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Terminal Evaluation of the project: 'Using SLM to improve the integrity of the Makgadikgadi Ecosystem and to secure the Livelihoods of Rangeland-dependent Communities'



Global Environment Facility (GEF)



United Nations Development Programme (UNDP)



Government of Botswana Ministry of Environment, Natural Resources, Conservation & Tourism (MENT)



BirdLife Botswana

Terminal Evaluation of the project: 'Using SLM to improve the integrity of the Makgadikgadi Ecosystem and to secure the Livelihoods of Rangeland-dependent Communities' (PIMS 5359)

July 2018

Undertaken by Sophie van der Meeren

For:

United Nations Development Programme, Global Environment Facility, BirdLife Botswana and Government of Botswana

Country: Botswana	PIMS No	359	
	GEF ID	5789	
	Project ID	00090691	
	Atlas Award:	00081415	
	Programme Period	2010-2014	
	GEF Period	GEF 5	
	Start Date	June 2014	
	End Date	December 2017	
	PAC meeting date	2 July 2014	
Management Arrangement	NGO Execution		
Implementing Agency	UNDP Botswana		
Executing Partner	BirdLife Botswana		
GEF Focal Area	Land Degradation		
Focal Area Strategic Objectives	To: Reduce pressures on natural resources from competing land uses in the wider landscape		
Total Allocated Resources	US\$7,587,832		
GEF	US\$792,832		
UNDP	US\$225,000		
Other National Partners	US\$6,795,000		

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Acronyms and abbreviations used in the Report

APR	Annual Project Report
AWP	Annual Work Plan
BLB	BirdLife Botswana
вто	Botswana Tourism Organisation
CBNRM	Community Based Natural Resource Management
СВО	Community Based Organisation
CPAP	Country Programme Action Plan (UNDP)
CBD	Convention on Biological Diversity
СО	Country Office
DA	District Administration
DAP	Department of Animal Production
DCP	Department of Crop Production
DDC	District Development Committee
DDP	District Development Plan
DEA	Department of Environmental Affairs
DFRR	Department of Forestry and Range Resources
DLUPU	District Land Use Planning Unit
DOT	Department of Tourism
DTCP	Department of Town and Country Planning
DVS	Department of Veterinary Services
DWNP	Department of Wildlife and National Parks
EOP	End of Project
HWC	Human Wildlife Conflict
LFA	Logical Framework Approach (Project Results Framework)
LUMP	Land Use Management Plan
M&E	Monitoring and evaluation
MFMP	Makgadikgadi Framework Management Plan
MOMS	Management Oriented Monitoring System
MOU	Memorandum of Understanding
MTR	Mid-Term Review
NBSAP	National Biodiversity Conservation Strategy and Action Plan
NGO	Non-governmental organisation
PA	Protected Area
PAC	Project Advisory Committee
PCU	Project Coordination Unit
PIR	Project Implementation Review
PM	Project Manager
PMU	Project Management Unit
PSC	Project Steering Committee
RCU	Regional Coordination Unit (of UNDP/GEF)
SEA	Strategic Environmental Assessment
SLM	Sustainable Land Management
SMART	Specific, Measurable, Achievable, Relevant and Time-bound
SSP	Southern Sua Pan
TAC	Technical Advisory Committee
TE	Terminal Evaluation
TOR	Terms of Reference
TRG	Technical Reference Group
TSSFA	Tikologo Small Stock Farmers Association
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
VDC	Village Development Committee

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### **Executive Summary**

- GEF-financed projects receive a terminal evaluation at project completion in order to meet GEF accountability requirements, and to promote operational improvement, learning and knowledge sharing amongst all project partners. A project's terminal evaluation is an evidence-based assessment, drawing on review of relevant literature, consultation with stakeholders and visits to key project sites to see impact on the ground.
- 2. The Project 'Using SLM to improve the integrity of the Makgadikgadi ecosystem and to secure the livelihoods of rangeland-dependent communities', known as the Makgadikgadi SLM project, is a medium sized project supported under the GEF Land Degradation Focal area. It was approved in 2014 under GEF 5. Total project value is US\$7,587,832, comprising GEF allocated financing of US\$792,832, UNDP funding of US\$225,000, and national co-financing of US\$ 6,570,000. The timeframe for project implementation was 3 years, between June 2014 and December 2017.
- 3. The project was designed to address rangeland degradation in the Makgadikgadi region and was focussed on piloting SLM within the Southern Sua Pan (SSP) area. The Project Document describes the baseline situation as one in which 'prevalent land and livestock management processes in Botswana's Makgadikgadi ecosystem are likely to compromise the continued flow of ecosystem goods and services from the savannah ecosystem that are necessary to sustain the national economy, livelihoods and the rich fauna and flora diversity.' It identifies a number of key issues contributing to land degradation in the Makgadikgadi area including:
  - Changing grazing regimes: Most palatable grasses near water points are becoming over grazed, less palatable species further from water points over rested, both resulting in lower grass vigour.
  - Fire and impact of burning on rangeland areas, in particular linked to the increased frequency of uncontrolled fires.
  - Arable farming and unsustainable harvest of veld products placing additional pressure on rangeland ecosystems.
  - Lack of Integrated Management, whereby management efforts are carried out in isolation by different sectors, leading to disjointed management.
  - The need for local communities to 'participate meaningfully in mainstreaming SLM principles into rangeland management and governance'.
- 4. Through assessment of the issues affecting land degradation, the Project Document distils two key barriers as the root causes preventing sustainable land management (SLM) in the Makgadikgadi region:
- 5. Barrier 1: 'Inadequate knowledge and skills for adoption of SLM in livestock management and livelihood support systems.' The Project Document underlines that 'although knowledge on how to effectively manage savannah ecosystems is increasing, very little of the currently available knowledge is being utilized to manage the livestock and livelihood support systems in Makgadikgadi. This is mainly due to low levels of skills amongst the land and resource managers, and weak technical expertise in the appropriate ministries.'
- 6. **Barrier 2:** 'Policy and market distortions have provided disincentives for adopting SLM and sustainable range management principles in the livestock production sector.'
- 7. The project aimed to address these barriers through targeted support to achieve two core Outcomes by project end, with activities clustered under three specific Outputs within each Outcome:

**Outcome 1**: Effective range management to improve range condition and flow of ecosystem services to support livelihoods of local communities in Southern Sua Pan Region.

Output 1.1: Local level participatory land use plans developed for the pilot area to support sustainable utilisation of range resources.

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

Output 1.3: Fire management strategy is developed and implemented in Southern Sua Pan in line with the provisions of the land use plans

**Outcome 2**: Effective resource governance frameworks for SLM and equitable resource access.

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.

Output 2.2: Decision-making support tool for Letlhakane sub-land board and Physical Planning Unit (Boteti sub district council)

- 8. Output 2.3: System for monitoring of range condition and productivity is in place
- 9. The project's overall **Objective** is 'to mainstream SLM in rangeland areas of the Makgadikgadi for improved livelihoods.' The Project Document specifies that the project 'will largely operate at two spatial scales with Outcome 2 at the larger spatial scale Makgadikgadi Framework Planning area, and Boteti sub-district and Outcome 1 focussing on finer spatial scale, with activities in Southern Sua Pan.'
- 10. The national Executing Agency for the project is the NGO BirdLife Botswana, key national partners include the Department of Forestry and Range Resources (DFRR) and Department of Environmental Affairs (DEA) of the Ministry of Environment, Natural Resources and Tourism (MENT) and the Department of Animal Production (DAP), and Department of Crop production (DCP) of the Ministry of Agricultural Development and Food Security . UNDP Botswana Country Office provides oversight and strategic guidance to the project as the GEF Implementing Agency.

Co-financing Category	Name of co-financier	Туре	Amount \$
Multi-lateral	UNDP	Cash	225 000
Bilateral	Japan International Cooperation	Cash	150 000
	Agency (JICA)		
National Government	Department of Forestry and Range	Cash	2 000 000
	Resources (DFRR)		
National Government	Department of Environmental Affairs	Cash	1 500 000
National Government	Department of Animal Production	Cash	500 000
National Government	Department of National Museum and	Cash	50 000
	Monuments		
National Government	Boteti sub-district Council		200 000
		kind	
Private	Botswana Ash Pty Ltd	Cash	280 000
Civil Society Organisation	BirdLife Botswana	Cash	1 440 000
Civil society organisation	Gaingo-O Community Trust	Cash	150 000
National Government	Letlhakane Sub-Land Board	Cash	150 000
Civil society organisation	Gumakutshaa Conservation Trust	In	150 000
		kind	
Total Co-financing			6 795 000

11. Co-financing allocated in the Project Document by national partners is as follows:

#### **Summary of Evaluation Findings**

12. Terminal evaluation of the Makgadikgadi SLM project provided an opportunity to examine all aspects of the project from design, through implementation, to analysis of the level of achievement of results and their likely sustainability. From this it is then possible to draw conclusions, distil lessons, and put forward recommendations to guide both the achievement of positive long-term impacts from this project, and the design and implementation of future initiatives.

