *Sclerocarya birrea*) and the Matute-a-Mongongo Women's Group (mongongo oil ? *Schinziophyton rautanenii*), and consolidating partnerships for R&D based on previous efforts for building trust between users and providers of GR to facilitate the identification of biodiscovery efforts, etc.

The project will build on, and partner with the National Environmental Fund (NEF). The NEF has supported the domestication of the Nagoya Protocol through provision of grants to community organisations involved in Access and Benefit Sharing related projects. The NEF is a financing mechanism established by the Government of Botswana to provide grants to legally established community organisations pursuing environmental management projects. The NEF has supported projects on natural resources management, capacity building, and awareness raising. The NEF is replenished through resource royalties, plastic levy, pollution fines, and other national taxes.

The project will build on awareness and capacity building activities of the Department of Environmental Affairs (DEA) who are the national focal points for the UNCBD. The DEA has, since acceding to the Nagoya Protocol, been involved in nation-wide awareness raising activities. The activities have been targeted at communities, community organisations and research entities. Though there are more stakeholders that need to be capacitated and informed of the Nagoya Protocol and its implications for Botswana, the awareness raising activities of the DEA have made an impact on some resource owners and users. Through this awareness activities, the DEA established a National ABS committee, which is an interim multi-stakeholder committee that convenes every quarter to consider ABS requests and guide on the overall implementation of the Nagoya protocol nationally.

7. Consistency with National Priorities

Is the Project consistent with the National Strategies and plans or reports and assessments under relevant conventions?

Yes

If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc

Botswana has been party to the CBD since 1995. Botswana's NBSAP 2016 is strongly aligned to the CBD 2011-2020 Strategy with a vision that "By 2025, ecosystem, species and genetic diversity is valued, protected, and used sustainably and equitably, through the involvement of all sectors of society and the provision of sufficient resources for its sound management." The NBSAP main goals are: a) Biodiversity is mainstreamed and valued across all sectors of society; b) The pressure on biodiversity is reduced and natural resources are used sustainably; c) Ecosystems, species, and GR are protected through sound management; d) Fair and equitable access to the benefits of biodiversity is secured; and e) Participatory planning, knowledge management, and capacity-building are in place to support NBSAP implementation. The project proposed herein is fully consistent with the NBSAP and its goals

The National Development Plan 2017-2023 has among its goals the "Inclusive Growth for the Realisation of Sustainable Employment Creation and Poverty Eradication," which is relevant to most of the activities funded by the GEF. It also provides an understanding of the alignment of development interventions with the national agenda and developmental plans. The project proposed herein is fully consistent with national development goals by contributing to the full domestication of the NP with tangible conservation and socio-economic benefits.

As indicated in the 6th National Report for the Convention on Biological Diversity, Botswana's National Target 16 under the CBD is that "By 2025, the Nagoya protocol is domesticated and operational, and specific actions that ensure fair and equitable access and benefit sharing are implemented." The project is consistent with this target and is a follow-up initiative^[1] from the Government of Botswana to achieve this target, by further strengthening the national ABS framework, enhancing awareness raising about ABS, capacity development for R&D, and partnership development for the implementation of the NP.

^[1] A national ABS pilot under the Global ABS project (GEF Project ID 5731) was implemented between October 2017 to March 2020.

8. Knowledge Management

Outline the knowledge management approach for the Project, including, if any, plans for the Project to learn from other relevant Projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

An ABS KM Strategy and Action Plan will be developed, which will include the following. Information will be disseminated through the local ABS COP/platform for lesson-sharing, common priority-setting, and awareness-raising established by the project (Output 2.4.1). The project will also make use of relevant websites such as the MENT website and the UNDP CO website. A Communications/Knowledge Management Expert may be hired (possibly on a part-time basis) to conduct communication and awareness-raising activities and will be responsible for the documentation

and systematisation of lessons learned and best practices. In addition, the results from the project will be disseminated through a number of existing UNDP information-sharing networks and forums. The project may also participate in the ABS Clearing-House platform for exchanging information on ABS established by Article 14 of the NP, as part of the Clearing-House of the CBD established under Article 18, paragraph 3 of the CBD; and in the NBSAP Forum (<http://www.nbsapforum.net/forum>), a global partnership that supports the review and implementation of NBSAPs and hosted in partnership by the Secretariat of the CBD, UNDP, and UN Environment Programme (UNEP). The ABS KM Strategy and Action Plan will also contribute to the protection of TK.

