



REQUEST FOR CEO ENDORSEMENT

PROJECT TYPE: Full-sized Project

TYPE OF TRUST FUND: GEF Trust Fund

For more information about GEF, visit TheGEF.org

PART 1: PROJECT INFORMATION

Project Title: Mainstreaming SLM in rangeland areas of Ngamiland district productive landscapes for improved livelihoods			
Country:	Botswana	GEF Project ID: ¹	4751
GEF Agency:	UNDP	GEF Agency Project ID:	4629
Other Executing Partner:	Department of Forestry and Range Resources (Ministry of Environment, Wildlife and Tourism), supported by the Department of Animal Production (Ministry of Agriculture)	Submission Date:	5 November 2013
GEF Focal Area:	Land Degradation	Project Duration (Months)	60
Name of Parent Program (if applicable):	NA	Agency Fee (\$):	308,180

A. FOCAL AREA STRATEGY FRAMEWORK²

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Amount (\$)	Co-fin(\$)
LD 1: Maintain or improve flow of agro-ecosystem services sustaining the livelihoods of local communities	Outcome 1.2: Improved rangelands /livestock management.	Land area under effective agriculture, land and water management practices with improved vegetative cover (1 m ha/ rangeland/ livestock)	GEF TF	2,143,000	13,000,000
LD 3: Reduce pressures on natural resources from competing land uses in the wider landscape	Outcome 3.1: Enhanced enabling environments between sectors in support of SLM.	Demonstration results strengthening enabling environment between sectors (livestock marketing, agriculture, land tenure)	GEF TF	793,000	14,599,000
Sub-total				2,936,000	27,599,000
Project management cost				145,800	1,000,000
Total project costs				3,081,800	28,599,000

B. PROJECT FRAMEWORK

Project Objective: To build institutions, policies & markets for mainstreaming SLM in managing rangelands in Ngamiland Botswana					
Component	Type	Expected Outcomes	Expected Outputs	GEF \$	CoFin \$
Effective range management improve range condition and flow of ecosystem services to support livelihoods of local communities	INV	Sustainable land management over an area of 1 million hectares, reducing land degradation from overstocking of cattle, goats and other livestock and enhancing ecosystem functions (water cycling, soil protection and biodiversity status) . Bush encroachment reduced and perennial grasses increased to return over 0.5 million hectares of current bush invaded land into ecologically healthier “wooded grasslands” with consequent increase in rangeland condition and at least 40% increase in primary productivity (baseline to be established during PPG);	Output 1.1: Local level land use plans developed for each pilot area (3)	300,000	1,500,000
	INV		Output 1.2: Improved range management and mixed livelihood systems piloted on commercial and communal ranches	828,000	4,500,000
			Output 1.3: Bush-control program is piloted and provides financial incentives for controlled bush clearance	610,000	2,000,000

¹Project ID number will be assigned by GEFSEC.

² Refer to the [Focal Area/LDCF/SCCF Results Framework](#) when completing Table A.

		Capacity indicators for key land use decision making and extension support institutions increased as measured by the capacity score card. [Departments of Forestry and Range Resources, District Land Use planning Unit (DLUPU) and Tawana Land Board]	Output 1.4: Fire management strategy is piloted	200,000	916,000
			Output 1.5: System for monitoring of range condition and productivity is in place.	205,000	1,000,000
Effective governance framework and markets provide incentives for livestock offtake and compliance with SLM		Land tenure, agriculture and livestock production policies recognize SLM principles and provide basis for the enforcement of the provisions of the three-tier land holding system to facilitate SLM; Co-finance) Markets for beef and other livestock products from Ngamiland District expanded resulting in: 20-30% increase in sales of livestock and livestock products from the district, leading to livestock offtake and at least 30% reduction in overstocking, and 25% increase in incomes of livestock farmers (baseline to be established during PPG); At least 20% of the farmers access more than USD \$ 0.25 million additional finance (loans and grants) and use it to improve trade in livestock and non-livestock products, in line with principles that promote SLM in livestock production;	2.1: A regional multi-stakeholder forum for facilitating a dialogue on SLM is created and empowered.	293,000	1,500,000
			2.2: Improved access of farmers to markets for livestock products ensured	400,000	2,000,000
			2.3: Processing plant in Ngamiland increases quantity and variety of locally processed beef products, allowing higher sales of livestock products and off-take (supported through BMC co-financing)	50,000	7,000,000
			2.4: Product placement secured in local and regional markets (supported through BMC co-financing)	50,000	7,183,000
Sub Total				2,936,000	27,599,000
Project Management				145,800	1,000,000
Grand Total				3,081,800	28,599,000

C. SOURCES OF CONFIRMED CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME (\$)

Sources of co-financing	Name of Co-financier	Type of co-financing	Amount(\$)	exchange rate=8.33*
Multilateral	UNDP	Cash		1,000,000
National Government	Department of Forestry and Range Resources (DFRR)	Cash		2,675,000
National Government	North West District Council	Cash		3,500,000
National Government	Department of Environmental Affairs	Cash		1,300,000
National Government	Department of Animal Production	Cash		3,000,000
National Government	Botswana Meat Commission	Cash		14,183,000
Civil Society Organisation	Kalahari Conservation Society	Cash		630,000
Civil Society Organisation	Tlhare Segolo Foundation	Cash		250,000
Academic Institution (National)	University of Botswana (Okavango Research Institute)	Cash		2,061,000
Total				28,599,000

D. GEF TRUST FUND RESOURCES REQUESTED BY AGENCY (IES), FOCAL AREA(S) AND COUNTRY(IES)

GEF AGENCY	TRUST FUND	FOCAL AREA	Country name	Project amount (a)	IA Fee	Total
UNDP	GEF	LD	Botswana	3,081,800	308,180	3,389,980

E. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

Component	Grant Amount(\$)	Cofinancing (\$)	Project Total (\$)
National/Local Consultants	375,000	500,000	875,000
Total	375,000³	500,000	875,000

F. DOES THE PROJECT INCLUDE A “NON-GRANT” INSTRUMENT? NO.

PART II: PROJECT JUSTIFICATION

A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN OF THE ORIGINAL PIF⁴

A.1 National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NCSA, NIPs, PRSPs, NPFE, Biennial Update Reports, etc.: N/A

A.2. GEF focal area and/or fund(s) strategies, eligibility criteria and priorities: N/A

A.3 The GEF Agency’s comparative advantage: N/A

A.4. The baseline project and the problem that it seeks to address:

A.4. The baseline project and the problem that it seeks to address: There was no change in baseline except that it has been further elaborated as summarized below.

Summary of Baseline:

Lying in the semi-arid interior of Southern Africa, Botswana’s climate is typified by a mean annual rainfall varying from less than 200 millimetres per annum in the Southwest to 650 millimetres per annum in the Northeast with an inter-annual variability of about 40%. Approximately 80% of the country is covered with Kalahari sand soils and savannah ecosystems that support both commercial and communal livestock systems, as well as National Park and Wildlife Management Areas. The Ngamiland District lies in the northwest of the country and covers an area of about 109,000 km² (10,900,000 hectares) of richly endowed rangelands and wetlands.

Despite the importance of both livestock and wildlife-based tourism to the economy, both of which rely on a healthy savannah, the integrity of the savannah ecosystem in the district has been declining steadily over several decades. This is having an impact on the ability of the savannah to continue supplying agro-ecosystem goods and services for sustaining the livelihoods of the Ngamiland people and the economy of Botswana. As stated in the National Action Program (2006), range degradation is mostly due to depletion of palatable grass species and in some cases severe soil erosion due to poor vegetative cover.

The productivity of the savannah ecosystem is at its best when supporting a healthy balance of grasslands and woody species. This mix evolved over millennia, influenced by ecological interactions between a set of biotic and abiotic conditions involving a mix of browsing and grazing herbivores, small and large herbivores (and other microbes), soil conditions, timing of fires and rainfall, and their positive and negative feedback pathways. The natural interaction of these factors has been largely disrupted by livestock farmers, who have changed land management practices without taking into consideration the effects of the changes on the basic characteristics of the ecosystem. As a result, rangeland conditions have been deteriorating and there is widespread bush encroachment, wherein grassland with a relatively low

³ This budget will be used to contract 2 individuals to coordinate technical input from the technical staff of line ministries, civil society, academic institutions and the private sector for all the components and to provide specific technical assistance to outputs 1.2 and 1.3 (Project Coordinator) and output 2.1 (Project Officer). Due to the long-term nature of the initiative, service contract will be more appropriate than consultant contracts.

⁴ For questions A.1 –A.7 in Part II, if there are no changes since PIF and if not specifically requested in the review sheet at PIF stage, then no need to respond, please enter “NA” after the respective question.

cover of woody species is rapidly colonized by tree or shrub cover. In Ngamiland (and much of Botswana), the face of these changes is the overstocking and overgrazing of livestock.

Global Significance:

Ngamiland district is home to the famous Okavango Delta, a wetland of international importance listed under the Ramsar Convention. Plant species composition in the delta comprises about 1,300 taxa. Use of the Rosenzweig (1995) formulae show that the Okavango Delta has a density of 210 species per km², similar to the dryer and colder biomes in Southern Africa, and more than twice as high as those of the better watered and warmer grasslands and savannas in the eastern and northern parts of the sub-continent (Ramberg et al., 2006). The high species diversity is an artefact of the flood pulse system that drives the ecological dynamics of the Delta.

Although the flora of the district outside the Okavango Delta is not well researched or documented, it is largely in line with the semi-arid Kalahari *Acacia-Baikiaea*⁵ woodlands that is the dominant savannah vegetation across the larger Kalahari basin. In its healthiest state, this vegetation is characterized by a balanced mixture of two life forms – trees and grasses – that make the savannah the most important ecosystem for livestock production in Africa. In the Ngamiland district, rangelands in good condition are dominated by open grasslands with scattered trees and bushes. The canopy is open allowing sufficient light to reach the ground and support an unbroken herbaceous layer consisting primarily of C4 grasses. The tree species are dominated by *Baikiaeaaplurijuga*, with varying proportions of *Colophospermummopane* and *Burkeaafricana*. The grass layer is dominated by species such as *Aristidameridionalis*, *A. congesta*, *Eragrostispallens*, and *E. lehmanniana*⁶. In addition to providing an excellent home to livestock, the whole district (including the delta) has a very rich and diverse fauna, including a variety of ungulates such as elephants, buffalos, and rhinos.

Threat #1: Overgrazing: Previous efforts to reduce grazing pressure on communal lands, by moving most of the livestock to commercial grazing areas, under which livestock management was supposed to be in line with principles of range management, including observation of stocking rates in line with carrying capacities, and active manipulation of the vegetation for optimum productivity, have been unsuccessful. This was expected to reduce herds and grazing pressure in communal areas, which were meant for farmers with small herds. Overgrazing has continued unabated in the communal lands and the commercial ranches. Coupled with certain areas being declared as “cattle free zones” in order to control livestock-wildlife diseases, and the occurrence of poisonous plants, this has effectively reduced the pasturelands available for grazing even further. The pressure on rangelands is further exacerbated by the lack of market outlets for Ngamiland cattle. The combined effect of large and growing herds, shrinking pasturelands, and disregard for sustainable principles of range management in the livestock sector have led to serious rangeland degradation, bush encroachment and loss of perennial grass cover.

Threat #2: Fires: The high incidence of fire and elephants was explicitly recognized as the principal cause of structural and compositional change of vegetation in the adjacent Chobe-Lenyanti systems. It seems likely that a similar process of savannization is occurring in north western Ngamiland, primarily through extensive and severe bush fires.

Threat #3: Arable farming and unsustainable harvest of veld products: Additional pressure on the ecosystem comes from arable farming and unsustainable harvesting of veld (grasslands) products by the growing population. Similar to the livestock production sector, these livelihood activities are contributing to ecosystem degradation due to the fact that they are being undertaken without due consideration for sustainability.

Barrier #1: There is inadequate knowledge and skills for adoption of SLM in livestock management and livelihood support systems, in line with clear principles of range management.

Barrier #2: Policy and market distortions have provided disincentives for adopting SLM and sustainable range management principles in the livestock production sector.