#### **Project Design**

- 13. The Terminal Evaluation assessed the quality of project design, to examine whether the Project Document provides a clear, well-conceived, strategic and feasible framework for achieving intended development results. This assessment includes rating of the quality of the overall monitoring and evaluation framework design.
- 14. The Project Document presents a thorough situational analysis which builds on existing literature, and outlines the strategic and planning context, providing a sound platform on which to develop the project strategy. The analysis includes a comprehensive assessment of stakeholders and their stakes, influence and capacity, and from this the Project Document determines the proposed role of different groups and agencies in the project. Useful further detail on stakeholder institutions and the project area is also provided within Annexes. The Project Document establishes links to past and concurrent projects and initiatives and highlights how the project will build on / collaborate with these initiatives, to support information sharing and upscaling of results. The project is well aligned with relevant planning frameworks and strategies, in particular the MFMP and SSPMP. There are, however, a few significant gaps within the baseline analysis in particular relative to the requirement for, and importance of, strategic environmental assessment (SEA) within land-use planning in Botswana, and of the role of the Department of Town and Country Planning (DTCP) as a key stakeholder. The Project Document also provides very little analysis of the 'policy and market distortions' and how these are creating 'disincentives' for SLM and sustainable range management in the livestock production sector.' A clearer assessment of these distortions was needed to provide the basis for project support to address the second barrier.
- 15. Within the project strategy, the consultative, participatory approach is excellent and there is a core focus on environmental sustainability and on the importance of sustaining ecosystems to support livelihoods. The focus on capacity building and on the establishment of partnership and conflict resolution is also excellent. Within the description of the alternative situation to be established through the project, the approach outlined under Outcome 1 is clear and responds directly to the key issues identified in the situation analysis, however under Outcome 2 the strategy is much less clear. There is a very weak description of the intended Outcome level result within the Project Document to define what the 'effective resource governance frameworks for SLM and equitable resource access' will be. Support under Outcome 2 also does not clearly address the second barrier identified in the Project Document, in that no focused support is included to remove 'policy and market distortions' in the livestock production sector, and there are no clear mechanisms through which the project aims to increase market related incentives for more sustainable livestock production. The overall project strategy and areas of intervention should directly address the two barriers identified during design as the key factors preventing the mainstreaming of SLM principles in rangeland management in the Makgadikgadi region. To be consistent with the baseline analysis of barriers, Outcome 2 should therefore have included a clearer focus on addressing policy and market distortions and disincentives.
- 16. There are also several inconsistencies within the Project Document. The most significant are the differences in the wording and ordering of Outcomes between the project strategy description and the Results Framework. The Results Framework inverses the numbering of Outcomes to that given in the project strategy, which causes confused referencing in the

Project Document. Outcome 1<sup>1</sup> is also worded differently in the Project Strategy and Results Framework and the different wording creates a significant discrepancy in the area of influence over which the project intends to achieve a 'sustainable land and livestock management<sup>2</sup>' impact in order 'to improve range condition and flow of ecosystem services to support the livelihoods of local communities'. It makes a significant difference to the evaluation of project results whether the geographical area over which the Outcome result is intended to achieve impact, is the entire 1,900,000 hectares of the Makgadikgadi rangelands, or solely the 545,000 hectares of the Southern Sua Pan. In the project strategy description within the Project Document, Outcome 1 is worded as 'Sustainable land and livestock management in over 1,900,000 hectares improves range condition and flow of ecosystem services to support livelihoods of local communities and biodiversity in the Southern Sua Pan Region. In the Results Framework the corresponding Outcome is 'Effective range management to improve range condition and flow of local communities in Southern Sua Pan Region<sup>3</sup>.'

- 17. Within Outcomes, another key weakness in the project strategy is that the areas of support described under each of the Outputs don't add up to achieve the Outcomes; this means that even if the project effectively implemented all areas of work envisaged under each Output, it would not achieve the two Outcomes at project end. Under Outcome 1, although the areas of support described within Outputs focus clearly on key issues within the situational analysis, it is unrealistic to specify that within three years the project would be able to demonstrate 'effective range management' which has 'improved range condition and flow of ecosystem services to support livelihoods of local communities in the Southern Sua Pan.' Under Outcome 2, the areas of support described under each Output do not add up to achieve 'effective resource governance frameworks for SLM and equitable resource access' by project end.
- 18. The project Objective is also not clearly defined. The Project Document does not provide a clear outline of the intended end of project result in terms of 'mainstreaming SLM in rangeland areas of the Makgadikgadi for improved livelihoods.' Only one OVI and Target are given in the Results Framework which refers to achieving 'improved management' over '1,900,000 hectares of rangeland'. There is nothing which indicates how 'improved' management will be measured and no indicator which enables measurement of 'improved livelihoods'; the OVI and Target do not enable measurement of results achieved. There is also the need within the project strategy for a clear explanation of how Outcomes 1 and 2 will work together to achieve the overall project Objective; in particular how Outcome 2 would support the upscaling of, and institutionalisation of, results and approaches developed under Outcome 1, to achieve the Objective level impact of 'mainstreaming SLM' across the whole of the Makgadikgadi region<sup>4</sup>. Within a three-year medium sized project, the anticipated end of project Objective result is somewhat unrealistic. It would be extremely difficult if not impossible for the project to mainstream SLM across the entire 1,900,000 hectares of Makgadikgadi rangelands, and the areas of project intervention described within the project strategy do not support achievement of this level of impact by EOP.
- 19. Within the Results Framework there are a number of weaknesses. The majority of the OVIs and Targets describe Output level products/results, rather than being SMART indicators that would enable measurement of Outcome level results. Baseline data in the Results Framework is weak across most OVIs, although under Outcome 1 the Results Framework adds a caveat to say that baselines will be established at project start. This is not ideal, but is understandable given the limited time allocated for project design<sup>5</sup>. Risk assessment in the

<sup>&</sup>lt;sup>1</sup> Referred to as Outcome 2 in the Results Framework

<sup>&</sup>lt;sup>2</sup> Also worded differently in the relevant Outcome statement in the Results Framework as 'effective range management'

<sup>&</sup>lt;sup>3</sup> Although, due to the inversed numbering it should be noted that this is numbered Outcome 2 in the Results Framework.

<sup>&</sup>lt;sup>4</sup> Note this wording implies an impact over a 1,900,000 hectare rangeland area affecting 32 communities' livelihoods.

<sup>&</sup>lt;sup>5</sup> Project conception was in December 2003, with one month was allocated for consultation and design of the project document, with subsequent approval of the document and submission to GEFSEC in March 2004.

Results Framework is not comprehensive, however the Project Document does include a much more comprehensive and useful assessment of risks within Annex 5. Another inconsistency between the project strategy description and the Results Framework under Outcome 1 is that the project strategy contains an Output 1.4, with an associated budget and relevant co-financing, however, no related indicators or targets are included within the Results Framework that relate to Output  $1.4^6$ .

- 20. The MTR raised concerns about weaknesses in project design when it assessed that 'project design is flawed and overambitious' and 'is highly unlikely to achieve aspirations of each of the two outcomes with the current outputs.' It described the Results Framework as 'seriously flawed' and recommended that both the strategic logic of project design and the results framework should be reviewed and amended. Following the MTR, the project developed a milestone based workplan, and addressed the majority of MTR recommendations, it did not however make any official changes to the project's Results Framework, and no further clarifications were provided as to the scope of intended Outcome and Objective level results and impact. The weaknesses in the project's overall strategy design and in the Results Framework therefore continue to affect the Terminal Evaluation.
- 21. Overall, the Project Document is well focused on addressing some of the key causal factors of land degradation in the SSP region and the participatory and partnership based approached is excellent. The situational analysis in the Project Document provides a good bedrock on which project implementation can build. Design of the project strategy, including the Results Framework, however, has a number of key weaknesses which affect the extent to which it would be possible for the project to achieve its stated Outcomes and Objective. The inconsistencies and weaknesses in the Project Document appear to have been due in large part to the limited amount of time made available for project design, which did not allow the design team and partners adequate time to develop a clear project strategy and results framework and to effectively review the Project Document prior to submission.