The project will identify and participate, as relevant and appropriate, in scientific, policy-based, and/or any other networks and platforms (e.g., Panorama ? Solutions for a Healthy Planet, (<https://panorama.solutions/en/organisation/united-nations-development-programme-undp>), which may be of benefit to project implementation through lessons learned. The project will identify, analyse, and share lessons learned that might be beneficial in the design and implementation of similar future projects. The full knowledge management strategy will be defined during the PPG phase.

Botswana's progress in the implementation of the Nagoya Protocol on ABS has primarily happened within the context of the GEF-UNDP Global ABS project Strengthening Human Resources, Legal Frameworks and Institutional Capacities to Implement the Nagoya Protocol (GEF Project ID 5731). The project focused on: a) strengthening the legal, policy and institutional capacity to develop national ABS frameworks; b) building trust between users and providers of genetic resources to facilitate the identification of bio-discovery efforts; c) strengthening the capacity of indigenous and local communities to contribute to the implementation of the Nagoya Protocol; and d) implementing a community of practices on ABS and South-South Cooperation mechanisms. Relationship to this project: The project will make use of the lessons learned, best practices, and tools developed under this project, including: a) the development and strengthening of national legal, policy and institutional ABS frameworks; b) establishing partnerships for bio-discovery between users and providers of genetic resources; c) the development of codes of conduct or guidelines for research on TK and genetic resources; and d) clarifying PIC and MAT requirements between users and providers of TK and biological resources. Leveraging on these results, the project will: First, consider conducting capacity-building activities for higher-level personnel who are decision makers, to enable the development and adoption of regulations (PIC, MAT, and MTA) that are key for the implementation of the National ABS Law; Second, continue to establish strong partnerships to effectively implement access to genetic resources and the fair and equitable sharing of benefits derived from their use. In particular, engaging indigenous communities and women in ABS pilot initiatives will strengthen partnerships and build trust between ILCs and users of genetic material; Third, actively involve national stakeholders in the analysis and drafting of all ABS-related documents (e.g., drafts of ABS regulations, standards for developing Biocultural Community Protocols [BCPs], and the National GR R&D Plan), which will increase national ownership of outputs and outcomes and contribute to achieving the long-term objective. Finally, the project will provide clarity and understating as to the real meaning of the use of genetic resources by all stakeholders. For example, under the Global ABS project, Botswana developed two BCPs (Devil's claw business case and Ostrich shell business case), but these are mostly within the biotrade context. The proposed outputs under this new project, such as Standards for Developing Biocultural Community Protocols Considering PIC and MAT (Output 1.2.2), need to be done with a

clear understanding by all stakeholders about the concept of access to genetic resources and benefit-sharing within the context of the Convention on Biological Diversity and the Nagoya Protocol.

One of the key lessons learned from the Global ABS project was the importance of increasing national ownership of the products and the process towards achieving the long-term objectives. Therefore, a comprehensive Stakeholder Engagement Plan will be developed as part of the PPG, including a communication strategy to share lessons learned and experiences with project stakeholders, among other aspects related to project implementation. The communication strategy will make use of social media (e.g., Facebook, WhatsApp, etc.), knowledge exchange platforms, printed and digital materials designed as newsletters, non-technical summary documents and reports, and project progress and monitoring reports, among other means, to share information.

9. Environmental and Social Safeguard (ESS) Risks

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

Overall Project/Program Risk Classification*

PIF	CEO Endorsement/Approval	MTR	TE
High or Substantial			

Measures to address identified risks and impacts

Provide preliminary information on the types and levels of risk classifications/ratings of any identified environmental and social risks and potential impacts associated with the project (considering the GEF ESS Minimum Standards) and describe measures to address these risks during the project design.