A. 5. [Incremental /Additional cost reasoning](#): describe the incremental (GEF Trust Fund/NPIF) financing and the associated [global environmental benefits](#) (GEF Trust Fund) to be delivered by the project:

⁵HanneloreBendsen and Thoralf Meyer, 2002: The Dynamics of the Land Use Systems in Ngamiland, Botswana: Changing Livelihood Options and Strategies (University of Botswana).

⁶ The Botswana National Atlas, 2000: The Government of Botswana

The project design is aligned with that of the original PIF in terms of the project objective, and broad outcomes. The two main components/ outcomes remain the same; the corresponding outputs remain the same in content; however, output 1.1 has been changed to reflect that the project will design integrated land use plans rather than carrying capacity plans. This is in line with the STAP comment that project formulation take into account the science of equilibrium and non-equilibrium dynamics and their applicability to savannah rangelands, particularly the notion of carrying capacity (refer to responses to STAP review in annex B). Outputs 2.1, 2.2 and 2.3 have been merged to one, while outputs 2.4-2.7 have been merged and reformulated to 3 new outputs (currently 2.2, 2.3 and 2.4). All the outputs have been edited to comply with the OECD definition of the outputs, in line with the GEF Manager’s comments at PIF. These changes reflect detailed discussions during the PPG and strengthen the project design, logic and flow. The GEF budget allocated to project components has changed slightly to reflect PPG findings (table below). The budget has now been presented by output. This change allows a greater percentage of the funds to support direct interventions on the ground for greater impact on the ecosystem and livelihoods.

	GEF	Co-fin
Component Total	2,143,000	9,916,000
Output 1.1	300,000	1,500,000
Output 1.2	828,000	4,500,000
Output 1.3	610,000	2,000,000
Output 1.4	200,000	916,000
Output 1.5	205,000	1,000,000
Component 2 Total	793,000	17,683,000
Output 2.1	293,000	1,500,000
Output 2.2	400,000	2,000,000
Output 2.3	50,000	7,000,000
Output 2.4	50,000	7,183,000
PM	145,800	1,000,000
Grand Total	3,081,000	28,599,000

1. Adjustments have been made in the text of the UNDP Project Document to address the key issues raised by GEFSEC, and STAP during the PIF approval process (see Annex B).
2. Global environmental benefits: the extent of global environmental benefits to be generated by the project has been better quantified (see Project Document).

Each project component/ outcome and output has been elaborated in detail (see below)

Component 1: Effective range management in over 1 million hectares improves range condition and flow of ecosystem services to support livelihoods of local communities in Ngamiland

3. Under this outcome, the project will put in place systems and capacities for applying improved range management principles over one million hectares of rangelands, to deliver the following outcomes: i) Sustainable land management adopted in over 1 million hectares, reducing land degradation from overstocking of cattle, goats and other livestock and enhancing ecosystem functions (water cycling, soil protection and biodiversity status); ii) Bush encroachment reduced and perennial grasses increased to return over 0.5 million hectares of current bush invaded land into ecologically healthier “wooded grasslands” with consequent increase in rangeland condition and at least 40% increase in primary productivity; iii) Capacity indicators for key land use decision making and extension support institutions increased as measured by the capacity score card. [Departments of Forestry and Range Resources, District Land Use planning Unit (DLUPU) and Tawana Land Board]
4. Activities will be piloted in different areas within Ngamiland (see Annex 2 for details on pilot areas). Replication of the successful pilots could have an impact on an additional 4.5 million hectares. Up-scaling of the

lessons of the project over similar savannah areas affected by rangeland degradation will be facilitated through the extension services of the Department of Veterinary Services (DVS), Department of Crop Production (DCP), Department of Forestry and Range Resources (DFRR), and Department of Animal Production (DAP). The outcomes will be delivered via the following outputs and suboutputs.

Output 1.1: Local level land use plans developed for each pilot area to support sustainable utilization of range resources;

5. There exists a district-level master plan that outlines zoning of land use at a broad level, but lacks detailed guidance on land use at a local level. This output will focus on developing detailed land use plans for the three pilot sites (Hainaveld ranches, Lake Ngami and Toteng–Maun ranches, and northern and western Ngamiland).

6. The first step will be to undertake integrated range assessment studies for these areas. The assessments will cover social, cultural, economic, and ecological aspects to give a complete baseline picture of the state of the range and other resources, as well as the levels of use and the dynamics shaping interaction between these resources and people in specific contexts. The assessments will provide more information on the challenges and opportunities present in the different pilot sites with a view to informing the design and methodologies for the interventions proposed. The range assessment will also take into consideration the potential impacts of climate change on trends in rangeland condition, particularly the issue of bush encroachment and the apparent thriving of invasive species.

7. The preparation of the assessments will be led by expert consultants (CBO or institute of higher learning) working together with the competent authorities within government (i.e. the relevant government departments, in particular DFRR, DCP, DAP, DVS with a view to determining sustainable utilization of the range, particularly for livestock grazing purposes. Consultations will be undertaken with the participation of members of the community living in study sites and representatives of civil society organizations, and where possible research organizations to ensure that inputs from all stakeholders are taken into account.

8. On the basis of these assessments, land use plans will be developed for each pilot area. The land use plans will guide decisions on livestock management, (including sales) and the sustainable utilization of other range resources. They will be informed by up-to-date knowledge on range conditions, carrying capacities and effects of the changing climate on bush encroachment and invasive species. Through these range assessment, sustainable stocking rates for cattle will be determined for the specific pilot areas and mechanisms for meeting these will be pursued through a participatory, multi-stakeholder approach. Implementation and management of stocking rates will be pursued more directly in the ranches by limiting numbers and less directly in communal areas by employing innovative range management strategies that involve movement of livestock and improvements in marketing to reduce overstocking.

9. Development of the land use plan will be led by the Tawana Land Board and DLUPU with the active participation of communities, other government and non-government stakeholders (see Table 5 on stakeholders and their role in the project). The multi-stakeholder forum to be established by the project under Output 2.1 will provide the mechanism for eliciting participation of these different stakeholders in the formulation of the land use plans. A consultative process is essential to address land use conflicts because the participatory land use planning process is anticipated to serve as a vehicle for conflict resolution and exploring sustainable approaches to rangeland utilization, particularly for livestock farming. This will be provided by implementing the systematic local land use planning tool which is known by its product, Participatory Integrated Land Use Management Plans (PILUMPs). Stakeholders will work together to identify areas of land use conflict and incorporate strategies to optimize competing land use practices through zoning using a participatory land use planning process adopted from the World Wildlife Fund and adapted for use in Botswana by the Southern Africa Regional Environment Programme (SAREP).

10. The development of the land use plans will be supported by capacity building workshops to enhance skills and capacities for land use planning to sustain the project's results in the long run (partly funded under output 1.5). The process of producing PILUMPs provides for both training and product (land use plan) development. It comprises a series of participatory consultative meetings which are initially for collecting

baseline data about the area by planners and the participating communities. These, as is stated above, will be integrated range assessments. Systematic participatory rural appraisal tools will be applied to collect this data. Another series of training workshops will follow to train the trainers, who often are the community leaders, on plan development, which includes local institutional capacity assessments, trends of key environmental, economic and social factors, problem identification and prioritisation and resource mobilisation. The next series of workshops open up the process for the wider community to participate in decision making on land zoning and implementation tasks allocation for different stakeholders. While the Tawana Land Board and DLUPU will lead this process as competent authorities, the Okavango Research Institute will facilitate the participatory planning process.

11. Land-use planning results will be communicated to relevant sub-district and district administrations and to management units of nearby protected areas. The lessons learned from the land use planning exercise will be assessed and summarized as an aid in future replication of this land use planning exercise.

12. The land use plans will inform the activities to be undertaken in output 1.2 and selected components of the land use plans will be implemented under outputs 1.3 (bush control) and 1.4 (fire strategy).

Output 1.2: Improved range management and mixed livelihood systems are piloted in line with the land use plans

13. This output will focus on improving the range management systems on commercial ranches and communal rangelands in line with the recommendations of the land use plans formulated under output 1.1. although the fine details will be guided by the land use plan, it is expected that this will involve a participatory process of bringing together traditional rangeland management systems and contemporary ones based on technical knowledge.

14. In commercial ranches that are enclosures, a system of paddocking, rotational grazing, supplementary feeding and controlled off-take will be put in place. The Department of Animal Production (DAP), Department of Agricultural Research (DAR) and Department of Forestry and Range Resources (DFRR) will work with farmer associations to identify volunteer farmers who have implemented different combinations of improved ranch management as described above. An ideal control farm will also be set up and monitored to assess benefits to the range and economic returns. Other participating ranches will also be subjected to the same monitoring for comparison. The backdrop to this is that most farmers have never implemented improved range management as per the provisions of the policies that resulted in their ranch allocation. They continued to operate the cattle post system but with limited mobility resulting in ranch degradation. Some did not implement the improved enclosure management because they were used to the traditional cattle post system which is a low-cost and low-return system; some did not implement it because they doubted the possibility of recovering the high set-up and maintenance cost of the ranch and making a profit. The project pilots will aim to find the best management combination to manage investment cost and preserve or even enhance the range lands/ranches. The main activities for the project will be to undertake baseline physical, economic and social assessments for the range and or ranches and then set up range management experiment conditions in different ranches for monitoring throughout the project using MOMS and traditional range assessment tools.

15. Local institutions will be empowered through training and resource provision to ensure that the improved range management system can be implemented on commercial ranches. Results and lessons learned from this pilot will be presented at sub-district, district, and national levels, as well as in print materials for wider outreach.

16. In communal rangeland areas, where the cattle post livestock system is followed, the project will pilot a pastoral system based on a combination of herding, kraaling and livestock movement. In addition, practical projects aimed at enhancing the community livelihoods portfolio with alternative ones will be piloted. A gender analysis will underpin development and implementation of the alternative livelihoods to ensure that critical issues related to access and control of land resources as they relate to women are identified and addressed. Communities will be supported with training and other resources to develop a multiple livelihood production system, involving improved cattle post pastoral systems, open game farming, sustainable veld products harvesting, and conservation agriculture. (See Annex 3 for more details on proposed alternative livelihoods.) Local institutions (including women's self-help groups) will be empowered through training and resource

provision to ensure that the improved pastoral system and multiple livelihoods can be effectively implemented on pilot communal rangeland areas.

17. Improvements to the cattle post pastoral system will be led by DAP and the Okavango Research Institute (ORI) of the University of Botswana. The system has champions, and trials with communities in similar conditions in Zimbabwe are already taking place and will provide benchmarking. Volunteer farmers will be sought to participate in the project by herding their livestock as a pack and managing the range in an agreed manner. Benchmarking, technical knowledge, and indigenous knowledge will all be combined to develop a management strategy for the range and the herd, to be implemented and monitored by the farmers and researchers throughout the project. This may be implemented in two areas around Thaoge and Kunyere streams, both of which flow into or towards lake Ngami. A firm decision will be made at inception where an appraisal will be done for feasibility of two sites for this activity.

18. The Department of Wildlife and National Parks (DWNP), the Botswana Tourism Organisation as well as the Tawana Land Board will support the existing Community Trust in the north-western Ngamiland area (pilot site 3) to set up a community-based open game ranch. This will include community mobilisation to foster community interest and buy-in. Training will also be provided by a team of experts from the participating institutions on different aspects of running the ranch, tourism development and entrepreneurship.

19. Training on Conservation Agriculture (CA) is already on-going for some communities through the SAREP project. These will provide benchmarking and expertise to train communities north of Gumare in the Etsha group of villages. The Botswana College of Agriculture (BCA), Department of Agricultural Research (DAR) and Department of Crop Production (DCP) will provide community mobilisation, training and technical support. They will work closely with the village Farmers' Committees.

20. Finally, this output will address rehabilitation of degraded areas through the use of live fences around homesteads and gardens, and establishment of riparian buffer strips. The area around Lake Ngami is particularly affected by loss of riparian woodlands. These activities are expected to contribute to higher tree cover, reduced soil erosion, increased rainfall infiltration, and enhanced nutrient cycling.