#### **Project Implementation**

- 22. The partnership-based approach to project implementation was exemplary. The project effectively engaged all key stakeholder groups, generating strong ownership of project results and improved understanding and collaboration. The Executing Agency was pro-active and committed and was highly praised by all stakeholders during terminal evaluation consultations. Local level stakeholders highlighted in particular the dedication of the Project Manager and the extent to which he went 'out of his way to provide support'.
- 23. The TRG and PSC were key fora for co-ordination, planning and monitoring; both groups provided valuable strategic advice and inputs over the life of the project and helped to guide results-based management. Reporting by the PMU was clear and consistent and formed the basis for well-informed decision-making. Lead public sector agencies, including DFRR, DCP, DAP, DVS, DEA and DTCP provided good leadership and support across relevant areas of project intervention; the Letlhakane Sub-Land Board and the Sub-Council Physical Planning Unit (PPU) also provided core input and support. Communities were directly engaged across all areas of project intervention, including through representation on the TRG and PSC. The project worked hard to ensure that there was effective consultation and community engagement, so that project support was well-targeted, addressing community needs and aspirations, whilst supporting SLM.
- 24. The ability of the project to adapt effectively to a range of challenges, and to leverage additional resources, was also linked to the nature of the project Executing Agency as an

<sup>&</sup>lt;sup>6</sup> Consultations during the TE seem to indicate that this Output should have been entirely removed from the Project Document and that the inconsistencies between the core of the Project Document and the Project Results Framework were likely to be largely due to the limited time available for project design, leading to a somewhat cursory review of the Project Document by all partners before submission to GEF.

independent, experienced NGO, with good international and local partnerships. BirdLife Botswana already had good working relationships with most partners in the project area, including community groups, is well respected at all levels, and through Birdlife International has an extensive international network on which it can draw to access external expert support and advice. It was therefore able to manoeuvre quickly and effectively to leverage and mobilise additional support, in order to support partners to address numerous challenges and externalities.

- 25. Project implementation has focussed heavily on achieving project Outputs and the project has demonstrated sound results-based management at the output-level. The issue arises in scaling up output-level results to demonstrate how these have worked together to cumulatively achieve Outcome and Objective level results, including to demonstrate the 'global benefits' of particular interest to GEF. This shortcoming stems largely from weaknesses in design: poor definition of intended Outcome and Objective level results in the Project Document, weaknesses in OVIs and Targets within the Results Framework which focus on Output level results, and inconsistent use of language and structure in the Project Document, limit the effectiveness of monitoring and strategic planning at the Outcome and Objective levels.
- 26. The project has achieved cost efficiency across a number of areas and has leveraged considerable extra support. Financial reporting has been clear and transparent. However, there are weaknesses in the extent to which the PSC considered and monitored expenditure against the Outcome budget allocations in the Project Document. The project has exceeded the acceptable 10% margin of variation with intended budgets allocated in the Project Document, with a 19.69% over-spend on Project Management and 14.16 under-spend on Outcome 1.

Outcome	Total Budget	%	Actual Expenditure	%	%
	allocated US\$				Difference
Outcome 1.	US\$457,000	57.64%	US\$344,723.36	43.48%	- 14.16
Outcome 2.	US\$298,078	37.60%	US\$254,261.22	32.07%	- 5.6
Project	US\$37,754	4.76%	US\$193,847.42	24.45%	+ 19.69
Management					
Totals	US\$792,832	100%	US\$792,832	100%	

 Table 1: Planned and Actual Makgadikgadi SLM Budget Expenditure between 2014 and 2017

- 27. There has been no recording of co-financing contributions and at EOP it is therefore not possible to quantify co-financing levels against those pledged in the Project Document. However, there is ample evidence of contributions by partners at all levels and there has been a high level of input and support from most co-financers listed in the Project Document; it is unfortunate that this contribution was not recorded and quantified. The additional resources leveraged by the project have also not been comprehensively logged, considerable additional support has been leveraged and some of this has been quantified, but at EOP it is not possible to quantify the total resources leveraged.
- 28. Overall, the project was cost efficient and the results achieved through the project can be seen to be closely tied to its effective implementation approach, in particular the good working relationships and commitment fostered by the project with all stakeholder groups, and the way in which it worked to support adaptive management and leverage additional resources. The UNDP RTA summarised the effectiveness of the project's implementation approach well in the final PIR report when she notes that: 'This project is an MSP (under \$795,000) but has achieved a significant amount within this budgetary constraint and this largely has to do with the approach the project has taken, which has been to focus on partnerships and deep engagement and consultative processes with all levels of land use management and planning at the site level.'

## **Project Results**

- 29. A project's terminal evaluation assesses the extent to which it has achieved intended development results at the Outcome and Objective level, including analysis of how it has worked to address the core 'barriers' identified in the Project Document, to achieve globally significant SLM impacts.
- 30. In assessing the overall results and impact of the Makgadikgadi SLM project, the terminal evaluation examined project achievements against the description of intended results outlined in the project strategy description, alongside the OVIs and Targets in the Results Framework. The TE has also taken in to consideration weaknesses in design which affected the potential for the project to achieve intended Outcomes, as well as unforeseen events and challenges which affect project implementation.

<u>Outcome 1:</u> Effective range management to improve range condition and flow of ecosystem services to support livelihoods of local communities in Southern Sua Pan

- 31. Under Outcome 1 the project aimed to pilot a series of measures to address the key causes of land degradation in the Southern Sua Pan<sup>7</sup>. It aimed to support the development of land-use plans to guide more sustainable land-use management within the SSP, and to provide support for piloting of improved land-use practices. It also aimed to build the capacity of SSP communities to address the problem of uncontrolled rangeland fires.
- 32. The project has achieved significant results under all three Outputs within Outcome 1. It has supported the development of land-use plans for each of the five village areas within the Southern Sua Pan (SSP), which have been combined within an 'overarching summary document covering all of the Southern Sua Pan' as an 'integrated land use plan' (ILUP). Linked to the land-use planning process, the project facilitated the development of a Strategic Environmental Assessment (SEA) which includes analysis of the land-use issues impacting on ecosystems and livelihoods within the SSP and provides important recommendations to support finalisation and implementation of the ILUP, with clear guidance for all partners on mechanisms to achieve more sustainable land management (SLM). The SEA is a key product that was not anticipated in project design and is an example of the way in which the project was able to adapt and leverage additional resources for the achievement of results. The project also provided important awareness raising, training and capacity building support for farming communities, introducing and trialling conservation agriculture (CA) as a more effective and sustainable method of farming, strengthening livestock farmers associations and providing training, awareness raising and technical support for improved livestock production and management. It built capacity amongst SSP communities for fire prevention and management, facilitating the establishment of a Fire Management Committee, providing training and equipment to the fire-fighting teams and the development of an SSP Fire Management Strategy to guide the Committee. The following analysis provides further detail on the results achieved under each Output and the extent to which these achieve the SLM impact intended in design.
- 33. Under Output 1.1 the project has met the target specified in the Results Framework to the extent that land use plans (LUPs) have been developed for each of the five villages in the SSP, within an overarching summary document covering the whole of the SSP area. The LUPs provide the basis for well-informed and more sustainable settlement planning and the means to address one of the livelihood issues identified in project design: that subsistence arable farming takes place around villages mainly on poor quality soils with low productivity. The LUPs identify fertile land surrounding villages and provide for phased settlement zoning based on land quality, prioritising agricultural development in the most fertile areas and residential development in the least suitable areas for agriculture. During the TE consultations

<sup>&</sup>lt;sup>7</sup> As outlined in the analysis of project design there is a lack of clarity in the Project Document as to whether the project intended to solely achieve impacts within the SSP or over the broader 1,900,000 hectare Makgadikgadi rangeland area

the Land Board indicated that although at EOP the LUPs are not yet being actively implemented, as was intended in the Target within the project's Results Framework, it is the firm intention of the Land Board to use the LUPs as the basis for land allocation in the five villages, as soon as the overall LUP document has been officially approved by the Ministry of Lands and Housing.<sup>8</sup>