Risk	Type	Level	Mitigation Measure
<i>Risks to project implementation</i>			

Lack of coordination between different stakeholders	Institutional	M I = 3 P = 3	The project will require a high level of understanding, interaction, joint planning, and collaboration among the Project Management Unit, Implementing Agency, government agencies, NGOs, communities, research institutions, and private sector entities. The project preparation will emphasize the building of partnerships, common agenda, and alignment of objectives and interests among likely partners. The institutional arrangement of the project will reflect this. A fully representative Stakeholder Forum may be established.
Limited commitment of funds by Government and other lead agencies (due to changes in macro-economic climate, global economic drivers, competing priorities, lack of investor interest, etc.) may limit the amount of funds available to scale up implementation post-project	Financial	M I = 3 P = 3	During the PPG, additional steps will be taken to ensure greater co-financing and the sustainability to ensure the scaling up of implementation post-project. This may include increasing current co-financing commitments and identifying and securing commitments from other sources including the private sector.
Delayed approval of the ABS law and regulations	Political	M I = 3 P = 2	Botswana enjoys a stable democratic environment which is good for the implementation of the project. The project directly addresses national priorities and as such it will increase the political will to see it through. Importantly, political structures, especially parliamentary committee on Environment and Climate, will be continuously engaged through different means of communication throughout the project. In addition, future parliamentary elections may result in delays approval of the ABS law and regulations and overall project implementation. High level engagement of decision-makers via MENT and UNDP and dissemination of existing and new drafts among key stakeholders will aim to secure the adoption of the national ABS law and related regulations.

Local communities not willing to participate in the project	Social	M I = 3 P = 2	During consultations, local communities (annex report or list) showed interest, willingness, and are eager to engage in the project; however, through the project awareness will be raised, information made available, and community structures strengthened for effective participation in the decision-making process and implementation. During the PPG phase, a stakeholder engagement plan will be developed and consultations will be held with community leaders and members to ensure their participation in the project design and during its implementation. The project must ensure that a Grievance Redress Mechanism (that meets the standards specified in the UNDP SES Policy and guidance on GRMs), is put in place within two months of project inception. In additional FPIC may be required.
Climate change may impact project outcomes	Environmental	M I = 2 P = 3	Botswana is considered highly vulnerable to climate variability and change due to its high dependence on rain-fed agriculture and natural resources, high levels of poverty?particularly in rural areas, and a low adaptive capacity to deal with these expected changes. Primary challenges are centred around water resource availability, changing precipitation patterns, and increasing population demands.[1] Climate change considerations will be incorporated into the project design based on a climate risk screening to be conducted during the PPG phase. This risk will be fully assessed as part of the UNDP SES; however, it was initially assessed that this risk will be low as project activities are primarily directed to strengthening the country?s legal and institutional framework for the implementation of the NP on ABS; field-level activities will be directed primarily to strengthen the skills of local communities (ABS project management, negotiation of ABS agreements, access to genetic resources and TK associated with GR, etc.) and the documentation of GR and associated TK.
COVID-19 pandemic may result in delay in project design and implementation	Health	M I = 3 P = 3	The COVID-19 pandemic may not be under control during project development and implementation. Project design activities may need to be carried out remotely, as feasible (telephone communications, forums, online/Website, network exchanges, etc.). UNDP corporate tools for COVID-19 risk management, including UNDP?s response offer on green recovery, will be applied. Also, GEF Guidelines regarding Project Design and Review Considerations in Response to the COVID-19 Crisis and the Mitigation of Future Pandemics will be considered.
<i>Social and environmental risks that may arise from implementation of the project</i>			