Output 1.3: Bush-control program is piloted and provides financial incentives for controlled bush clearance

21. This output will focus on the issue of bush encroachment that is particularly rampant in the area around Lake Ngami and moving towards the delta; and will implement the recommendations of the land use plans formulated under output 1.1. The project will work with subsistence farmers to harvest bush in overgrazed, bush-infested rangelands, and use mechanical means for the production of charcoal briquettes, fuel wood and other woodland products. This will be based on a co-management approach. The system is expected to improve range condition, productivity and carrying capacity for cattle in the pilot areas. Bush clearing will be accompanied by reseeding with perennial grasses, to support the regeneration of grasses from any seeds that still remain in the seedbed. Perennial grasses have good self-seeding ability and with proper management they can establish and spread quickly to give good cover. The most productive grasses in the semi arid rangelands include *Cenchrus ciliaris*, *Chloris roxburghiana*, *Entropogon macrostachyus*, *Eragrostis superba*. These grasses are known to have good grazing value and persistence. They are also easy to establish, drought tolerant and able to survive and perpetuate itself.

22. A safeguards system will be used to ensure that reseeding is only with grasses endemic in Ngamiland and that bush products are sourced only from bush-invaded savannahs/ grasslands and not forests, and that the use of the bush does not cause a net increase in emissions. In developing this system, the project will liaise with other similar initiatives in the region (mainly Namibia) to examine successful approaches and lessons. Local institutions will be empowered through training and resource provision to develop and implement this program.

23. One of the most limiting factors in widespread adoption of reseeding is inadequate supply of quality seeds of high yielding rangeland grass species. The project will therefore assist farmers to obtain good quality seeds. It will then train farmers, ToTs (Trainers of Trainers) and the extension workers on methods to design, facilitate and implement seed multiplication initiatives. Keen farmers will be encouraged to grow grass seeds and/or grass for sale to others; this will contribute to improving livelihoods, providing a financial incentive to range rehabilitation. This will be realized through linking community groups undertaking rehabilitation to

existing markets or livestock marketing partners particularly private sector, especially those seeking forage for feedlots for animals pending sales to the Botswana Meat Commission (output 2.2).

24. Partnerships will be sought between the project and the Rural Industries Innovation Centre to identify the appropriate technology and possibly train users on such technology for processing wood products into briquettes. The communities around Lake Ngami will participate in the bush clearing and manufacturing of briquettes for sale. Women will be specifically identified as the target group for the activities around manufacturing and sale of briquettes through an existing local/community-based institution. A training module on sustainable methods of bush clearing will be developed and training workshops will be delivered through community based institutions working with a member of the Project Management Unit (PMU). A search will be undertaken to identify communities already implementing such programs and exchange visits will be organized for community representatives/trainers who will return to demonstrate and train the rest of the project participants. The Local Enterprise Authority (LEA) would be engaged to train the community group on basic business management, marketing and book-keeping. The Social and Community Development Council is expected to be involved to mobilize the participating community group to form and under empowered leadership who would be trained on basic organizational leadership such as conducting meetings, record keeping and reporting as well as conflict resolution. Results and lessons learned from this pilot will be presented at sub-district, district, and national levels, as well as in print materials for wider outreach.

Output 1.4: Fire management strategy is piloted in Tsodilo line with the provisions of the land use plans

25. Under this output the project will pilot the effective use of fire as a savannah vegetation management tool to reduce uncontrolled fires, improve quality of grazing and increase rangeland carrying capacity by reducing the frequency of fires from yearly to once every 3 years. This will be piloted in the Tsodilo Hills areas (that falls within pilot area 3), which is a hot spot in the district for annual fires. A fire management strategy has been prepared in the past for Tsodilo Hills. The project will help establish a multi-stakeholder Tsodilo Hills Fire Management Committee and develop its capacity to review the existing Tsodilo Fire Management Strategy and implement it. This will be based on a co-management approach. The Fire Management Committee will be facilitated to implement the fire strategy. This will include training on methodologies for managing and controlling fire and capacitated to better respond to fire outbreaks. They will also be trained to monitor fire incidences using Management Oriented Monitoring Systems (MOMS). The Department of Forestry and Range Resources (DFRR) fire rangers will facilitate the community training and facilitate increased participation of community members in fire control and management. A participatory approach to review, updating and enhancement of the existing fire management strategy will be used to create an atmosphere of co-learning where indigenous fire management knowledge will be incorporated alongside technical knowledge. Results and lessons learned from this pilot will be presented at sub-district, district, and national levels, as well as in print materials for wider outreach.

Output 1.5: System for monitoring of range condition and productivity is in place.

26. The objective of the monitoring system will be to serve as a decision support tool for farmers to help them in planning and implementing SLM strategies, as well as re-evaluating these strategies based on results and impacts. The monitoring system will essentially be designed as a community level, management-oriented monitoring system (MOMS). It will be developed in a participatory manner. Experts from the Okavango Research Institute, DFRR and DAP will support the establishment of the monitoring system by providing support in setting-up the system (defining what data need to be collected and ensuring that data are compatible with analytical models that are to be used, how data are to be collected and by whom).

27. Data from the integrated range assessments carried out under Output 1.1 will provide the baseline against which to compare changes. Monitoring will be based on observations of key areas (monitoring plots) and key attributes. Monitoring plots and attributes are to be selected and finalized during the inception phase but are likely to include aspects of direct relevance and interest to local communities (for example, livestock productivity; animal sightings for wildlife endowment for ecotourism; local rainfall for arable production planning; problem animal issues to understand crop damage and livestock predation; veld products to monitor and manage their harvesting; early warning of disease and drought so that farmers can modify their decisions on livestock off-take, breeding, and sale), as well as conventional rangeland assessment attributes (for example,

total system carbon; rangeland biodiversity; grass composition and cover as well as tree composition and density; land cover measured by Natural Divergent Vegetation Index, invasive plants). In developing the monitoring system, consistency with UNCCD impact indicators will also be ensured to support national reporting to the Convention. Results and lessons learned from the pilots via the M&E system will be presented at sub-district, district, and national levels, as well as in print materials for wider outreach. The project will contribute lessons on good practices in SLM to the PRAIS portal of the United Nations Convention to Combat Desertification (UNCCD), under the rubric of “best practices”. It will also support the country’s reporting to the UNCCD by enriching the data uploaded on PRAIS.

Outcome 2: Effective resource governance frameworks and markets provide incentives for livestock off-take and compliance with SLM

28. Under this outcome, the project will facilitate the conditions necessary for development and successful implementation of the local integrated land use plans and replication of the pilot activities developed under Outcome 1. These conditions relate to improved capacity for local resource governance catalyzed through GEF resources (Outputs 2.1, 2.2), removing barriers to small-scale, non-meat, livestock product-based enterprises catalyzed through GEF resources (Output 2.3), and improved access to markets for Ngamiland meat catalyzed through cofinancing (Outputs 2.4 and 2.5).

Output 2.1: A regional multi-stakeholder forum for facilitating a dialogue on SLM and mainstreaming SLM into regional and national policy programs and processes is created and empowered.

29. The project will support the formation of a regional multi-stakeholder SLM forum (at the Ngamiland District level) to lead district-level dialogue on mainstreaming SLM considerations in implementation of critical national and regional policies, plans and strategies. This includes policies on livestock production and marketing, and agricultural land use (Tribal Grazing Land Policy, National Policy on Agricultural Development). Experiences from the project’s pilot interventions (Outcome 1) will be used to inform the policy framework for SLM, particularly regarding rangelands and livestock.

30. Currently, there exists a multi-sectoral institution (as in multiple government sectors) at the district level namely the District Land Use Planning Unit (DLUPU). The Land Board functions as the secretariat of this institution and the DEA and DFRR are also members. DLUPU already has a land use planning and environmental advisory mandate. However, it does not have a multi-stakeholder membership (i.e., membership beyond government sectoral departments). The project thus aims to pilot an expanded multi-stakeholder forum that builds on the existing multi-sectoral one. Membership of the forum will include representatives from government, NGOs, water and land user groups such as Farmers’ Associations, community trusts, community leaders, private sector (hunting/ fishing, tourism agencies, small businesses, and enterprises), etc.

31. Particular emphasis will be placed on ensuring community participation in this forum as this has been identified as a weakness in resource governance. Local natural resource management/ community based management institutions will be developed and capacitated (potential for development of Farmers’ Associations as recommended by the Ngamiland Integrated Land Use Plan) to facilitate effective participation of communities in the dialogue to ensure that local level issues are reflected in the emerging national beef marketing policy, as well as other incentive programs for marketing of livestock products. In this regard, local natural resource management/ community-based management institutions such as community trusts, farmers’ committees, village development committees, and Bogosi⁷ will be empowered, through a clear mandate and financial and technical resources. In addition to leading the policy discussions, the institutions will use the capacity to lead the design and implementation of range management principles envisioned in SLM at the local level.

32. The project will therefore mobilize the local institutions around the concept of SLM. The PMU together with leading government institutions (DEA and DFRR) and engaged community development mobilization experts will hold participatory training workshops with local institutions to introduce the SLM concept and project and relate it to indigenous knowledge and management systems. A few other training

⁷ Chieftainship

workshops will focus on skills development in areas of proposed SLM project activities. Financial, capital and extension support will be made available for the local institutions to attend meetings and participate in activities. They will also be supported with skills development and extension support to hold their own meetings to organize their contribution and that of their communities. Local institutions will also be supported with skills development in conflict resolution. This will be provided with the input of local leaders to ensure that it is built upon the traditional/ local conflict resolution approaches. While the project will provide and/ or mobilize this support initially, modalities of sustenance of this support through Government and NGOs will be built into the project such that it continues beyond the life of the project.

33. The capacity of civil society to lobby and advocate for SLM will be developed by having a budget allocation for their activities through Government and NGO support, and supporting NGOs' access to donor funding. Support to and involvement of these civil society institutions is important because with appropriate training and resources they are well-placed to assume responsibility for some extension services.

34. The proposed plan for the creation of the multi-stakeholder forum includes: (i) determination of a preliminary list of potential participants from Government, NGOs, water and land user groups such as Farmers' Associations, and private sector; (ii) dissemination of basic information materials on the role of the Ngamiland SLM forum to potential participants; (iii) organization of area visits and meetings for consultations on the role, status and importance of the forum, as well as local expectations; (iv) consultations on and selection of forum members; (v) preparation and implementation of the initial meeting for establishing the forum; (vi) follow-up discussions of founding documents of the forum with members; (vii) first full meeting of the forum; (viii) development and approval of the strategy and work plan for influencing key policies; (ix) continuing training and technical assistance related to SLM for forum members during the project.

35. It is expected that the forum will function through different sub-groups/ committees. For example, there will be a sub-committee on livestock products that will look at the entire livestock value chain and will ensure that all players are actively engaged in policy discussions, effectively serving as a support group/network. There will also be a fire-management sub-committee operating in the Tsodilo area to pilot a participatory fire management strategy (Output 1.4). All pilot sites will have land use planning sub-committees to oversee the production of the local integrated land use plans through the PILUMPs process (Output 1.1). The farmer's committees and associations, who will work with communities and ranch owners on improved range management systems (Output 1.2), will also report to the regional multi-stakeholder committee.

36. The forum will lead the process of generating recommendations to mainstream SLM into the productive sector policies including the Tribal Grazing Land Policy (TGLP), The Tourism Policy (under review), Forest Act, The Wildlife Conservation Policy (under review), Wildlife Conservation and National Parks Act, and the Botswana Beef and Trade Policy. Led by the Ministry of Land and Housing together with the Department of Environmental Affairs (MEWT) and Department of Forestry and Range Resources (DFRR), and with technical support from local CSO groups (including ORI), the forum will actively seek opportunities to participate in national discussions on policy reform, as well as initiate such discussions where appropriate.

Output 2.2: Improved access of farmers to markets for livestock products

37. This output will focus on improving the enabling environment for establishment of small-scale, community-based enterprises related to processing and marketing of livestock products such as leather, horn, and bones, from both cattle and other small stock. Farmers, merchants, and regulators/ policy-makers/ competent authorities will be brought together to explore the feasibility of establishing an inclusive livestock value-chain⁸, as well as opportunities for establishment of small industries based on non-meat livestock products.