- 34. The village LUPs have been integrated within a framework document which covers the whole SSP area, representing the 'overarching summary document' specified in the Results Framework Target. This Integrated Land Use Plan (ILUP) highlights the importance of sustainable rangeland management across the SSP, and thus complements the existing Southern Sua Pan Management Plan (SSPMP). The ILUP does not, however, provide detailed guidance on the sustainable land-use planning mechanisms required to guide decisions on livestock management (including sales) and the sustainable utilization of other range resources' as was specified in the project strategy description under Output 1.1 in the Project Document. The ILUP also does not incorporate a robust monitoring framework which will be critical to achieve more sustainable land management across the SSP rangelands, the monitoring chapter in the ILUP provides very little guidance on monitoring, comprising solely two brief paragraphs. The reason why a more comprehensive SLM plan for the SSP area wasn't developed appears to be that there simply wasn't the time or the resources to do so during the lifetime of the project, given the number of challenges and externalities encountered during project implementation. The fact that the project was able to produce the ILUP and SEA during the lifetime of the project is a considerable achievement.
- 35. The Strategic Environmental Assessment (SEA) developed under Output 1.1 is a key document for sustainable land management planning in the SSP area; it provides more detailed guidance on potential management mechanisms to achieve sustainable land use planning and management across the SSP rangelands than the ILUP. This includes a number of recommendations to amend and strengthen the ILUP, and to support its implementation, including an outline monitoring framework. It is unfortunate that the ILUP has not adopted the key recommendations in the SEA as this would have greatly strengthened the potential of the ILUP to guide SLM across the SSP rangeland area.
- 36. In development of the land use plans the project adopted an exemplary process of consultative, participatory and partnership-based planning which in itself has resulted in strong ownership of the plans at the local level and has greatly increased understanding of, and support for, sustainable land use management at all levels. The LUPs are well aligned with the SSPMP, MFMP and other relevant regional plans and strategies. The TE found evidence of broad support for the land use zoning proposed in the settlement land use plans, both among farmers in the communities, Kgosi as leaders of those communities and within public sector agencies.
- 37. Under Output 1.2 the project has helped to raise awareness amongst all stakeholders of SLM issues in the Southern Sua Pan and of the importance of more sustainable land-use practices to support livelihoods linked to arable farming, livestock production and harvesting of veld products. It has helped to demonstrate that conservation agriculture (CA) can be a more efficient and effective method of arable farming, and has provided training, basic equipment and support to farmers across the SSP. This has been effective in establishing a core of support for CA amongst community trusts, DCP and the farmers who have piloted the techniques. A number of farmers in SSP communities have expressed an interest in trialling CA, and pilot farmers consulted during the TE confirmed that they achieved promising results and aim to continue with the techniques, so long as they continue to get support to do so. DCP is committed to providing ongoing support for CA and this will be essential if it is to

<sup>&</sup>lt;sup>8</sup> The Land Board has frozen land allocation for almost two years waiting for completion of the LUPs, reflecting the importance they attach to these documents as the basis for land use decision making within the five SSP villages.

become established as a commonly used method of farming. Support for sustainable, community-based management of veld product harvesting under the project has been weaker and the project has not achieved the anticipated results, however, the project has leveraged additional support to enable BirdLife Botswana to continue to work with a local community trust following EOP for the establishment of a more sustainable veld product management system that can generate increased livelihood benefits for local communities.

- 38. Within the core issue of livestock production and herd management, the project has helped to establish a small stock association and to strengthen the beef farmers association. It has also helped to raise awareness of the issues associated with overstocking and provided training to livestock farmers in the SSP across a range of livestock production techniques. At EOP the Small Stock Association is functional and is actively supporting its members to increase the efficiency and sustainability of production methods. The Beef Farmers Association is not yet fully functional and major challenges remain in achieving more sustainable patterns and levels of cattle farming in the SSP and Makgadikgadi region.
- 39. As outlined in the SEA in the final year of project implementation, 'the main environmental issue relating to land degradation in the SSP is overgrazing by livestock' and there is an urgent need to 'put in place appropriate land management measures to help halt and reverse land degradation and to ensure that livestock numbers are kept within the carrying capacity of the rangelands.' The ILUP also emphasises the importance of sustainable livestock production for the ecosystems within the SSP area and for the livelihoods of communities who live there. It includes assessment of relevant issues, but does not provide the management guidance required to achieve this. The SEA has provided a number of specific recommendations on ways to increase the sustainability of livestock production in the SSP, and on ways to strengthen the ILUP, and this in itself is an important result supporting intended results under Output 1.2. The sustainability of livestock production, both small stock and cattle is key to sustainability of livelihoods.
- 40. In achieving results under Output 1.2 the Department of Crop Production (DCP) provided important leadership and support for trialling of Conservation Agriculture (CA), the Department of Animal Production (DAP) and Department of Veterinary Services (DVS) for strengthening livestock farmers associations and in training on improved livestock production methods. The Department of Forestry and Range Resources (DFRR) supported the production of relevant products and surveys in relation to sustainable harvesting of veld products and worked with BLB and the community trust in accessing funding<sup>9</sup> continue with this work following EOP. DFRR also provided important advice and guidance on overall rangeland management issues as the department responsible for rangelands in Botswana.
- 41. Under Output 1.2 the project has met the majority of targets specified in the Results Framework. Development results can be seen in the way in which support has strengthened institutions, helped to raise awareness and skills at all levels and produced information products. The project has created momentum across a range of areas and demonstrated results to support the adoption of more sustainable land-use practices. However, considerable work remains to be done if the support provided through the project, and initiatives piloted under it, are to be sustained to support achievement of the intended Outcome level result. In particular there is an urgent need to establish measures to achieve more sustainable livestock production, in order to address the core issue of overgrazing of rangelands. At EOP, the project has had little 'on the ground' impact in addressing this issue.
- 42. Under Output 1.3 the project worked in direct partnership with DFRR and with the four SSP communities to build awareness of fire prevention and control, and capacity for improved fire-fighting and management. Under the lead of DFRR the project has established an SSP Fire Management Committee and developed an associated Fire Management Strategy. The ILUP

<sup>&</sup>lt;sup>9</sup> A National Environment Fund supported two-year initiative which includes support for sustainable veld product harvesting.

and SEA are again relevant to Output 1.3, providing an assessment of the impact of fire on SSP rangelands and recommending mitigation measures.

- 43. Core to the results achieved by the project under Outcome 1 was its consultative and partnership-based implementation approach. The project effectively engaged all key stakeholder groups, generating strong ownership of results and improved understanding and collaboration at all levels. The Executing Agency was pro-active and committed and was highly praised by all stakeholders during terminal evaluation consultations. The PSC and TRG provided sound strategic advice and were closely engaged in guiding the project. At EOP there is clearly an interest and commitment amongst all partners to implement the plans and strategies that have been developed, and to continue to work together towards establishing more effective land-use practices. The project demonstrated good adaptive management in responding to a range of challenges, particularly relative to development of the land-use plans.
- 44. The extent to which the project has achieved the intended Outcome level result of establishing 'effective range management to improve range condition and flow of ecosystem services to support livelihoods of local communities in Southern Sua Pan' is limited however. Significant challenges still remain to achieve sustainable rangeland management across the SSP and this will require further resources and time. The project's anticipated Outcome level result of achieving ecosystem level impacts on the scale necessary to demonstrate improvements to the condition of rangelands with improved 'flow of ecosystem services to support livelihoods of local communities in Southern Sua Pan' is somewhat unrealistic within a three-year MSP. It is even more unrealistic to anticipate that the project would be able to achieve and demonstrate this result over the whole of the Makgadikgadi region, as is outlined in some Outcome references within the Project Document.
- 45. At EOP under Outcome 1 the project has clearly increased awareness and understanding amongst the four communities within the SSP and within Government Departments and planning agencies in Boteti sub-District. It has provided training and supported the development of plans, tools and guidelines. This has built the capacity of all stakeholders for both improved land-use planning and for achieving more effective and sustainable agricultural and livestock production practices. It has also strengthened/ established organisations, in particular the livestock farmers associations, community trusts and the SSP Fire Management Committee and has strengthened partnerships between these groups and relevant Government Departments. Across all of these areas the project has then helped to strengthen the basis on which stakeholders in the SSP area can achieve more sustainable and effective land use practices. However, to actually effect sustainable changes in land-use and management practices across the SSP area, on a scale that can have long-term, ecosystem level impacts in addressing the causal factors of rangeland degradation, will require substantial further support. The project has helped partners to identify some potential avenues for ongoing support, though funding for community-based initiatives by private sector organisations and the National Environment Fund, and the project Executing Agency BirdLife Botswana will remain active in the region. Relevant local government departments that have been engaged in the project also confirmed that they will continue to support SLM work in the area. The achievement of landscape level SLM results will require strong partnership between all of these groups, and may also require further external financial and technical support.