<p>1. By promoting commercialization of genetic resources, and introducing tighter regulation of bioprospecting and harvesting of source materials, the project could inadvertently lead to adverse impacts on human rights, and restrictions on access to resources by the local communities that are custodians of GR and its associated traditional knowledge (TK). These impacts and restrictions may differentially impact marginalized and vulnerable groups, such as remote area rural dwellers and other specific community groups, women, the elderly, and other special interest groups such as traditional healers and collectors and traders of veldt products of health, cosmetic, spiritual or cultural value;</p>	<p>Social</p>	<p>Moderate</p> <p>I = 3</p> <p>P = 3</p>	<p>This risk will be addressed through the development of the following during PPG :</p> <p>a) A Stakeholder Analysis and Comprehensive Stakeholder Engagement Plan, including Free, Prior and Informed Consent.</p> <p>b) Gender Analysis and Gender Action/Mainstreaming Plan</p> <p>c) Community Planning Framework</p> <p>Further, during the implementation phase, Strategic Environmental and Social Assessment (SESA) will be built into the scope of work undertaken to develop all project outputs that may have upstream impacts on the full enjoyment of human rights by all stakeholders. The full SESP developed during the PPG will confirm which outputs will require SESA.</p>
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<p>2. The holders of genetic resources and associated traditional knowledge might not have enough knowledge of the provisions of the Nagoya Protocol to claim their rights in relation to GR and associated TK, and government agencies and other duty bearers may not have the knowledge or operational experience to recognize these rights or ensure that they are upheld in the development and implementation of the project outputs</p>	<p>Social</p>	<p>Moderate</p> <p>I = 3</p> <p>P = 3</p>	<p>In keeping with Article 22 of the Nagoya Protocol, the project will ensure that the design and implementation of training programmes to be provided under Outputs 1.1.2, 1.2.1, 2.2.2 and 2.3.4 will effectively enhance the knowledge and understanding of local communities and specific resource-user collectives to empower them to exercise their rights, and that government officials will be able to effectively implement the ABS Laws in support of this. The Stakeholder Engagement Plan will include guidelines for ensuring that all stakeholders are able to benefit equitably from access to the training provided through the project.</p> <p>Further, the analyses, plans and frameworks described under Risk 1 will ensure that all relevant stakeholders are properly engaged during the design phase to inform/lead, at least:</p> <ul style="list-style-type: none"> (i) the development of appropriate regulations and standards to protect the rights of GR custodians and knowledge holders (Outputs 1.1.1, 1.2.1 and 1.2.2) and equip them to monitor implementation (Outputs 1.2.1 and 2.3.4) (ii) Establishment of the ABS Community of Practice to ensure ongoing learning and lesson-sharing (Output 2.4.1) (iii) Development of Guidelines for the protection of GR-related Traditional Knowledge (Output 2.4.3) <p>During implementation, the TORs for developing project outputs with upstream impacts (Outputs 1.1.1, 1.1.3, 1.2.2, and 2.2.1 and 2.4.3 ? full list to be confirmed during PPG) must include Strategic Environmental and Social Assessment, to ensure that measures for protecting the rights of GR custodians and knowledge holders is hardwired into their design and implementation.</p> <p>Further, the design of the demonstration R&D project (Output 2.3.5) to be implemented after this MSP, must be subjected to screening for social and environmental safeguard risks, and must include appropriate guidelines measures for further risk assessment and mitigation ? more detailed requirements to be determined during PPG for this ABS MSP.</p>
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<p>3. Women may not be able to participate fully in decision-making around use, benefit-sharing and protection of the natural resources from which GR are sourced, taking into account the differential roles of men and women in accessing environmental goods and services. They may also become more vulnerable to gender-based violence as a result of their participation in the project and realization of benefits from ABS agreements.</p>	<p>Social</p>	<p>Moderate</p> <p>I = 3</p> <p>P = 2</p>	<p>Consistent with Article 5 of the Nagoya Protocol, and with UNDP's SES Policy, during the PPG phase the project must carry out a detailed Gender Analysis and develop a Gender Action/Mainstreaming Plan to ensure that the needs and rights of women are fully addressed and built into all project activities, and to ensure that the project outputs better enable women to participate meaningfully in decision-making around use, benefit sharing and protection of the natural resources from which GR are sourced.</p> <p>The gender analysis and action/mainstreaming plan must be developed following the recommendations in the UNDP Guidelines for Mainstreaming Gender into ABS (? Mind your Step?), which can be accessed at:</p> <p>https://www.undp.org/publications/mainstreaming-gender-abs-value-chains-gender-toolkit</p> <p>The Gender Action Plan should also: (i) include measures for avoiding or mitigating the risk of women becoming targets of gender-based violence as a result of being project beneficiaries or benefiting from future ABS agreements; (ii) Specify gender dimensions that should be built into the SESA(s) to be undertaken during project implementation.</p> <p>The Gender Action/Mainstreaming Plan (to be appended to the Prodoc) must also be used to inform the identification of appropriate indicators and gender disaggregated targets to be built into the Project Results Framework and the Monitoring and Evaluation Plan.</p>
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4. Stakeholder consultations may not be fully inclusive, especially of marginalized groups and other vulnerable individuals, or special interest groups (such as traditional healers, collectors and traders of veldt products, the elderly), or may not be culturally appropriate, and this could result in grievances or objections from these stakeholders.	Social	Moderate I = 3 P = 2	<p>Fully inclusive and meaningful stakeholder engagement must be ensured through:</p> <ul style="list-style-type: none"> - a Stakeholder Analysis and development of a Comprehensive Stakeholder Engagement Plan to be included in the ProDoc package, following the UNDP SES Policy Supplemental Guidance on Stakeholder Engagement and consistent with the requirements of an IPPF under SES Standard 6. The SEP may also include specific provisions for engagement with specific resource-user collectives such as traditional healers. Stakeholder engagement both during the PPG and project implementation must follow the principles of Free, Prior and Informed Consent and FPIC consultations carried out during PPG must be documented in the Annexes to the ProDoc ? either as part of the Stakeholder Engagement Plan or as a stand-alone Annex. - A Gender Analysis and development of a Gender Action/Mainstreaming Plan <p>Further, the project must ensure that an appropriate Grievance Redress Mechanism is in place to provide an avenue for stakeholders to voice any concerns or objections that may have related to the project. The TORS for this must be clarified during the PPG phase and it must be operational within the first two months of project implementation.</p>