38. While there is local interest in accessing markets for non-meat livestock products, the enabling environment for small farmers to enter the market is lacking. The project will work to remove barriers and facilitate entry into the sector/ market. A detailed feasibility study will be undertaken covering economic assessment, environmental assessment, and socio-cultural aspects. Options for access to credit will also be

⁸ A livestock value chain can be defined as the full range of activities involving different people that are required to bring a product (e.g. live animal, meat, milk, egg, leather, fiber, manure) to final consumers passing through the different phases of production, processing and delivery.

explored and facilitated through the engagement of local/national financing institutions such as the National Development Bank (NDB), Citizen Empowerment Development Agency (CEDA)⁹ and business development support through the Local Enterprise Agency (LEA)¹⁰.

Output 2.3: Processing plant in Ngamiland increases quantity and variety of locally processed beef products, allowing higher sales of livestock products and off-take (supported through BMC cofinancing)

39. Under this output, the project will work with the private sector, farmers and government to increase slaughter capacity and produce a broader range of meat products. By increasing the demand for Ngamiland cattle (to be processed into meat products by the plant), the project expects to contribute towards increased off-take in Ngamiland.

40. Through BMC cofinancing, the capacity of the Maun abattoir is to be increased. The aim is to raise slaughter numbers that are currently below the set rate of 100 animals a day and increase it to 120. In addition, a meat processing facility is to be established in Maun, through a partnership between BMC and a private sector partner from South Africa, which will produce a wide range of processed meat products suitable for a range of global markets. For example, the market for sous vide¹¹ products is expanding rapidly in Eastern Europe and Asia.

Output 2.4: Product placement secured in local and regional markets (supported through BMC co-financing)

41. Through BMC cofinancing, the project will work with the private sector, farmers and government to tap into a broader range of markets for Ngamiland beef. Currently, Botswana is exploring liberalization of the beef market that would allow more players to be involved in the export of beef products to other non-EU markets as well as export of live cattle to regional markets such as Angola and Zimbabwe. This is being spear-headed by BMC. The ability to expand access to beef markets is expected to increase the demand for Ngamiland beef products and hence lead to greater off-take. The project (along with the Department of Animal Production) will facilitate improved engagement between BMC and other small-holder farmers on strategies to increase the marketability of their cattle to the BMC for both local and international markets (e.g. controlling infections, feeding and feedlotting to improve the quality of the beef, etc.). Emphasis will also be placed on improving the quality of production and packaging systems for finished products, and bringing products in line with ecotourism principles such as sourcing locally and reducing the carbon foot print.

A.6 RISKS, INCLUDING CLIMATE CHANGE, POTENTIAL SOCIAL AND ENVIRONMENTAL RISKS THAT MIGHT PREVENT THE PROJECT OBJECTIVES FROM BEING ACHIEVED, AND MEASURES THAT ADDRESS THESE RISKS:

Risk	Rating	Mitigation measures
Lack of buy-in from planning institutions and Government. There is a possibility of conflicts arising from perceptions of interference and differences on approaches to how the issues could be addressed, especially between government institutions and civil society organizations.	M	The project requires collaboration and coordination by all key stakeholders. It will, therefore, set-up a multi-stakeholder forum that will ensure dialogue, joint planning, implementation and monitoring and evaluation in order to create ownership and accountability. Government institutions participating in the project will be directly driving their own mandates; they will have a direct interest in the successful implementation of the project. Participating government institutions (Departments of Animal Production; Forestry and Range Resources and Tawana Land Board) will benefit from the project intervention activities. Civil society organizations will be provided capacity development support.
The benefits generated by the project may be offset by the impacts of climate change, which might exacerbate the	M	The project will address this risk by building a better understanding of the potential impacts of climate change on trends in rangeland condition, particularly the issue of bush encroachment and the apparent thriving of

⁹ CEDA was established by the Government of the Republic of Botswana in 2001 to provide financial and technical support for business development with a view to promote viable and sustainable citizen owned business enterprises.

¹⁰ LEA is a coordinated and focused one-stop shop Authority that provides development and support services to the local industry needs of SMMEs, encompassing training, mentoring, business plan finalization, market access facilitation, and facilitation of technology adaptation and adoption.

¹¹ Sous vide is a process of cooking vacuum sealed food at a very tightly controlled temperature, normally the temperature the food will be served at, but cooked for very long periods. More importantly, it would allow Botswana to sell very high quality tender cooked beef to this niche market.

<p>usual droughts; indeed, Botswana has encountered 12 dry episodes in the last 22 years with economic consequences for ranches and severe impacts on the poorest communities (Mafisa herders).</p>		<p>invasive species. The findings of this study will contribute to the land use plans, a key element for improving ecological integrity of the rangelands and improving ecosystem functionality and cover. This is expected to increase the resilience of ecosystems to climate change induced fire, drought and other perturbations. By reducing existing anthropogenic stressors to ecosystems, the project will enhance their capacity to recover following such perturbations. Building capacity for long-term monitoring of rangeland conditions will increase the possibility of adaptive management, including early detection (and addressing) of climate change impacts.</p>
<p>Weak enforcement of the TGLP has in the past encouraged overstocking in the communal lands since commercial farmers have retained the right to offload excess livestock to the communal areas. Increased access to livestock markets might become a perverse incentive and fuel higher stocking rates, if governance is not improved simultaneously.</p>	M	<p>Enforcement of the TGLP has been difficult in the past since it seemed to benefit the elite, who are commercial farmers. However, losses from the high rate of rangeland degradation in Ngamiland seem to be causing larger losses than gains from exploiting the weakness in the policy, even for commercial farmers. Combined with the current political support for national policy on beef markets from the President's Office and the highest management of the Botswana Meat Commission, this turn of events provides a conducive environment for change. The project will seek to improve governance at the local level by engaging and capacitating local natural resource management/ community-based management institutions such as community trusts, farmers' committees, village development committees, and Bogosi. These institutions will be empowered, through a clear mandate and financial and technical resources, to lead the design and implementation of range management principles envisioned in SLM at the local level (Output 2.2). The land use plans to be developed by the project for each pilot area will guide decisions on livestock management (including sales).</p>
<p>Reluctant participation by local communities due to fear that the project will compromise their livelihoods by introducing strict management systems.</p>	L	<p>Noting that local communities bear the heaviest cost of rangeland degradation and limited access to markets for livestock products, the project will work closely with them to address the challenges in a participatory manner. The project strategy emphasizes the fact that local communities need to participate meaningfully in rangeland governance. The project will provide technical, institutional and financial support for engaging in improved livestock production and mixed livelihood systems. It will also recognize and build on the traditional knowledge and institutions of local communities and fully integrate this in designing management interventions. The project will also improve targeting and distribution of benefits among women.</p>
<p>There is a risk of resistance to the empowerment of poorer women from the more privileged sections of the community</p>	M	<p>The project will make deliberate interventions that raise awareness about the importance of participation and inclusion in implementing solutions and most importantly recognize that access to productive resources may be based on qualifications such as age, gender, ethnicity, religion, status, profession, place of birth or origin, common education and many other attributes that constitute social identity. The initial stakeholder consultation processes will engage the services of a sociologist or rural development specialist as part of a team that will conduct participatory rural appraisal as a component of the rangeland assessments. This will mobilize the whole community for participation in the project, build rapport between the outsider project implementers and local communities and make a case for full stakeholder participation and attendant partnerships</p>
<p>Effectiveness of the project in increasing off-take depends, in part, on the successful identification of, and engagement with new markets, and the farmers' quick adjustments to different livestock products. There is a small risk that it might be difficult to match new markets to new products, or that farmers fail to meet the quality specifications for new products and the new markets.</p>	M	<p>Participation of the Botswana Meat Commission is critical in overcoming this risk. Fortunately, the project has very high political support from both the country's leadership (President's office) and the BMC, which are both committed to finding new markets for the country's beef and other livestock products. The project will also involve the private sector (through the BMC for international and national players) and through the district chamber of commerce, to identify and address challenges related to successful engagement with markets.</p>

A.7. COORDINATION WITH OTHER RELEVANT GEF FINANCED INITIATIVES: - ELABORATED AS BELOW

42. There are a number of projects addressing key natural resource management challenges in Ngamiland District. These projects provide opportunities for complementarities and building of synergies with the proposed project. The Department of Wildlife and National Parks, in partnership with the World Bank, is implementing a project to address wildlife/human conflicts by promoting co-existence (The Human-Wildlife-Coexistence Management Project in Northern Botswana). One of the project sites is in Seronga area within Ngamiland. The project intends to develop and pilot strategies of human co-existence with wildlife and mitigating the effects of problem animals. One of the key intervention areas of the project is to improve livelihoods of the communities who live in wildlife areas. The project will coordinate activities with this Human-Wildlife Coexistence Management project, especially activities related to piloting conservation agriculture and open game farming at the community level, to ensure that successful approaches for managing conflict are integrated into the pilot activities.

43. The USAID SAREP, which aims to assist the Countries of Botswana, Namibia and Angola to effectively manage the resources of the Okavango River Basin, will facilitate the implementation of the Ngamiland Integrated Land Use Plan. In addition, SAREP will assist in the formulation of a Strategic Environment Assessment for Ngamiland which will take in to account aspects of SLM. SAREP will further work with the various departments such as Ministry of Agriculture to explore alternative investments for SLM such as REDD+. Decision support systems will be developed to facilitate decision making in land management. The proposed project will coordinate closely with SAREP in order to share information, knowledge and approaches.

44. A GEF funded project with the main objective of building local capacity for the conservation of biodiversity in the Okavango Delta; Biokavango project is working primarily in the wetland system of the Okavango Delta; strengthening tourism, fisheries and sustainability of veld products as livelihood support systems. Notable interventions include facilitation of the establishment of local level resource management structures and active community involvement in biodiversity conservation in Tubu, Panhandle area and the eastern distal ends of the Delta. Sustainable Land Management initiatives proposed under this initiative will utilize the systems and processes initiated by Biokavango project.

45. The Government of Botswana, working with local communities and the private sector, is initiating a project under the REDD+ mechanism of the UNFCCC. The pilot project will take place in NG 8 controlled hunting area within Ngamiland District. This project will complement the SLM project through protection of rangeland areas, monitoring and releasing benefits from such resources. ORI of the University of Botswana is currently in the process of establishing a resource monitoring system. The capacity within ORI and other monitoring initiatives in the district such as biomass assessment by the DFRR provide an opportunity for collaboration in building the capacity of local farmers, planners and decision makers in range resource monitoring.

B. ADDITIONAL INFORMATION NOT ADDRESSED AT PIF STAGE:

B.1 Describe how the stakeholders will be engaged in project implementation.

46. The natural resource sector of Ngamiland has multiple stakeholders. During the PPG phase, a stakeholder workshop was held to identify stakeholders as primary, secondary, and tertiary according to livelihood dependence on natural resources. In addition, stakeholder interest and influence were also assessed. The table below summarizes these findings, as well as articulates the role and responsibilities of different stakeholders in project implementation.