<u>Outcome 2:</u> Effective resource governance frameworks for SLM and equitable resource access'

46. Under Outcome 2 the project aimed to support SLM at a larger spatial scale over the whole Makgadikgadi Framework Planning area and Boteti sub-district. It aimed to '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' and to 'empower local institutions to improve resource governance and stakeholder participation in regional dialogues on the importance of mainstreaming SLM into rangeland management for local development.'

- 47. The project has provided support across the three component Outputs and this has resulted in the development of tools for land-use planning and management within the Boteti sub-District and strengthening of a key Makgadikgadi regional SLM forum.
- 48. The Makgadikgadi Wetlands Management Committee (MWMC) combines all 32 villages within the Makgadikgadi region, alongside relevant government departments, private sector organisations and NGOs. It was established under the Makgadikgadi Framework Management Plan as a body to support implementation of the plan. Under Output 2.1 the project provided support to revitalise the MWMC and has developed guidelines for it. The Committee offers an important forum for discussion of SLM issues at the Makgadikgadi regional level, and to facilitate upscaling of initiatives and lessons across the region. The project has met the target established in the Results Framework of 'active participation' in this 'multi-stakeholder forum' by 'government, NGOs, water and land user groups, community trusts, community leaders, private sector'. The project supported awareness raising on SLM amongst members of both the 2015-2017 and the new 2017-2020 committees, including sharing the lessons and achievements of the SSP pilot initiatives. Project support for 'upscaling' of results beyond the SSP area can be seen in the way in which project results and lessons were shared at MWMC meetings and helped to inspire and inform other CBOs across the region. The Project Manager and TAC also supported a number of CBO members of the MWMC to write project proposals and access funds for initiatives across the wider MWMC area; these initiatives will build on the awareness raised, capacity and partnerships built through the SLM project. At EOP there is no data to enable measurement of an impact in terms of changes to SLM governance systems and policies, however, the project has helped to generate a basis of knowledge, capacity, and an interest in SLM issues, on which MWMC members can draw to engage in and influence such processes in the future. Key to the potential future role and impact of the Committee is the need for ongoing financial and technical support, in particular from DEA; this will be vital if the MWMC is to be sustained and strengthened as a body which can support more 'effective resource governance frameworks for SLM and equitable resource access,' across the Makgadikgadi region.
- 49. Under Outcome 2 the project also supported the development of a land-use planning tool for Boteti sub-District. This 'Land Use Conflict Information System (LUCIS)' is now officially installed and adopted by the Boteti sub-Land Board and Physical Planning Unit (PPU). Capacity building support was provided by the project to key land-use planning officers to enable them to effectively use the system. LUCIS is a powerful tool for land-use planning and management, however, to achieve 'effective resource governance and equitable resource access' there is a need to establish more integrated land-use management systems in the sub District, and indeed more broadly across the whole District. A key issue identified in project design was that 'management efforts are carried out in isolation by different sectors, leading to disjointed management, gaps in management and monitoring gaps, and duplication of effort'. LUCIS can provide a tool to support more coordinated and informed management across sectors, and it will be important for the information and mapping in LUCIS to be directly accessible to all relevant land-use management agencies, not solely the sub-Land Board and PPU. In order to support sustainable land management, it is also critical that the data in the system is regularly updated through ongoing monitoring by all agencies; planning based on old data can be counter-productive. There is currently no clear monitoring / updating system for LUCIS. At EOP the result achieved under Output 2.2 is that the project has helped to develop a powerful land-management and monitoring tool, however its impact in supporting more effective land-use management is not yet clear. It will be important to ensure that LUCIS is used as a tool to support integrated land use planning and that a clear multi-agency monitoring system is established to update the information in it, so that land-use planning decisions are made based on up to date and accurate data.

- 50. The project provided some limited support to strengthen rangeland monitoring systems under Output 2.3, however results are relatively weak. The intended EOP result was to establish a 'system for monitoring of range condition and productivity'. In describing the alternative situation to be put in place by the project the Project Document states that it would develop 'multi-scale rangeland monitoring tools' which would 'cover economic, environmental, and social aspects of rangeland and result in both technical range monitoring tools as well as a community tool based on MOMS which is implemented in neighbouring communities<sup>10</sup>.
- 51. Effective monitoring is critical for achievement of the project's sustainable rangeland management objective; without effective, integrated monitoring systems, land-use management partners cannot get a clear understanding of the condition of habitats / ecosystems, the impact of land-use pressures on those ecosystems, and consequently the management measures needed to achieve SLM.
- 52. The project established community-based Management Oriented Monitoring System (MOMS) teams in each of the 4 core SSP villages and provided training and awareness raising to those teams, led by DFRR and DWNP. However, at project end, MOMS data/systems have not yet been actively used to support improved rangeland monitoring and management at any level. DFRR confirmed that they intend to increase use of MOMS, including a national initiative for digitising of MOMS data from the data sheets compiled by community MOMS teams. This will make the information more accessible to DFRR as part of departmental monitoring systems. The project Executing Agency also worked with community groups in the SSP area to collect data for the national Bird Population Monitoring Programme (BPMP). This has helped to raise awareness of SLM issues and build capacity for common-bird monitoring, to support an existing national programme managed by BLB. In addition to the community level MOMS training, the project commissioned a remote-sensing report at project end which examines at a range of parameters to provide an assessment of range condition over the life of the project, using the satellite-based vegetation condition index (VCI), however no field-based assessments were undertaken.
- 53. The project provided very little support for the development / strengthening of technical range monitoring tools; there was no support provided across the areas identified in the project strategy for: 'measurement of rangeland biodiversity, grass composition and cover as well as tree composition and density, total system carbon, invasive plants and land cover', and the project has not increased the capacity of Government partners in reporting against UNCCD impact indicators. At EOP an effective 'system for monitoring of range condition and productivity' is not place at either the level of the SSP, Boteti sub-District or Makgadikgadi region. The weak results achieved under Output 2.3 can in part be attributed to weaknesses in project design. Also, to the fact that the project faced a number of challenges and externalities which took time and resources to resolve; the project had to prioritise its efforts and priority was given to development of the land-use plans under Output 1.1, which drew time and resources away from other areas of project support.
- 54. The establishment of a 'multi-scale', integrated system for monitoring range condition and productivity remains an urgent priority at project end, and is vital to support SLM. Monitoring should combine technical data/analysis from relevant government agencies (including DCP, DAP, DVC, DFRR, DWNP, DEA, DTCP, DoT/BTO), NGOs such as BirdLife Botswana and community-based MOMS assessments. The Strategic Environmental Assessment (SEA)<sup>11</sup>, provides a number of useful recommendations, emphasising the importance of 'establishing a comprehensive programme of data collation and monitoring, by all implementing agencies.' It raises concerns over the lack of baseline data and monitoring the need to establish the

<sup>&</sup>lt;sup>10</sup> Page 17 Project Document analysis of alternative situation to be put in place by the project

<sup>&</sup>lt;sup>11</sup> developed under project Output 1.1

carrying capacity of the rangelands. Chapter 8 of the SEA highlights the most urgent baseline and threshold data required to support SLM in the Southern Sua Pan and provides an outline monitoring framework.

55. Overall under Outcome 2 the project worked to strengthen the MWMC and to develop the LUCIS and MOMS tools, it also played a valuable facilitatory role in bringing a range of stakeholders together, strengthening their knowledge and capacity and supporting them to develop new initiatives. However, considerable further work is required to achieve the Outcome of 'effective resource governance frameworks for SLM and equitable resource access' both within the geographical area of the SSP and across the wider Makgadikgadi region. In particular it will be important for future initiatives to focus on establishing the monitoring frameworks/ processes, integrated management systems and the policy and economic incentives necessary to establish effective resource governance frameworks for SLM.