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5. The project outputs will promote the collection/harvesting and commercial development of genetic resources from naturally-occurring species, which might result in over-exploitation, with adverse impacts on biodiversity, species and ecosystems. This is of particular concern for species that may be rare or threatened, or may occur in or adjacent to critical habitats or environmentally sensitive areas (including legally protected areas or areas proposed for protection or recognized as valuable or deserving of protection by local communities).	Environmental	Moderate I = 3 P = 2	<p>It is not possible to assess this risk more fully at this stage since the species that might be selected for R&D of GR are not yet known, and may only become known during implementation.</p> <p>The future risk that might arise from over-harvesting, and its knock-on impacts, will be managed through development of a model climate-smart Species Management Plan for a prioritized species (Output 2.3.3) ? this will serve as a prototype to guide the development of management plans for all species selected in future for bioprospecting, R&D and commercialization of ABS products.</p> <p>The ProDoc should provide clear guidelines on criteria for selection and prioritization of species for selection for R&D, and for development of the species management plan, which could be based on the template for a Biodiversity Management Plan in the UNDP SES Toolkit (https://info.undp.org/sites/bpps/SES_Toolkit/Pages/Homepage.aspx), and any applicable national guidelines that may exist.</p> <p>The demonstration R&D project to be developed under Output 2.4.3 should make provision for development of a species management plan for the targeted species, if this is different from the species selected for Output 2.3.3) ? details to be fleshed out during the PPG.</p>
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<p>6. The project entails the use of GR-related traditional knowledge and practices (including for commercial benefit by external parties), which could erode or have adverse impacts on the cultural heritage and identity of affected peoples (including those that fit with the characteristics described under UNDP SES Standard 6).</p> <p>This risk cuts across all project components.</p>	Social	<p>Substantial</p> <p>I = 4</p> <p>P = 4</p>	<p>The baseline assessments to be undertaken during the PPG phase must include at least a preliminary Cultural Heritage Impact Assessment* (incorporating traditional knowledge related to potential GR), which should incorporate at least: early and meaningful consultation with relevant stakeholders; desktop review of any relevant inventories, maps or survey; and a review of relevant national legislation and regulations relating to management of Cultural Heritage (including traditional knowledge). This assessment will also inform the development of Output 2.4.3, Guidelines for the Protection of GR-related Traditional Knowledge, so that the risk can be at least partially managed through project design.</p> <p>Based on the findings of this assessment: i) where the risks and impacts are well understood and limited, and of low-moderate impact and likelihood, simple mitigation measures as per international best practice should be built into the full SESP and the Prodoc (in the design and description of project activities, and any relevant TORs); (ii) where the risks are rated as Moderate but are complex or less well understood, the full SESP should detail if any further targeted Cultural Heritage Impact Assessments or Management Plans must be developed during project implementation; (iii) if the risks to cultural heritage are determined during the baseline assessments to be High or Substantial, the SESP should specify whether a targeted or full Cultural Heritage Impact Assessment and Management Plan is needed as part of a scoped or full ESIA during implementation.</p> <p>*All consultations with communities regarding cultural heritage and traditional knowledge or practices must observe the rights of communities to withhold information they regard as sensitive if disclosure may pose any risks to the holders of information or the cultural resources themselves. All requests to observe confidentiality must be observed.</p>
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7. The outputs of the project will have impacts on the rights, lands, natural resources and traditional livelihoods and practices of peoples and resource-user collectives who fit with the definition of 'indigenous peoples', including through collection and commercialization of resources on their lands and their traditional knowledge.	Social	Substantial I = 4 P = 4	<p>The Stakeholder Analysis undertaken during PPG must assess and map the presence of all communities and resource-user collectives to whom the provisions of UNDP SES Standard 6 applies, and provisions for meaningful and culturally appropriate engagement must be built into the Comprehensive Stakeholder Engagement Plan.</p> <p>Stakeholder engagement must meet the requirements of Free, Prior and Informed Consent, as appropriate (following the guidance in the UNDP SES Supplemental Guidance on Standard 6 ? available at https://info.undp.org/sites/bpps/SES_Toolkit/Pages/Homepage.aspx</p> <p>and the process and outcomes of these consultations must be documented as part of the Stakeholder Engagement Plan annexed to the ProDoc.</p> <p>The project must ensure that a Grievance Redress Mechanism (that meets the standards specified in the UNDP SES Policy and guidance on GRMs), is put in place within two months of project inception.</p>
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<p>8. The implementation of Benefit-sharing agreements between providers and users of genetic resources, and of restrictions on access to resources through tighter bioprospecting regulations and species management plans-which the project aims to ?lead to??may result in economic displacement for some communities or individuals or changes in community or customary rights to GR-related resources</p>	<p>Economic Social</p>	<p>Moderate I = 3 P = 2</p>	<p>The likelihood and impact of this risk must be re-assessed during PPG during development of the SESP. The SESP will also determine if a targeted plan is required to mitigate these risks (e.g. a Livelihoods Action Framework/Plan).</p> <p>Further, the SESA(s) to be undertaken during implementation will assess, <i>inter alia</i>, the socio-economic status and vulnerability of affected persons, and who the relevant rights-holders are for specified GR and what their current livelihoods options are and how they might be affected. The findings will be used to ensure that risk mitigation is built into the regulations for PIC, MAT and MTA, and other relevant project outputs that will influence the establishment of benefit-sharing agreements in future.</p> <p>Mitigation of this risk will also be through:</p> <ul style="list-style-type: none"> - ensuring Free, Prior and Informed Consent (FPIC, as per the UNDP SES Policy) of project-affected communities for activities to develop project outputs that will inform/govern the development of benefit-sharing agreements (e.g. inventories of species with GR value, and their associated TK; the national permitting system) - ensuring that communities and other custodians of GR are properly trained in relevant provisions of the Nagoya Protocol (Prior and Informed Consent, PIC; Mutually Agreed Terms, MAT, and Material Transfer Agreements) and are fully empowered to exercise their rights during negotiation of agreements.
<p>9. The outcomes and realization of the broader development objective of the project may be vulnerable to/undermined by the impacts of climate change, due to the threats climate change may pose to the survival of the species from which GR are sourced.</p>	<p>Environmental</p>	<p>Moderate I = 2 P = 3</p>	<p>Climate risk screening should be carried out during PPG, applying the STAP Guidance on Climate Risk Assessment, with the results presented in an Annex to the ProDoc.</p> <p>During PPG attention should be given to including climate vulnerability as a criterion for the selection of species for R&D and the model species management plan should be ? climate smart.?</p>