Stakeholder	Interest in SLM	Degree of interest	Level of influence	Comments	Participation in project implementation
1. Subsistence farmers-pastoral	Grazing and livestock development	High	Low	The survival of their livestock and livelihood is directly dependent on land, but they have low influence on decision making	Will participate in the land use planning process through membership in land use planning committee/multi-stakeholder forum. Will also participate in design and implementation of management oriented monitoring system (MOMS) Participate in pilot harvesting of bushes for charcoal briquettes and firewood as a community enterprise Participate in piloting monitoring of an innovative pastoral system based on a combination of herding, kraaling and livestock movement
2. Subsistence farmer-Arable	Ploughing land	High	Low	Their livelihoods depend on rangelands but they have minimum role in decision making	Will participate in the land use planning process through membership in land use planning committee. Will also participate in design and implementation of management oriented monitoring system (MOMS) Participate in pilot harvesting of bushes for charcoal briquettes and firewood as a community enterprise Participate in CA pilots
3. Commercial farmers	Rangelands/ farm land	High	Medium/High	Their user rights allow them to make decisions on their land. Still depend on government as final decision maker. Have financial power to for example employ lawyers to speak on their behalf.	Will participate in the land use planning process through membership in land use planning committee. Participate in range resource assessment and design and implementation of appropriate range management system (including stocking rates) Will also participate in design and implementation of management oriented monitoring system (MOMS) Participate in livestock value chain analysis and identification of opportunities for farmers to enter new markets Participate in establishing a meat processing plant
4. Other resource users in the community – community trusts, fishers, gatherers, etc.	Range resources for subsistence	High	Low	Their livelihood depends on the land but they have no decision making power	Will participate in the land use planning process through membership in land use planning committee. Participate in open game farming feasibility studies and pilots Will participate in assessment, planning and piloting community level harvesting, value addition and marketing of veld products Will also participate in design and implementation of management oriented monitoring system (MOMS)
5. Farmers' Committee	Range resources for subsistence, farmer education	High	Low	Often not empowered by law or policy to make decisions. Have no money or knowledge to contribute to decision making.	Will participate in the land use planning process through membership in land use planning committee. Participate in pilot harvesting of bushes for charcoal briquettes and firewood as a community business Will participate in CA pilots
6. Farmers' Association	Access to the rangeland	High	High	Have financial power to for example employ lawyers to speak on their behalf; may also have members in influential positions.	Will participate in the land use planning process through membership in land use planning committee. Will participate in range assessment and innovation feasibility studies, piloting and monitoring Will also participate in design and implementation of management oriented monitoring system (MOMS)
7. Department	Management of	High	High	Are empowered by an act	Together with the project management unit will set up the project multi-stakeholder forum

Stakeholder	Interest in SLM	Degree of interest	Level of influence	Comments	Participation in project implementation
of Forestry and Range Resources (DFRR)	forest and range resources			of Parliament to manage range resources	and facilitate its capacity development and empowerment Will participate in the land use planning process as a member of DLUPU and the project multi-sectoral stakeholder forum. Will participate in range assessment and innovation feasibility studies, piloting and monitoring Will lead the establishment of a multi stakeholder Tsodilo Hills Fire Management Committee and develop its capacity to support the review and implementation of the Tsodilo Fire Management Strategy. Will also participate in design and implementation of management oriented monitoring system (MOMS) and others suitable for use in ranches. Will lead and facilitate assessment, planning and piloting community level harvesting, value addition and marketing of veld products
8. Ngamiland District Land Use Planning Unit (DLUPU)	Land resources use and management planning	High	Medium	While it is a recognized land use planning institution it does not have an empowering mode of operation. It functions as a loose institution with a non-binding participation arrangement.	Will lead the land use planning process as part of the project multi-stakeholder forum. Participate in open game farming feasibility studies and pilots Will also participate in design and implementation of management oriented monitoring system (MOMS)
9. Tawana Land Board	Land custodian; allocation, administration and management	High	High	Have the legal mandate to manage land	Will participate in the land use planning process as a land authority and secretariat of DLUPU and as part of the project multi-stakeholder forum Participate in open game farming feasibility studies and pilots Will also participate in design and implementation of management oriented monitoring system (MOMS)
10. Department of Environmental Affairs	Coordination of all environmental and natural resource management	High	High	Legally mandated to overlook all environmental management. EIA act	Together with the project management unit will set up the project multi-stakeholder forum and facilitate its capacity development and empowerment. Will participate in the land use planning process as a member of DLUPU and the project multi-stakeholder forum. Will also participate in design and implementation of management oriented monitoring system (MOMS)
11. DWNP	Wildlife resources management	High	High	Legally backed by the Wildlife and National Parks Act	Will participate in the land use planning process as a member of DLUPU and the project multi-stakeholder forum. Participate in open game farming feasibility studies and pilots Will also participate in design and implementation of management oriented monitoring system (MOMS)
12. Department of Tourism/ Botswana Tourism Organization	Tourism development	High	Medium	Not land managers but backed by economic development vision which rates tourism high.	Will participate in the land use planning process as a member of DLUPU and the project multi-stakeholder forum. Participate in open game farming feasibility studies and pilots Will also participate in design and implementation of management oriented monitoring system (MOMS)
13. Department	Water management	Medium	Medium	Mandate does not include land	Will participate in the land use planning process as a member of DLUPU and the project multi-stakeholder forum

Stakeholder	Interest in SLM	Degree of interest	Level of influence	Comments	Participation in project implementation
of Water Affairs				management.	
14. Department of Roads	Access to land for road development	Low	Low	The interest is low because responsibility is exclusive to main roads and is dependent to other sectors, marketing infrastructure	Will participate in the land use planning process as a member of the project multi-stakeholder forum
15. District Administration (District Officer Development)	Rural Development	High	High	Interest is high because rural economy is dependent on implementation of programs and policies; have the backing of implementation of District Development Plans, and village development plans	Will participate in the land use planning process as a member of DLUPU and the project multi-stakeholder forum.
16. Tribal Administration	Improved community livelihoods	High	Medium	Interest is high because they care about community welfare, but they do not have legal backing on land use. Often superficially involved.	Will participate in the land use planning process as a member of the project multi-stakeholder forum. Participate in pilot harvesting of bushes for charcoal briquettes and firewood as a community business Will co-lead assessment, planning and piloting community non-timber products harvesting, value addition and marketing Will participate in the Tsodilo Hills Fire Management Committee to support the review and implementation of the Tsodilo Fire Management Strategy as outlined in the Management Plan. Will also participate in design and implementation of MOMS
17. Police Services	Law enforcement	Low	Low	Police service not yet keen on environmental resources management. But have backing of all laws including penal code.	Will participate in the land use planning process through membership in land use planning committee/multi-stakeholder forum.
18. NWDC-Economic Planning work with DOD and physical planner	Coordinate all district projects, especially socio-economic ones	High	High	Main local authority	Will participate in the land use planning process through membership in DLUPU and the project multi-stakeholder forum. Participate in pilot harvesting of bushes for charcoal briquettes and firewood as a community business
19. NWDC-Physical Planning-Land use	Planning layout in gazetted areas	High	High	Main local authority	Will participate in the land use planning process through membership in DLUPU and the project multi-stakeholder forum.

Stakeholder	Interest in SLM	Degree of interest	Level of influence	Comments	Participation in project implementation
from Agric. and land use zoning					
20. Social and Community Development	Improved Livelihoods	High	Low	Their interest is in improving livelihoods such as giving the destitute livestock, but they are left out of land use planning	Will participate in the land use planning process as a member of the project multi-sectoral stakeholder forum Participate in pilot harvesting of bushes for charcoal briquettes and firewood as a community business Will also participate in design and implementation of management oriented monitoring system (MOMS) Will co-lead and facilitate assessment, planning and piloting community non-timber products harvesting, value addition and marketing
21. Department of Veterinary Services	Animal Health	High	High	High influence in that the beef industry is of high interest to the national economy and determined by international markets.	Will participate in the land use planning process through membership in DLUPU and the project multi-stakeholder forum.
22. Department of Animal Production	Livestock development	High	Low	Focused on the animals themselves and less on the range	Will participate in the land use planning process through membership in DLUPU and the project multi-stakeholder forum. Will participate in range assessment and innovation feasibility studies, piloting and monitoring Will participate in livestock value chain analysis and setting up a meat and animal products plant in Ngamiland Will participate in the formation and capacity development of the Tsodilo Hills Fire Management Committee to support the review and implementation of the Tsodilo Fire Management Strategy as outlined in the Management Plan. Will also participate in design and implementation of management oriented monitoring system (MOMS and others suitable for use in ranches)
23 Department of Crop production	Improved agricultural production	High	High	Is legally mandated and empowered to facilitate improved agricultural production	Will participate in the land use planning process as a member of DLUPU and the project multi-stakeholder forum. Participate in conservation agriculture pilots Will also participate in design and implementation of management oriented monitoring system (MOMS)
24. Department of Agricultural Research and other Academics	Range and livestock development research	High	Low/ Medium	High interest because their core business is research on range land. Influence is low because they can only recommend action; sometimes medium as they have access to Government, Ministry of Agriculture	Will participate in the land use planning process as a member of the project multi-stakeholder forum Will participate in livestock value chain analysis and setting up a meat and animal products plant in Ngamiland Will participate in range assessment and innovation feasibility studies, piloting and monitoring Participate in the research part of piloting of innovative pastoral system based on a combination of herding, kraaling and livestock movement and CA
25. Botswana Meat	Meat for market	High	High	Backed by Government	Will participate in the land use planning process as a member of the project multi-stakeholder forum

Stakeholder	Interest in SLM	Degree of interest	Level of influence	Comments	Participation in project implementation
Commission					Will participate in livestock value chain analysis and setting up a meat and animal products plant in Ngamiland
26. Butcheries	Meat for market	High	Low/Medium	Usually left out of decision making as a stakeholder group but may be part of powerful stakeholder group e.g. commercial farmers.	Will participate in livestock value chain analysis and setting up a meat and animal products processing plant in Ngamiland
27. Expert	Livestock development and range development	Low	Medium/high	Usually contracted to give advice, so likely to influence action	Will participate in livestock value chain analysis studies Will participate in range assessment and innovation feasibility studies, piloting and development of the monitoring tool
28. Private sector (Livestock, Tour Operators, Banks and other financiers)	Land for other uses	High	High	Have economic power to buy land or influence decision making. Have national development priority backing.	Will participate in the land use planning process as a member of the project multi-stakeholder forum. Will participate in livestock value chain analysis and setting up a meat and animal products plant in Ngamiland through financing or direct investment Participate in open game farming feasibility studies and pilots by supporting ecotourism activities and purchase of other products of game farming Will also participate in design and implementation of MOMS
29. NGOs, Eg, Tlharesegolo NCONGO	Conservation	High	Medium	Civil society not empowered to be involved in land management. But may have access to knowledge and information to access decision making process.	Will participate in the land use planning process as a member of the project multi-stakeholder forum. Participate in pilot harvesting of bushes for charcoal briquettes and firewood as a community business Participate in open game farming pilots Will facilitate assessment, planning and piloting community non-timber products harvesting, value addition and marketing Will also participate in design and implementation of MOMS

B.2 Socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund/NPIF)

47. The focus on access to a broader range of markets for a wider variety of livestock products, supported by greater access to finance, will ensure more community members participate in livestock markets, thus increasing household incomes. This will contribute to securing livelihoods and food security in the short term as well as increasing prosperity for the rural poor in the long-term. Revitalizing local institutions for range and resources management and governance will increase social capital and improve empowerment.

48. Women play a critical role in livestock husbandry (particularly small stock) and natural resources management in Ngamiland, both as beneficiaries but often as victims of the effects of reduced productivity. In recognition of this fact, a gender analysis will underpin development and implementation of the alternative livelihoods promoted by the project, to ensure that critical issues related to access and control of land resources and other natural resources as they relate to women are identified and addressed. The aim is to promote a more effective targeting of initiatives, and provide disaggregated data for monitoring, in line with the UNDP gender marker. Thus, a number of project activities are expected to directly and indirectly contribute towards improving the condition of women. This would be through enhancing their capacity to participate in decision-making processes, and engaging in land use activities that have the potential to improve their economic situation. For instance, where there is collection of firewood and clearing of bush encroachment, pilot activities to generate income from the sale of such firewood will deliberately target women beneficiaries.

49. In addition, the project will actively empower women and other excluded groups, particularly those at high risk of suffering from the effects of rangeland degradation and climate change vulnerabilities. This will be achieved through social mobilization utilizing Women Self Help Groups (SHGs) and other such community based structures. These groups will benefit particularly from skill development (education/training), access to financial resources and markets for sustainably produced/harvested veld products.

50. Expanding the processing of livestock products will increase jobs in the district, further contributing to household incomes and social capital. Increasing trade in livestock will increase the overall tax revenue available to the regional and national governments, providing funds that can be potentially used to support further improvement to natural resources management and/or provision of social services (education, health clinics, roads, etc.).

B.3.Explain how cost-effectiveness is reflected in the project design:

51. GEF funding in the proposed sustainable land management project for Botswana is designed to be catalytic insofar as it builds upon on-going government efforts to improve land use, and on past and current international development efforts to pilot more sustainable practices. In order to realize the project objective of mainstreaming SLM in rangeland areas of Ngamiland District in the most cost-effective manner, project design has been based on the following principles.