#### Conclusions and Sustainability

- 56. Overall, the project has met almost all the Targets established in the Results Framework. It achieved a remarkable amount within the confines of the time and resource constraints, particularly considering the weaknesses in project design and the externalities that impacted on implementation. At project end, however, considerable further work and support is required to achieve the project's intended, if ambitious, Outcomes, and even more so to achieve the intended Objective of mainstreaming SLM in rangeland areas across the 1,900,000 hectares of the Makgadikgadi rangelands.
- 57. The project has however contributed valuable support across the key SLM issues identified in the situational analysis in the Project Document:
  - Fire and impact of burning on rangeland areas: the project has put in place a system, built capacity and partnerships, and raised awareness to help prevent and control fire in SSP rangeland areas
  - Arable farming and unsustainable harvest of veld products: the project has piloted and demonstrated the potential for more sustainable arable farming techniques, through Conservation Agriculture. Although it has had little impact in establishing more sustainable harvesting of veld products, it has supported the development of an initiative that may help to achieve this result post project.
  - 'Meaningful participation' by local communities to mainstream SLM principles into rangeland management and governance': the project supported communities to participate directly in all areas of project intervention, including for development of the land-use-plans, and has maintained a focus on mainstreaming SLM principles. It has also strengthened the capacity of farmers associations, community trusts and the MWMC to operate as organisations that can more 'meaningfully' represent community interests.
  - Integrated Management: the project has supported a range of departments to work together in implementing SLM measures under the project; DFRR, DAP, DCP, DEA and DTCP all played a lead role across relevant areas of intervention. It has also strengthened the interaction between departments and communities, supporting integration at the community level. The need to establish more integrated management systems for SLM, and in particular more effective and integrated monitoring of the condition of rangeland ecosystems, however, remains a key priority at project end. The strategic environmental assessment (SEA) provides a number of useful recommendations to support more integrated management and monitoring.
  - Grazing Regimes / Overgrazing: the project has had a minimal impact in addressing this key issue, it has raised awareness of range degradation and the impact of overgrazing, and has strengthened farmers associations, however the establishment of more sustainable levels and patterns of grazing remains a key issue and priority at project end.

The SEA underlines this when it concludes that 'the main environmental issue relating to land degradation in the SSP is overgrazing by livestock', to address this there is an urgent need to 'put in place appropriate land management measures to help halt and reverse land degradation and to ensure that livestock numbers are kept within the carrying capacity of the rangelands.'

- 58. The results achieved by the project have contributed significantly to addressing the first barrier identified in the Project Document, however the project has not had any clear impact in addressing the second barrier whereby 'policy and market distortions provide disincentives for adopting SLM and sustainable range management principles in the livestock production sector'. The lack of project impact against this barrier can in large part be linked to the absence in project design of any clear strategy to address these issues.
- 59. Overall, the project has initiated some important work and built capacity and awareness for SLM, it has also demonstrated the effectiveness of a participatory implementation approach that fosters multi-stakeholder partnership and ownership of results. It is vital however that support is now maintained across all key areas of project intervention, if partners are to achieve the intended project Outcomes and Objective. This support will need to come from a range of sources including from: national government agencies, prioritising the budgets and policies necessary to achieve more sustainable land-use and land management in the Makgadikgadi region; continued engagement by NGOs such as BirdLife Botswana; strengthened engagement by community groups and associations in SLM, in particular for more sustainable livestock production; increased investment and support from the private sector; and strong partnership between all stakeholders to achieve more integrated and well-informed management.
- 60. The project Executing Agency has worked hard to ensure that there will be continuity following project end. The TE has rated all elements of sustainability as 'moderately likely'. In providing this rating across all sustainability criteria, the TE has taken in to consideration the fact that BirdLife Botswana have supported partners to identify a range of potential avenues for ongoing support, and that it will remain active in its support for SLM in the region. The rating also reflects the fact that local stakeholders are committed to continuing the work initiated through the project, have strong 'ownership' of the results achieved, and that the project has strengthened partnerships between stakeholders at all levels. The existence of key planning frameworks which support SLM, including the Makgadikgadi Framework Management Plan (MFMP), Southern Sua Pan Management Plan (SSPMP), and the Integrated Land Use Plan (ILUP) which was developed through this project, also increase the likelihood of ongoing strategic support for SLM in the Makgadikgadi region. It is important to emphasise, however, that the 'moderately likely' rating does not imply that sustainable results have been achieved, it reflects the fact that at EOP it is moderately likely that further support will be provided to support sustainability. The findings of this Terminal Evaluation clearly underline the fact that substantial further support is required if the work initiated through the project is to be sustained, in order to support long-term positive outcomes to 'mainstream SLM in rangeland areas of the Makgadikgadi for improved livelihoods.'
- 61. The TE is required to rate the relevance, effectiveness and efficiency of project support whereby evaluation of a project's 'relevance' considers the extent to which the project addresses the causal factors of land degradation, and whether it is consistent with local, national and global priorities and policies. The evaluation of 'effectiveness' examines the extent to which the project has achieved intended results<sup>12</sup> and how it has achieved those results. Evaluation of 'efficiency' examines the extent to which results have been delivered with the least cost possible.

<sup>&</sup>lt;sup>12</sup> Evaluation of effectiveness is normally focussed on the level of achievement of Outcome and Objective level results, however in providing the rating for this project the TE has taken in to consideration the fact that the Outcomes and Objective established in the Project Document were unrealistic given the time and resources available.

62. The project is clearly highly relevant to context of SLM in the Makgadikgadi region and specifically to the Southern Sua Pan. The priorities identified in the situational analysis within project design remain highly relevant at project end. Rating of effectiveness is normally required to assess the extent to which Outcomes and Objective have been achieved. Although the project has not achieved either of its Outcomes or Objective, the TE considers this to be largely due to unrealistic design. The TE has rated the project's effectiveness as 'satisfactory' due to the fact that it adopted a highly effective implementation approach and, within the limits of the resources and time available to it, has achieved satisfactory results and met the majority of targets established in the Results Framework. The TE has rated project efficiency as 'highly satisfactory'. The project demonstrated good adaptive management, effectively overcoming a range of challenges, achieving efficient use of project resources, and leveraging considerable additional support for the achievement of results.

#### **Overall Ratings**

63. It is a GEF requirement that a project Terminal Evaluation includes ratings against key criteria, to assess the project's performance in terms of the quality of monitoring and evaluation, the quality of overall implementation and execution and of project relevance, effectiveness, efficiency. The Terminal Evaluation also rates the likelihood that positive results will be sustained across four key areas of impact: environmental, socio-political, governance / institutional and financial. The following ratings are provided for the Project

## **EVALUATION FRAMEWORK RATINGS**

1. Monitoring and Evaluation	Ratings	
M&E design at entry	Moderately Satisfactory	
M&E Plan Implementation	Satisfactory	
Overall quality of M&E	Satisfactory	
2. IA& EA Execution		
Quality of UNDP Implementation	Satisfactory	
Quality of Implementing Partner Execution - BLB	Highly Satisfactory	
Overall quality of Implementation / Execution	Satisfactory	
3. Assessment of Outcomes		
Relevance	Relevant	
Effectiveness	Satisfactory	
Efficiency	Highly Satisfactory	
4. Sustainability		
Financial resources	Moderately Likely	
Socio-political	Moderately Likely	
Institutional framework and Governance	Moderately Likely	
Environmental	Moderately Likely	
Overall likelihood of sustainability:	Moderately Likely	

#### **Lessons Learnt and Recommendations**

64. Terminal evaluation of the Makgadikgadi SLM project has highlighted a number of useful lessons to guide the design and implementation of future initiatives and to support strengthened SLM in the Makgadikgadi region. A summary of lessons learnt and recommendations is provided below with further detail in Part 4 of this TE report.

#### **Lessons Learnt**

#### Participatory Land Use Planning Processes and the challenges of Fixed Project Timeframes

- 65. The TE has undertaken a detailed review of the support provided by the project for land-use planning, including the range of challenges that the project faced, and how these were addressed. The majority of lessons highlight the positive results achieved in fostering partnership and in supporting direct stakeholder engagement in the land-use planning process. It also demonstrates the complex range of issues that can affect land-use planning, and that to resolve these issues, requires adequate time and skilled facilitation.
- 66. The fixed timeframe that projects entail can present real challenges for the facilitation of complex multi-stakeholder land-use planning processes. There can be an inherent conflict between a fixed project timeframe requiring a 'product' (ie: the approved plan) to be produced by project end, and the participatory process required for effective development and approval of the plan. If the project timeframe is inadequate then the project is faced with the difficult decision to either follow an effective participatory, integrated land-use planning process, but risk failing to produce the agreed 'product' by project end; or it has to adopt a sub-optimal process to 'fast-track' the approach in order to produce the required plan document, but this then risks developing a sub-optimal plan which may not have strong stakeholder buy-in and support. Projects that try to short-circuit consultative process risk producing land-use plans that are not based on an in-depth understanding of the area and land-use issues, and therefore don't provide an effective planning framework for SLM. Without effective stakeholder engagement, plans are also less likely to be accepted and supported by stakeholders when they are implemented. It is important for funding agencies, UNDP and National Government agencies to realise that production of the plan document by EOP does not necessarily equate to production of a sustainable and effective land-use planning result.
- 67. This Makgadikgadi SLM project took a sensible middle path by facilitating the engagement of all stakeholders in the land-use planning process, undertaking baseline assessments for resource mapping and commissioning a strategic environmental assessment (SEA). However, due to conflictual issues and disagreements over the boundaries of communal rangelands, the land-use planning process was not able to include any detailed planning and management measures for communal rangelands. Instead it focussed on developing detailed plans for the village settlement areas, and placed these within an overarching document which outlines the broader SLM issues across the SSP. This has resulted in the production of five settlement plans that have broad support, however, it means that the ILUP itself is unlikely to have any real impact in addressing the key SLM issue of over-stocking of rangeland areas and this remains a priority issue for the Southern Sua Pan at project end.