10. COVID-19 could pose a risk to the health of project duty bearers and beneficiary communities during project development and implementation, especially for activities that involve community consultation	Environmental	Moderate I = 3 P = 3	<p>The project will be designed to use agreed COVID-19 protocols (in line with measures stipulated by the Government of Botswana and UNDPs Duty of Care Guidelines), as necessary ? for example, use of masks, smaller sized meetings, social distancing, and giving the option to communities to decide if they are comfortable with participating. If the COVID-19 pandemic resurges such that face-to-face meetings are not possible, or travel restrictions are re-imposed, the project will employ virtual means of engagement ? adequate budget provisions should be made for this.</p> <p>During the PPG an analysis should be made of the prevailing COVID-19 situation, and likely future scenarios, and appropriate measures for avoiding disease transmission and mitigating risks arising from COVID-19 will be built into the Prodoc under the Risk Management section, and the activities</p>
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[1] Climate Risk Profile: Botswana (2021): The World Bank Group.

Supporting Documents

Upload available ESS supporting documents.

Title

Submitted

**6428 Social and Environmental Screening Template - ABS
Botswana PIMS 6428 - cleared - revised 13 May**

Part III: Approval/Endorsement By GEF Operational Focal Point(S) And GEF Agency(ies)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter with this template).

Name	Position	Ministry	Date
Mr. Khulekan i Mpofu	Chief Natural Resources Officer	Department of Environmental Affairs under Ministry of Environment Natural Resources Conservation and Tourism	3/22/2022

ANNEX A: Project Map and Geographic Coordinates

Please provide geo-referenced information and map where the project intervention takes place