- i. The project will pilot existing best practices and streamline the process of applying them at a wider scale. In most cases the adoption of the selected best practices will meet the interests of land users, and the project will apply a cost sharing requirement whenever this is feasible. To take the example of ranches, some have not implemented the improved enclosure management system because they doubted the possibility of recovering the high set-up and maintenance cost of the ranch and making a profit. The project pilots will aim to find the best management combination to manage investment cost and preserve or even enhance the range.
- ii. In order to facilitate further replication of best practices in the most cost-effective manner, the project will focus on providing technical advice, developing decision-support tools, and building the capacity of existing technical extension services (extension services of the Department of Veterinary Services, Department of Crop Production, Department of Forestry and Range Resources, and Department of Animal Production). The project will, thus, encourage resource allocation by land users and competent authorities in sustainable land use, and

only need to cover a limited proportion of direct investments required to demonstrate and propagate the selected best practices. This will lead to better allocation of GEF and non-GEF resources.

- iii. Regular communication and coordination with other donor agencies working on similar interventions will be established to ensure that there are no overlaps of activities and full advantage of beneficial synergies are taken. For example, in developing the project's pilot activities on controlling bush encroachment (by harvesting bush and using mechanical means for the production of charcoal briquettes, fuel wood and other woodland products), the project will liaise with other similar initiatives in the region (mainly Namibia) to examine successful approaches and lessons.
- iv. The project will aim to improve access of farmers to alternative markets for livestock products to create an incentive for greater livestock off-take and integration of SLM principles in rangeland management. Due to the prevalence of livestock diseases, conventional markets for beef are less accessible. One approach is to undertake measures to control diseases and still be able to access these markets. Substantive resources are being invested in the baseline to this end (e.g., the government's FMD control program). The project will explore an alternative, cost-effective way to provide incentive for greater off-take namely, by enabling farmers to tap into markets for non-beef livestock products (leather, horns, etc.) and regional markets for processed meat products.
- v. In terms of policies that impact rangeland use and management, Botswana's policy and legislative environment can be said to be saturated yet failing to effectively deliver. The key missing element is lack of multi-stakeholder involvement in the implementation of policies, which is critical for sustainable land management. Most importantly, community participation in resource governance is particularly weak. The most cost-effective way of ensuring that the existing policy environment is supportive of SLM, is to provide for multi-stakeholder dialogue and engagement. The project will focus on providing such a forum to lead district-level dialogue on mainstreaming SLM considerations in implementation of critical national and regional policies, plans and strategies. Furthermore, practical experience gained through the pilot activities of the project will inform this policy dialogue.

C. DESCRIBE THE BUDGETED M & E PLAN:

52. The project's monitoring and evaluation (M&E) activities will build on UNDP's existing M&E Framework for land degradation programming. Project monitoring and evaluation will be conducted in accordance with established UNDP and GEF procedures and will be provided by the project team and the UNDP Country Office (UNDP-CO) with support from the UNDP/GEF Regional Coordination Unit. The Project Results Framework provides performance and impact indicators for project implementation along with their corresponding means of verification. The LD-PMAT will be used to monitor the project's impact on land degradation. The M&E plan includes: inception report, project implementation reviews, quarterly and annual reviews, an independent mid-term review and an independent final evaluation. The following sections outline the principle components of the M&E Plan and indicative cost estimates. The project's M&E Plan will be presented and finalized in the Project's Inception Report following a collective fine-tuning of indicators, means of verification, and the full definition of project staff M&E responsibilities.

PROJECT START:

53. A Project Inception Workshop will be held within the first 6 months of project start with those with assigned roles in the project organization structure, UNDP country office and where appropriate/feasible regional technical policy and program advisors as well as other stakeholders. The Inception Workshop is crucial to building ownership for the project results and to plan the first year annual work plan.

54. The Inception Workshop will address a number of key issues including: (a) Assist all partners to fully understand and take ownership of the project. (b) Detail the roles, support services and complementary responsibilities of UNDP CO and RCU staff vis à vis the project team. (c) Discuss the roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms. (d) The Terms of Reference for project staff will be discussed again as needed. (e) Based on the project results framework and the relevant GEF Tracking Tool if appropriate, finalize the first annual work plan. Review and agree on the indicators, targets and their means of verification, and recheck assumptions and risks. (f) Provide a detailed overview of reporting, monitoring and evaluation (M&E) requirements. The Monitoring and Evaluation work plan and budget should be agreed and scheduled. (g) Discuss financial reporting procedures and obligations, and arrangements for annual audit. (h) Plan and schedule Project Board meetings. Roles and responsibilities of all project organization structures should be clarified and meetings planned. The first Project Board meeting should be held within the first 2 months following the inception workshop.

1. An Inception Workshop report is a key reference document and must be prepared and shared with participants to formalize various agreements and plans decided during the meeting.

PROJECT IMPLEMENTATION WORKPLAN:

55. Immediately following the inception workshop, the project will be tasked with generating a strategic workplan. The workplan will outline the general timeframe for completion of key project outputs and achievement of outcomes as detailed within this project document. The workplan will map and help guide project activity from inception to completion. This will include process indicators to monitor project activity. These time-bound indicators will serve as benchmarks to measure progress towards achievement of intended project outcomes and outputs. The updated workplan and related progress report will be submitted annually to the Project Board and UNDP/RTA for review. To ensure smooth transition between project design and inception, the inception workshop and work planning process will benefit from the input of parties responsible for the design of the original project, including as appropriate relevant technical advisors.

QUARTERLY PROGRESS MONITORING:

56. Progress made shall be monitored in the UNDP Enhanced Results Based Management Platform. Based on the initial risk analysis submitted, the risk log shall be regularly updated in ATLAS. Risks become critical when the impact and probability are high. Note that for UNDP GEF projects, all financial risks associated with financial instruments such as revolving funds, microfinance schemes, or capitalization of ESCOs are automatically classified as critical on the basis of their innovative nature (high impact and uncertainty due to no previous experience justifies classification as critical). Based on the information recorded in Atlas, a Project Progress Reports (PPR) can be generated in the Executive Snapshot. Other ATLAS logs can be used to monitor issues, lessons learned etc. The use of these functions is a key indicator in the UNDP Executive Balanced Scorecard.

ANNUALLY (ANNUAL PROJECT REVIEW/PROJECT IMPLEMENTATION REPORTS (APR/PIR)):

57. This key report is prepared to monitor progress made since project start and in particular for the previous reporting period (30 June to 1 July). The APR/PIR combines both UNDP and GEF reporting requirements. The APR/PIR includes, but is not limited to, reporting on the following: (a) Progress made toward project objective and project outcomes - each with indicators, baseline data and end-of-project targets (cumulative); (b) Project outputs delivered per project outcome (annual); (c) Lesson learned/good practice; (d) AWP and other expenditure reports; (e) Risk and adaptive management; (f) ATLAS QPR; (g) Portfolio level indicators (i.e. GEF focal area tracking tools) are used by most focal areas on an annual basis as well.

PERIODIC MONITORING THROUGH SITE VISITS:

58. UNDP CO and the UNDP RCU will conduct visits to project sites based on the agreed schedule in the project's Inception Report/Annual Work Plan to assess first hand project progress. Other members of the Project Board may also join these visits. A Field Visit Report/BTOR will be prepared by the CO and UNDP RCU and will be circulated no more than one month after the visit to the project team and Project Board members.

MID-TERM OF PROJECT CYCLE:

59. The project will undergo an independent Mid-Term Evaluation during the mid-point of project implementation. (October - November 2016). The Mid-Term Evaluation will determine progress being made toward the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization and terms of reference of the mid-term evaluation will be decided after consultation between the parties to the project document.

60. The Terms of Reference for this Mid-term evaluation will be prepared by the UNDP CO based on guidance from the Regional Coordinating Unit and UNDP-GEF. The terms of reference will be completed one-year before the planned mid-term. The international evaluator/team leader will be recruited directly by the Regional Coordinating Unit of UNDP-GEF. The international independent expert will be recruited at least eight-months prior to the planned commencement of the mid-term evaluation. The management response and the evaluation will be uploaded to UNDP corporate systems, in particular the [UNDP Evaluation Office Evaluation Resource Center \(ERC\)](#). The relevant GEF Focal Area Tracking Tools will also be completed during the mid-term evaluation cycle.

END OF PROJECT:

61. An independent Final Evaluation will take place three months prior to the final Project Board meeting and will be undertaken in accordance with UNDP and GEF guidance. The final evaluation will focus on the delivery of the project's results as initially planned (and as corrected after the mid-term evaluation, if any such correction took place). The final evaluation will look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental benefits/goals. The Terms of Reference for this evaluation will be prepared by the UNDP CO based on guidance from the Regional Coordinating Unit and UNDP-GEF.

62. The Terminal Evaluation should also provide recommendations for follow-up activities and requires a management response that should be uploaded to PIMS and to the [UNDP Evaluation Office Evaluation Resource Center \(ERC\)](#). The relevant GEF Focal Area Tracking Tools will also be completed during the final evaluation. During the last three months, the project team will prepare the Project Terminal Report. This comprehensive report will summarize the results achieved (objectives, outcomes, outputs), lessons learned, problems met and areas where results may not have been achieved. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the project's results.

LEARNING AND KNOWLEDGE SHARING:

63. Results from the project will be disseminated within and beyond the project intervention zone through existing information sharing networks and forums. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to project implementation through lessons learned. The project will identify, analyze, and share lessons learned that might be beneficial in the design and implementation of similar future projects. Finally, there will be a two-way flow of information between this project and other projects of a similar focus.

Communications and Visibility Requirements

64. Full compliance with UNDP’s Branding Guidelines and guidance on the use of the UNDP logo will be maintained. These can be accessed at <http://web.undp.org/comtoolkit/reaching-the-outside-world/outside-world-core-concepts-visual.shtml>. Full compliance will also be maintained with the GEF Branding Guidelines and guidance on the use of the GEF logo. These can be accessed at http://www.thegef.org/gef/GEF_logo. The UNDP and GEF logos will be the same size. When both logos appear on a publication, the UNDP logo will be on the left top corner and the GEF logo on the right top corner.

65. Full compliance will also be maintained with the GEF’s Communication and Visibility Guidelines (the “GEF Guidelines”).¹² Amongst other things, the GEF Guidelines describe when and how the GEF logo needs to be used in project publications, vehicles, supplies and other project equipment. The GEF Guidelines also describe other GEF promotional requirements regarding press releases, press conferences, press visits, visits by Government officials, productions and other promotional items.

66. Where other agencies and project partners have provided support through co-financing, their branding policies and requirements will be similarly applied.

67. Where other agencies and project partners have provided support through co-financing, their branding policies and requirements will be similarly applied.

AUDIT CLAUSE:

68. The Audit will be conducted according to UNDP financial regulations, rules and audit policies.

Table 1. M&E Activities, Responsibilities, Budget and Time Frame

Type of M&E activity	Responsible Parties	Budget US \$ Excluding project team Staff time	Time frame
Inception Workshop	Project Manager UNDP CO UNDP GEF	\$10,000	Within first two months of project start up
Inception Report	Project Team UNDP CO	None	Immediately following Inception workshop
Measurement of Means of Verification for Project Purpose Indicators	Project Manager will oversee the hiring of specific studies and institutions, and delegate responsibilities to relevant team members	To be finalized in Inception Phase.	Start, mid and end of project
Measurement of Means of Verification for Project Progress and Performance (measured on an annual basis)	Oversight by Project Manager Monitoring and Evaluation Officer Project team	To be determined as part of the Annual Work Plan’s preparation.	Annually prior to APR/PIR and to the definition of annual work plans
APR and PIR	Project Team UNDP-CO UNDP-GEF	None	Annually
Quarterly progress reports	Project team	None	Quarterly
CDRs	Project Manager	None	Quarterly
Issues Log	Project Manager UNDP CO Programme Staff	None	Quarterly
Risks Log	Project Manager UNDP CO Programme Staff	None	Quarterly
Lessons Learned Log	Project Manager UNDP CO Programme Staff	None	Quarterly
Mid-term Evaluation	Project team UNDP- CO UNDP-GEF Regional Coordinating Unit	\$40,000	At the mid-point of project implementation.