#### Strategic Support for SLM

68. Strategic Environmental Assessment (SEA) is core to sustainable land-use planning and management, and is a regulatory requirement in Botswana. It is important to ensure that financial and technical provisions are made for SEA within the design and implementation of any project which includes land-use planning, and that the timeframe and approach established in the project strategy incorporates a SEA early on in the plan development process. It may also be useful in future initiatives to incorporate a training element alongside support for SEA, so as to strengthen capacity within government agencies.

69. The Department of Town and Country Planning (DTCP) as the national department responsible for spatial planning and for the control of land development in Botswana, is a key stakeholder in land use planning and can provide direct support for development of land use plans. The 'In-house' approach adopted by the project for development of land-use plans was effective; led by DTCP the project directly engaged key agencies within the design teams, and the planning process, built knowledge and understanding of the area and land-use management issues, supported coordination and partnership between stakeholder groups and established ownership of the plans at all levels. The project approach also demonstrates how external experts can provide valuable support, in particular for specialised components such as SEA. It would be useful for future initiatives to consider how to support a nationally led plan development processes in which external experts can be strategically used to support specialist components, whilst also strengthening national capacity, through for example training elements or working alongside local counterparts.

#### Projects as Facilitators of Change

- 70. The Makgadikgadi SLM project demonstrates how projects can be catalysts for positive change. Future projects can learn lessons from the effective approaches adopted by the project in working as a facilitator on various levels. Key stakeholders were directly engaged from the start, helping to shape project implementation mechanisms and the project has established strong ownership of results, and built capacity and awareness. In order to achieve SLM it is important for projects to work closely with all those who can influence land-use practices: Livestock Associations, VDC Farming Initiatives; Community Trusts, bore hole owners and Government agencies (DAP, DCP, DVS, DWNP, DTCP District Council, Land Board etc). The Project Manager stressed that it takes time to win support and buy-in from stakeholders, and it is important to continually build partnerships from project start to end, to maintain stakeholders' interest and participation.
- 71. The TRG and PSC were key fora, facilitating inter-sectoral and inter-stakeholder coordination, and providing key strategic advice and support throughout project implementation. The PSC provided high level support and guidance and the Project Manager stressed the important role senior government officials played in facilitating speedy decision making. The inclusion within the TRG of all stakeholder groups, including government departments, Kgosi, farmers associations and community trusts, ensured that TRG meetings were a forum for partnership and learning. It combined a broad range of interest groups with different knowledge and skills, who together guided the project in providing well targeted support.
- 72. The leadership provided by core Government partners including DFRR, DCP, DAP and DTCP provides an example of how sectoral agencies can contribute strongly to achieving project results whilst also working to achieve their own strategic priorities, and how a project can help to strengthen partnership between agencies and with community groups. The Project Manager highlights that in engaging with Government departments it is important for projects to align support with government planning and financial cycles. He suggested that in future projects it is important for PMU to recognize that departments are more active in quarters 2 and 3 of the financial year, than at the start and end of the year; implementation of core activities should therefore be focused in the middle of the financial year year. The Project Manager also emphasised the importance of 'proper handover between leaving and incoming staff at the government institutions.' Frequent change of staff within government institutions causes delays and a lack of continuity of initiatives.
- 73. In providing support to livestock associations and community trusts, the project also demonstrates the potential of these groups to facilitate change within communities. CBOs share knowledge, raise awareness and can provide leadership for the design and implementation of community based SLM livelihood initiatives. The project worked directly with these groups, helping to build capacity and was pro-active in the way in which it supported

community trusts and farmers associations to access external funds through NEF and through applications to grant schemes operated by the local mining companies.

- 74. The Project Manager was a skilled facilitator and adopted a pro-active approach, forging partnerships, assessing and identifying opportunities and working as the central cog in the wheel, effectively driving project implementation. In recruiting project managers, implementing and executing agencies should recognise the importance of facilitation skills, and place emphasis on this skill set within TOR and selection. Project workplans should also include an adequate timeframe and budget for 'facilitation'.
- 75. BirdLife Botswana (BLB) were a flexible and highly competent project Executing Agency. Important elements of the PMU's approach to project management include the establishment of good working relationships with a range of partners on the ground from the start, and taking time to fully understand the area and development context. BLB also supported effective project implementation through their network of partners nationally, through information dissemination and leveraging additional support. Their international links through Birdlife International also provide them with access to a pool of international expertise, which supported the SEA and MTR. BLB also has experience in SLM and of working with a range of donors, including under the GEF SGF. As an independent NGO BLB had flexibility to adapt quickly to changes in a project's situation and was able to facilitate partnership between different groups at all levels.

#### Cost Efficiency

76. The project made efficient use of project resources and was able to leverage considerable extra support. Lessons can be learnt from the sensible and considered approach which the project took to the provision of equipment. Requests for additional agricultural equipment were received by the PMU during the first half of project implementation, including high cost items such as tractors and machinery, the PSC and TRG provided valuable advice to PMU concluding that it would not be cost efficient for the project to provide the additional equipment requested. When projects receive additional requests for equipment during project implementation it is important for the PMU and PSC to follow a similar approach to that used under this project and assess a) whether the items requested are core to the achievement of intended results b) whether the budget is available / whether expenditure on additional equipment would take resources away from other areas of project support c) whether other opportunities exist for project stakeholders to access the equipment. The PSC also provided the valuable advice to the PMU that when it comes to equipment and goods it is always better for a project to under-promise and over-deliver than over-promise and under-deliver!

A Project Document should be Internally Coherent and should Clearly Define Intended Outcome Level Results

77. Assessment of project design within the Makgadikgadi SLM project highlights the importance of ensuring that there is a clear and cohesive 'internal logic' to the strategy presented within a Project Document, whereby Outcomes are clearly defined and Outputs work together to achieve project Outcomes and ultimately the project Objective by EOP. The project's Results Framework should then establish the means to monitor and measure achievement of these results.

#### Post Project Sustainability

78. It is important for sustainability mechanisms to be clearly written in to project design. The design of future projects can learn from the actions BLB has taken, which highlight ways in which financial and technical support can be sourced to support partners, post project. The Project Document should incorporate provisions for support by project management units (PMU) to partner groups, during the last half of project implementation, for the development of proposals to relevant small grant funds, and the establishment of links with relevant private

sector organisations and Government Departments. This will help to ensure that work initiated through projects has financial and technical support to be sustained following project end.

79. Ongoing support by national government partners following EOP is critical and the PSC can provide a key forum to secure high-level commitment for this. Within a project strategy it is important to highlight the need for formal commitment from government partners, in the final year of project implementation, for the provision of ongoing post project support across relevant areas. This commitment can be incorporated within sustainability targets in a project's Results Framework.

## Allow Adequate Time for a Project Design Process

80. Consultations during the TE indicate that weakness in the Makgadikgadi SLM Project Document may in large part be due to a rushed design process. It is important that UNDP allows adequate time for project design; this is a good investment as the Project Document provides the bedrock of analysis, and the structure and strategic approach on which project implementation is based. A well-constructed Project Document greatly increases the likelihood that a project will achieve effective and sustainable results. Allowing adequate time for design also means that a design team can consult with all key stakeholders, review existing data, build on lessons learnt from past work, and on systems, information and tools developed under previous projects, and establish links to existing initiatives; all of which will greatly increase the likelihood of effective and efficient project implementation.

#### Recommendations

81. The following recommendations build on the analysis in the TE report to suggest some potential avenues through which project partners can increase the likelihood of achieving sustainable SLM impacts in the SSP and broader Makgadikgadi region, and to guide the implementation of future UNDP/GEF initiatives.