¹²The GEF Guidelines can be accessed at http://www.thegef.org/gef/sites/thegef.org/files/documents/C.40.08_Branding_the_GEF%20final_0.pdf

Type of M&E activity	Responsible Parties	Budget US \$ Excluding project team Staff time	Time frame
	External Consultants (i.e. evaluation team)		
Final Evaluation	Project team, UNDP-CO UNDP-GEF Regional Coordinating Unit External Consultants (i.e. evaluation team)	\$40,000	At the end of project implementation
Terminal Report	Project team UNDP-CO local consultant	Funds are budgeted for local consultants to assist where needed (approximately \$10,000)	At least one month before the end of the project
Lessons learned	Project team Monitoring and Evaluation Officer UNDP-GEF Regional Coordinating Unit (suggested formats for documenting best practices, etc.)	Funds are budgeted for local consultants to assist where needed (approximately \$10,000)	Yearly
Audit	UNDP-CO Project team	\$5,000	Once during lifetime of project as per UNDP audit regulations
Visits to field sites	UNDP Country Office UNDP-GEF Regional Coordinating Unit (as appropriate) Government representatives	Paid from Implementing Agency fees and operational budget	Yearly
TOTAL indicative COST Excluding project team staff time and UNDP staff and travel expenses		US \$ 115,000	


PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT AND GEF AGENCY

- A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT(S) ON BEHALF OF THE GOVERNMENT(S):**
(Please attach the [Operational Focal Point endorsement letter\(s\)](#) with this form. For SGP, use this [OFP endorsement letter](#)).

NAME	POSITION	MINISTRY	DATE(MM/dd/yyyy)
Ms. Ingrid Otukile	Chief Natural Resources Officer	Ministry of Environment, Wildlife and Tourism	10/03/2011

B.GEF AGENCY CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for CEO endorsement/approval of project.

Agency Coordinator, Agency Name	Signature	Date	Project Contact Person	Telephone	Email Address
Adriana Dinu, UNDP-GEF Officer-in-Charge and Deputy Executive Coordinator		5 November 2013	Veronica Muthui – Technical Advisor, Ecosystems and Biodiversity	+27 12 354 8124	Veronica.Muthui@u ndp.org

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

This project will contribute to achieving the following Country Programme Outcome as defined in the CPAP: Strengthened national capacity and improved policy and institutional framework for environmental management and sustainable development and Enhanced capacity of communities for natural resources and ecosystem, management and benefit distribution
Country Programme Outcome Indicators: No. of community-based organizations with capacity to develop and implement plans in natural resources and ecosystem management and benefit distribution
Primary applicable Key Environment and Sustainable Development Key Result Area: Mainstreaming Environment and Energy
Applicable GEF Strategic Objective and Program: LD 1: Maintain or improve flow of agro-ecosystem services sustaining the livelihoods of local communities; LD-3: Reduce pressures on natural resources from competing land uses in the wider landscape
Applicable GEF Expected Outcomes: Outcome 1.2: Improved rangelands/ livestock management; Outcome 3.1: Enhanced cross-sector enabling environment for integrated landscape management
Applicable GEF Outcome Indicators: Indicator 1.2 Increased land area with sustained productivity and reduced vulnerability of communities to climate variability; Indicator 3.1 Policies support integration of agriculture, rangeland, forest, and other land uses

Project Strategy	Objectively Verifiable Indicators	Baseline	Target	Sources of verification	Risks
Objective ¹³ : To mainstream SLM in rangeland areas of Ngamiland District productive landscapes for improved livelihoods	Hectares of rangeland that are under improved management	Zero	1 million hectares by project end (In addition, it is expected that project lessons can be replicated to an additional 4.5 million hectares post-project)	Project PIR, Independent Evaluation, periodic field surveys/field visits	Lack of buy-in from planning institutions and Government. There is a possibility of conflicts arising from perceptions of interference and differences on approaches to how the issues could be addressed, especially between government institutions and civil society organizations. The benefits generated by the project may be offset by the impacts of climate change, which might exacerbate the usual droughts.
Outcome 1 ¹⁴ : Effective range management improves range condition and flow of ecosystem services to support livelihoods of local communities	Area of rangeland with improved grass and herbaceous species cover	64,000 ha denuded in ranches	Approx. 40% (25,600 ha) in 4 ranches rehabilitated by project end	Field and remotely sensed data collected during the project	Weak enforcement of the TGLP has in the past encouraged overstocking in the communal lands since commercial farmers have retained the right to offload excess livestock to the communal areas. Increased access to livestock markets might become a perverse incentive and fuel higher stocking rates, if governance is not improved simultaneously.
	Area of riparian woodland preserved	10,000 ha of riparian woodland lost around Lake Ngami	200 meter buffer zone reclaimed by project end	Field and remotely sensed data collected under the project	
	Incidence of late dry season fires	Fires burn annually at Tsodilo	Frequency reduced to every three years	DFRR data	
	Extent of uncontrolled fires	10,000 ha affected by	Fire-affected area reduced	DFRR data	

¹³ Objective (Atlas output) monitored quarterly ERBM and annually in APR/PIR

¹⁴ All outcomes monitored annually in the APR/PIR. It is highly recommended not to have more than 4 outcomes.

Project Strategy	Objectively Verifiable Indicators	Baseline	Target	Sources of verification	Risks
		uncontrolled fire	by 50% most of the years and by 100% in two out of the five years of the project		Reluctant participation by local communities due to fear that the project will compromise their livelihoods by introducing strict management systems.
	Area affected by bush encroachment	100,000 ha affected by overgrazing and bush encroachment	Decrease by 50% by the end of the project	Field and remotely sensed data collected under the project	
	No. of farmers practicing conservation agriculture	Zero	30 every other year, trained and given extension support	Department of Crops data	
	No. of farmers practicing improved and effective herd management	Zero	30 farmers enrolled for participation in the project (20 initially and 10 more added by project end)	DAP and ORI data	
	Stocking rates in line with the prevailing condition of the rangeland	Tbd during the range assessment studies of this project	Tbd during the project and implemented in 4 ranches by project end	DAP and ORI data	
	No. of farmers ¹⁵ with improved livelihoods	Tbd during range assessments which will cover farmer livelihoods as well	Double farm generated income of farmers involved in improved herd management and CA by project end	Baseline and monitoring data collected by project	
	Economic returns per land unit	Tbd during range assessments which will include establishment of economic returns from different land uses (ranches and communal rangelands)	Increase returns by a quarter of the baseline every year after the 2 nd year	Baseline and monitoring data collected by project	
	Capacity of key land management institutions for SLM	Summary baseline capacity score 28%	Raise to 50% and improving by the end of the project	Capacity Development Scorecard (see Annex 4 of the UNDP Project Document) ; project M&E data	
Outcome 2: Effective governance framework and markets provide incentives for livestock off-take and compliance with SLM	Multi-stakeholder forum for mainstreaming SLM issues in national and regional policies, plans and strategies	Existing multi-sectoral institution is limited to multiple government sectors	Active participation from government, NGOs, water and land user groups, community trusts, community leaders, private sector by project end	Meeting minutes	Difficulties in matching new markets to new products, or farmers fail to meet the quality specifications for new products and new markets.
	Revenue from non-beef livestock products	Zero	Tbd during feasibility studies for setting up a processing and marketing	Project reports on pilot activity	

¹⁵ Farmers are disaggregated according to gender, age group and small stock keeping

Project Strategy	Objectively Verifiable Indicators	Baseline	Target	Sources of verification	Risks
	Off-take rate for cattle	Tbd during range assessments under the economic section	plant Tbd after range assessments	Data from district office of Ministry of Agriculture	

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

Comments	Response	Reference in the UNDP Project Document
Comments from the GEF Secretariat at PIF stage		
1) Provide a comprehensive risk analysis.	The risk analysis has been detailed further.	Annex 5
2) Detail and confirm the cofinancing.	Co-financing confirmed (see table C)	Table C of this CEO Request and annex 9.
3) Include a Monitoring plan with indicators compatible with the GEF5 LD strategy (productivity, income).	<p>a) The project's monitoring and evaluation (M&E) activities will build on UNDP's existing M&E Framework for land degradation programming. M&E will be conducted in accordance with established UNDP and GEF procedures and will be provided by the project team and the UNDP Country Office (UNDP-CO) with support from the UNDP/GEF Regional Coordination Unit. The Project Results Framework provides performance and impact indicators for project implementation along with their corresponding means of verification. The LD-PMAT will be used to monitor the project's impact on land degradation.</p> <p>b) In line with the GEF-5 LD Strategy, indicators related to improved livelihoods in rural areas have been included in the results framework.</p> <p>c) Under output 1.5, the project will be putting in place a monitoring system that will serve as a decision support tool for farmers to help them in planning and implementing SLM strategies, as well as re-evaluating these strategies based on results and impacts. As part of this system (with the help of experts from ORI, DFRR and DAP), one of the rangeland assessment attributes to be measured is changes in land cover as measured by NDVI.</p>	<p>a) Section 6: Monitoring Framework and Evaluation (page 40)</p> <p>b) Project Results Framework (page34)</p> <p>c) Output 1.5 (page 22)</p>
4) Detail implementation arrangements.	The project will be implemented through a NIM/NEX arrangement and mainly driven by the Ministry of Environment, Wildlife and Tourism in collaboration with other government agencies, NGOs, research institutions and communities. The implementation arrangements have been detailed further.	Section 5: Management Arrangements (page 39)
5) Detail the social and traditional structure in the villages and how the project is going to work with the appropriate local stakeholders.	This is done in the stakeholder table. The entire project strategy is premised on the fact that the local structure will be the primary entry, with technical assistance delivered by the project through the line ministries, civil society and the academia. The traditional structure at the village level is such that the Chief is the ultimate authority for community governance matters and households are headed by male although many households are female-headed (and often poorer for that reason). There are local institutions in village settings such as the Village Development Committee with both male and female membership and Community Based Organizations established for purposes of Community Based Natural Resources Management (CBNRM). These would form the basis for project engagement with communities at the local level.	Table on Stakeholder role in project implementation (page 26)
6) Provide the breakdown of resources used for field oriented activities, planning, and training.	The bulk of the budget (about 69%) will be used for Outcome 1 (excluding project management costs) which will deliver 5 key initiatives on the ground. These are integrated land use plans US\$ 300,000), which will guide the rest of the outcome. Provisions of the integrated land use plans will be implemented under output 2.2 (improving range management systems and livelihood activities – US\$ 828,000). Specific provisions will be piloted under output 1.3 – bush	See budget notes (page 41-43 of UNDP Prodoc)

Comments	Response	Reference in the UNDP Project Document
	control and perennial grasses (US\$ 610,000), and use of fire as a management tool under output 1.4 with a budget of US\$ 200,000. Output 1.5 will support the design and implementation of an M&E plan (US\$ 205,000). In addition, extra care was taken to allocate the bulk of the budget within an output to actual activities on the ground, through the budget line “Materials and Goods”. This line will support direct implementation of range improvement activities and livelihood support activities that reduce pressure on the natural resources.	
Comments from the GEF Council at PIF stage		
No comments		
Comments from STAP at PIF stage		
<p>1. A re-reading and assimilation into this project of some of the lessons of previous attempts to improve the rangeland in Botswana will be essential. A good starting point is the 1989 paper by Louise Fortmann (Peasant and official views of rangeland use in Botswana. Fifty years of devastation? Land Use Policy 6(3): 197-202). It provides a 60-year historical context as to why many herders in Botswana are extremely skeptical of official rangeland policy. This will be a fundamental barrier that the current project will need to surmount explicitly. The complex linkages between herders' largely-opportunistic strategies, the condition of the vegetation, soil and plant communities and the productivity of the range also demands a careful look see Annika Dahlberg (2000), J. Arid Environments 44(1): 19-40. It is clear that while people and livestock do have an appreciable impact on the vegetation, it is not at all clear that productivity has declined. Carrying capacity concepts as proposed in the current project are far too simplistic and lead to erroneous outcomes see Abel N (1993). Carrying capacity, rangeland degradation and livestock development policy for the communal rangelands of Botswana. Overseas Development Institute, Pastoral Development Network Paper 35:1-9.</p>	<p>The scientific views referred to by the STAP reviewer are reflected in the reports prepared by national experts under the PPG. National experts are in agreement with the issues raised, particularly on perceptions of degradation and the conventional solutions usually proposed to arrest it. The concept of carrying capacity, in particular, is one that is fiercely debated in Botswana and in the context of Ngamiland, where the argument that livestock numbers are too high becomes extremely difficult to make if one looks at wildlife populations (in particular elephant and buffalo populations have been argued to be unsustainable as well).</p> <p>The project will take a differentiated approach to ranches and communal rangelands. In the communal rangelands, keeping in mind the need to engage communal farmers who follow the cattle post livestock system, the project will pilot a pastoral system based on a combination of herding, kraaling and livestock movement. This has been reflecting in the now modified output 1.1 which will formulate integrated land use plans instead of the carrying capacity plans proposed at PIF. In addition, practical projects aimed at enhancing the community livelihoods portfolio with alternative ones will be piloted. Communities will be supported with training and other resources to develop a multiple livelihood production system, involving improved cattle post pastoral systems, open game farming, sustainable veld products harvesting, and conservation agriculture. In commercial ranches that are enclosures, a system of paddocking, rotational grazing, supplementary feeding and controlled off-take will be put in place. The Department of Animal Production (DAP), Department of Agricultural Research (DAR) and Department of Forestry and Range Resources (DFRR) will work with farmers associations to this end. They will be supported by the Okavango Research Institute of the University of Botswana, which will provide technical assistance to many of the initiatives, making sure that implementation is being informed by the latest science and lessons from the country, the region and abroad.</p>	Output 1.1 and budget notes on pages 41-43 of the UNDP Prodoc
<p>2. In line with the point above about learning from history, it is good that the current project contains at least six important elements SLM technologies and skills; adaptive management; ecological monitoring; land governance; markets and trade; and finance. STAP has some concerns that the purely technical aspects such as SLM technologies and credit finance will receive disproportionate attention. It is important in a project such as this that the difficult aspects such as local community involvement and devolution of</p>	<p>National project experts involved in the PPG phase fully endorse the STAP reviewer's observation that local community involvement and devolution of governance are issues that need to be given equal, if not more, importance compared with technical aspects. A key aspect of the long-term solution is that local communities need to participate meaningfully in land use planning and rangeland governance (in particular at the policy formulation stage).</p> <p>It is for this reason that the first output of the project is a participatory integrated land use plans – which will have high participation of the local people. The rest of the implementation of the project will be guided by the land use plans (as explained in the prodoc text). Governance will be improved through outcome 2: Output 2.1 focuses on the formation of a</p>	Output 1.1 (page 18) Output 2.1 (page 23), Output 2.2 (page 24)

Comments	Response	Reference in the UNDP Project Document
<p>governance are not sidelined. The wide-scale non-compliance with government land policy, noted by the proposal (PIF #10), is largely a result of the imposition of technical solutions that local people find unacceptable.</p>	<p>regional multi-stakeholder SLM forum. Currently, there exists a multi-sectoral institution (as in multiple government sectors) at the district level namely DLUPU. However, it does not have a multi-stakeholder membership (i.e., membership beyond government sectoral departments). The project thus aims to pilot an expanded multi-stakeholder forum that builds on the existing multi-sectoral one. Membership of the forum will include representatives from government, NGOs, water and land user groups such as Farmers' Associations, community trusts, community leaders, private sector (hunting/ fishing, tourism agencies, small businesses, and enterprises), etc.</p> <p>Particular emphasis will be placed on ensuring community participation in this forum. Local natural resource management/ community based management institutions will be developed and capacitated (potential for development of Farmers' Associations as recommended by the Ngamiland Integrated Land Use Plan) to facilitate effective participation of communities in the dialogue to ensure that local level issues are reflected in discussions and implementation of critical national and regional policies, plans and strategies. The capacity of civil society to lobby and advocate for SLM will be developed by having a budget allocation for their activities through Government and NGO support, and supporting NGOs' access to donor funding. Support to and involvement of these civil society institutions is important because with appropriate training and resources they are well-placed to assume responsibility for some extension services.</p> <p>This forum will lead a discussion on the mainstreaming of SLM in the productive sector policies. Review of the key productive sector policies presented in table 2 of the Prodoc showed that only the Botswana Conservation Strategy and the recently formulated CBNRM have a fair to good chances of mainstreaming SLM. With the participation of the local resource users, the forum will undertake a further detailed review of the policies and generate recommendations on how the country's policies could be more effective in supporting improved rangeland management. Every effort will be taken to uplift this discussion to the national level.</p>	
<p>3. The 'barrier analysis' (#18+) is well presented. It does, however, represent a somewhat technocratic view of the problem of rangeland degradation. So, for example, Barrier 1 focuses on the lack of application of the "clear principles of range management". It appears that the principles meant are those related to the classic application of rotational grazing and carrying capacity calculations - see point 1 above. Nowhere in the proposal is there recognition or understanding of non-equilibrium dynamics in rangeland use and practice, as well as the lack of understanding of pastoralist strategies (see the review by Scoones, I. 1999. New ecology and the social sciences: what prospects for a fruitful engagement? Annu. Rev. Anthropol. 28:479-507). The proponents are urged to build their approach carefully on the new thinking on range ecology that emerged in the 1990s</p>	<p>As regards the science of equilibrium and non-equilibrium dynamics and their applicability to savanna rangelands, the work of scholars such as Scoones and Abel has shown that these scientific claims/ arguments are highly debatable in contexts like those of Botswana where the rainfall and drought cycles play the largest role in both the productivity of the range and the ability of livestock to thrive. In fact Scoones' argument is that these environmental dynamics themselves regulate the stock, resulting in massive die-offs during droughts and significant recovery of the same when the rains are good. And Botswana goes through those cycles every 10 or so years. So the equilibrium science is a little difficult to apply in the rangelands of Botswana. Pastoralist strategies (which are largely opportunistic) play a significant role in the survival of the stock and often times significant risk is taken by the farmers themselves (and they often accept losing large numbers of cattle as long as they manage to preserve others). This happens throughout Botswana, but the challenge with Ngamiland is the fact that it is a wildlife conservation area and the protected nature of the Okavango Delta (Ramsar Site) and the tourism dynamics, as well as the existence of foot-and-mouth disease, and the political-economic dynamics of Botswana beef's access to the European market, all add a layer of complexity to this already complex picture. So the real issue is how to ensure that big business tourism and big wildlife conservation co-exist with livelihood strategies of poor farmers of keeping cattle</p>	<p>Output 1.1 (page 18) output 1.4 (page 21), Output 2.3 (page xx), Output 2.4 (page 25), Output 2.5 (page 25)</p>

Comments	Response	Reference in the UNDP Project Document
<p>see example from Botswana at http://pubs.iied.org/pdfs/9529IIED.pdf - paying particular attention to threats posed by privatising the commons'.</p>	<p>and other small stock right next door to large cattle ranches that compete for the same water, grazing and market for beef.</p> <p>The project will, therefore, pilot a pastoral system based on a combination of herding, kraaling and livestock movement (Output 1.2). In addition, practical projects aimed at enhancing the community livelihoods portfolio with alternative ones (open game farming, sustainable veld products harvesting, and conservation agriculture). The project will also focus on improving the enabling environment for establishment of small-scale, community-based enterprises related to processing and marketing of livestock products such as leather, horn, and bones, from both cattle and other small stock (Output 2.3). Farmers, merchants, and regulators/ policy-makers/ competent authorities will be brought together to explore the feasibility of establishing an inclusive livestock value-chain, as well as opportunities for establishment of small industries based on non-meat livestock products.</p> <p>Simultaneously, through BMC cofinancing, slaughter capacity will be increased, capacity to produce a broader range of meat products will be increased (Output 2.4), and a broader range of markets for Ngamiland beef will be tapped (Output 2.5).</p> <p>As explained in the response to comment 1 (above) the project will be supported by the Okavango Research Institute of the University of Botswana, which will provide technical assistance to many of the initiatives, making sure that implementation is being informed by the latest science and lessons from the country, the region and abroad.</p>	
<p>4. STAP appreciates the attempt to list Global Environmental Benefits (GEBs) in #21 of the proposal. However, STAP recommends a careful elaboration of this section in the full proposal. As currently worded, the expected GEBs are not global benefits as recognised by the GEF. They include actions that may lead to global benefits, but the actual beneficial impact on aspects such as biodiversity conservation, carbon sequestration, and changes in land (vegetation) cover are not mentioned. The pathways between the activities of the project claimed to lead to GEBs need to be specified, along with the indicators that will verify that global benefits have been achieved.</p>	<p>The GEBs have been clarified in line with GEF concepts as highlighted in the LD Strategy and LD-PMAT. As reported in table 4 of the prodoc the GEBs include Improvements in vegetative cover over 1 million ha of rangelands (with the potential for replication to 4.5 million ha); this will be achieved through bush control (which will improve the integrity of the wooded grasslands ecosystem) and better use of fire as a management tool for the savannah vegetation. The project pilots are on the outskirts of the Okavango delta which has biodiversity of global significance, and which is under great threat from the pressure emanating from land and rangeland degradation. By improving range condition, this project will increase land productivity and reduce the pressure on the Okavango Delta. Although it will be difficult to measure the pressure (and therefore GEBs in the delta) using standard procedures, this is very important as the pressure for resources needs to be stemmed before it spills over to the delta. The pathways of reducing this pressure and increasing productivity, as well as for the bush and fire strategy are now clearly outlined in the strategy section of the prodoc.</p>	<p>Table 4 (page 18) LD-PMAT Strategy section of the prodoc (pages 16-40)</p>
<p>5. STAP notes the intention to support ecological monitoring that is mentioned in the Project Framework. There is a lack of specification of what this monitoring will be including the indicators and methods that will be used and who will do the monitoring. It will be essential in a project such as this that indicators are well chosen to be both scientifically-valid and relevant to the GEF focal area strategies. STAP suggests that changes in total system</p>	<p>Output 1.5 of the project will establish a monitoring system to serve as a decision support tool for farmers to help them in planning and implementing SLM strategies, as well as re-evaluating these strategies based on results and impacts. The monitoring system will essentially be designed as a community level, management-oriented monitoring system (MOMS), with the support of experts from the Okavango Research Institute, DFRR and DAP.</p> <p>Monitoring plots and attributes are to be selected and finalized during the inception phase but are likely to include aspects of direct relevance and interest to local communities (for example, livestock productivity; animal sightings for wildlife endowment for ecotourism; local rainfall</p>	<p>Output 1.5 (page 22)</p>

Comments	Response	Reference in the UNDP Project Document
<p>carbon be included on a sample basis, along with rangeland biodiversity and land cover (NDVI) measures. Further, the project makes claims to support the provision of ecosystems goods and services; therefore measures of livestock and rangeland productivity would be appropriate. Consistency with UNCCD impact indicators would be good and would support national reporting to the Convention. In addition, the UNCCD PRAIS is moving towards the reporting of 'best practice' in SLM and the present project is urged to contribute, since the solutions found in Botswana may well be applicable more widely. The project's links with the Okavango Research Institute could be useful here, giving it a central role in ecological monitoring.</p>	<p>for arable production planning; problem animal issues to understand crop damage and livestock predation; veld products to monitor and manage their harvesting; early warning of disease and drought so that farmers can modify their decisions on livestock off-take, breeding, and sale), as well as conventional rangeland assessment attributes (for example, total system carbon; rangeland biodiversity; grass composition and cover as well as tree composition and density; land cover measured by Natural Divergent Vegetation Index, invasive plants). In developing the monitoring system, consistency with UNCCD impact indicators will also be ensured to support national reporting to the Convention. The UNCCD Focal Point will be involved to provide the link to PRAIS – by making sure that the indicators selected cater for both local needs (for adaptive management) and national/global needs (UNCCD wider audience) – within budget and technical capacity for monitoring.</p>	

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS¹⁶

A. DESCRIBE FINDINGS THAT MIGHT AFFECT THE PROJECT DESIGN OR ANY CONCERNS ON PROJECT IMPLEMENTATION, IF ANY:

NA

B. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES FINANCING STATUS IN THE TABLE BELOW:

PPG Grant Approved at PIF: 100,000			
Project Preparation Activities Implemented	GEF/LDCF/SCCF/NPIF Amount (\$)		
	Budgeted Amount	Amount Spent To Date	Amount Committed
Component 1 – Baseline data collection	55,000	73,968	-
Component 2 – Capacity Assessment	15,000	17,832	-
Component 3 – Feasibility Analysis, budget	30,000	8,200	-
Sub-total (GEF)	100,000	100,000	0
Sub-total (Cash co-financing from UNDP)	42,590	19,639	22,951
Total	142,590	119,639	22,951

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

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

N/A

¹⁶If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for the activities.