# Recommendations 1: There is a need for substantial ongoing SLM support in the Southern Sua Pan

Recommendation 1a: To achieve SLM results in the Southern Sua Pan, Government partners need to maintain support across all core areas of work initiated under the project

82. The Makgadikgadi SLM project achieved a lot within the time and resources available to it and established real momentum for change. However, there is a danger that if support is not maintained at the community level, the progress made through the project could slip backwards. It will be essential for national government agencies, in particular DFRR, DAP, DCP, DWNP and DEA, to continue the work initiated under the project. The TE strongly recommends that at the national level Government departments ensure that resources are allocated in annual budgets and workplans to provide ongoing support across all areas of project intervention. This includes the following:

Department of Crop Production (DCP): Ensure priority is given in departmental budgets, workplans and strategies to:

- Establish a system for monitoring conservation agriculture (CA) results
- Review the results and lessons learnt through the project, in partnership with pilot farmers and community trusts, in order to identify priority areas of future support.
- Assess opportunities to train and equip village development committees, community trusts
   / farmers associations to enable them to become more self-sufficient in use of
   conservation agriculture (CA) techniques, and to enable them to train others within
   communities (training of trainers).
- Establish an induction process for new Extension Officers to train them in CA

 Identify opportunities to scale up CA pilots to other areas, including the sharing of lessons learnt and support for farmer exchanges.

Department of Animal Production (DAP): Ensure priority is given in departmental budgets, workplans and strategies to:

- Provide support that will continue to build the capacity of both the Small Stock and Beef Farmers Associations, to a level where they can sustain themselves.
- Prioritise training in practices that will support more sustainable levels and types of production, including supplementary feeding, kraaling, management of livestock movements and increasing rate of cattle offtake.
- Strengthen market incentives for more sustainable levels and types of production
- Strengthen monitoring of livestock numbers and movements in rangelands and work with DFRR to determine sustainable stocking levels / rangeland carrying capacity.
- Identify opportunities to strengthen management of livestock numbers around boreholes, so as to establish more sustainable levels of grazing.

Department of Forestry and Range Resources (DFRR): Ensure priority is given in departmental budgets, workplans and strategies to:

- continue to provide support for fire management including prevention and control
- actively support MOMS, including training of community teams
- support the establishment of a community-based management system for sustainable harvesting of veld products in the SSP
- work with DAP to determine rangeland carrying capacity for livestock
- strengthen monitoring of the condition and productivity of rangeland ecosystems.

Department of Environmental Affairs

- Advise on amendments to the ILUP, based on review of the recommendations in the SEA
- Maintain support to the Makgadikgadi Wetlands Management Committee
- Provide ongoing support and advice to all stakeholders to strengthen SLM in the SSP and broader Makgadikgadi region and assess opportunities to access further external technical and financial support for a 'second phase' of this Makgadikgadi SLM project.

#### Sub DLUPU

 ensure effective interagency co-ordination of SLM initiatives at the sub-District level to support implementation of the ILUP and SSPMP for SLM outcomes.

#### Recommendation 1b: Implement the Land Use Plan in conjunction with the SEA

83. To achieve a positive SLM outcome, implementation of the ILUP should be undertaken in close conjunction with the SEA. The ILUP document itself would be greatly strengthened if it is revised to address the core issues and recommendations outlined in the SEA. SEA Chapter 9 'Conclusions and Recommendations' provides a clear summary as to how the ILUP could be updated to more effectively support SLM.

# Recommendation 1c: Establish a multi-scale, integrated rangeland monitoring system for the Southern Sua Pan

84. To achieve sustainable land management in the Southern Sua Pan, and more broadly across the Makgadikgadi region, there is an urgent need for government partners to establish an integrated system for monitoring range condition and productivity. This is vital to enable all partners to get a clear understanding of the condition of habitats / ecosystems, the impact of land-use pressures on those ecosystems over time, and consequently to determine the management measures needed to achieve SLM. An effective monitoring system should combine technical data/analysis from relevant government agencies (including DFRR, DCP, DAP, DVC, DWNP, DEA, DTCP, DoT/BTO), NGOs such as BirdLife Botswana and communities, through MOMS assessments. The system should reflect and build on the participatory, partnership-based design process used for development of both the ILUP under this project, and previously for the SSPMP and MFMP. It should also build on the existing tools and systems used by agencies, including those developed under previous projects<sup>13</sup>.

- 85. The Strategic Environmental Assessment (SEA) developed under this project provides some key recommendations to support the establishment of 'a comprehensive programme of data collation and monitoring, by all implementing agencies' (refer SEA chapter 8). The TE strongly recommends that partners review the recommendations provided in the SEA:
- 86. The most urgent priority is to establish baseline and threshold data, including:
  - Sustainable yield of the groundwater resource (i.e. the maximum amount that can be abstracted without depleting the groundwater resource).
  - Rangeland condition and extent and severity of land degradation, including:
    - rangeland assessment using Normalised Difference Vegetation Index (NVDI) and its derivative, the Vegetation Condition Index (VCI);
    - location, area (ha) and % of land affected by bush encroachment;
    - severity of bush encroachment (i.e. the extent to which the land is impenetrable for livestock as a result of bush encroachment);
    - location, area (ha) and % of land with native, palatable, perennial grass species (v. invasive, unpalatable, annual grass species).
  - Carrying capacity of the rangelands.
  - Location and sustainable yield of veld products (i.e. the maximum amount of veld product that can be harvested without depleting the veld product resource or causing land degradation).
  - Amount of wood collected for fuel / lighting and the area affected.
  - Population and distribution of key species, including:
    - rare / endangered bird species on Sua Pan
    - common bird species in the rangelands
    - herbivore / ungulate species
    - IUCN Red Data List species
    - rare / endangered species of flora
- 87. The SEA emphasises that 'monitoring needs to be carried out on an ongoing basis in order to identify trends in the environmental status of the Southern Sua Pan (SSP) area and progress against the targets proposed in the SEA report. The frequency of this monitoring will depend on what is being monitored and the extent to which this data is already collected. Where appropriate, the local communities should be actively engaged in this monitoring to help them develop a stronger understanding of their local environment and the impacts, both positive and negative, of the land uses in which they are engaged. This engagement should also help to develop a sense of ownership and responsibility in helping to tackle issues and in making the management of land and other resources in the area more sustainable.'

<sup>&</sup>lt;sup>13</sup> For example, a previous GEF supported 'Indigenous Vegetation Project' supported DFRR to develop rangeland monitoring tools.

The Land Use Conflict Information System (LUCIS) can provide a useful tool for planning and management, so long as the data in it is accurate; planning based on old or inaccurate data can be counterproductive. The SEA raises the concern that some of the data used in the LUCIS is historic, including use of data from the 2012 Southern Sua Pan Management Plan (SSPMP). It will be important for partners to establish a multi-agency system to ensure that the data in LUCIS is regularly updated through monitoring. New data and maps may also need to be added if priority issues emerge, for example to map the spread of invasive species or disease. LUCIS is a tool that can support a range of agencies in their work, as part of land-use management and monitoring. The TE recommends that all relevant agencies (including DFRR, DAP, DCP, DWNP, DoT/BTA) are given direct access to the LUCIS tool.

88. There is also the need for ongoing support by DFRR, DWNP and BLB to build the capacity of community groups for use of Management Oriented Monitoring Systems (MOMS). It is important to ensure that MOMS data is actively used to support decision making. For communities this means ensuring that the information collected is directly relevant to them and that they have a means of recording it, and referring to it over time. For government departments and BLB, the development of a system for digitising data from MOMS will make this information more accessible and useful, so that changes can be compared and measured over time.

#### Recommendation 1d: Urgent need to address land degradation caused by overgrazing

- 89. The Project Document assessed that 'the long-term solution to reverse the degradation of rangelands in the Makgadikgadi is to mainstream SLM principles into the livestock production sector, specifically in areas where rangeland degradation is most intense.' The findings of the Strategic Environmental Assessment (SEA) underline the fact that at project end this issue remains a priority, it stresses that 'land degradation resulting from overgrazing is probably the single most important environmental issue in the area.' It recommends that there is an urgent need to put in place appropriate land management measures to help halt and reverse land degradation and to ensure that livestock numbers are kept within the carrying capacity of the rangelands. The SEA raises the concern that the carrying capacity of the rangelands is not clearly understood and recommends that 'the Department of Forestry and Range Resources will need to work closely with the Department of Animal Production to put measures in place to ensure that stocking densities of livestock are reduced to, and kept below, the carrying capacity of the rangelands on which the livestock (and the local communities) depend.' It puts forward recommendations on actions that can be taken including:
  - reducing the number of livestock or excluding livestock in areas affected by land degradation, particularly around water points and the pans;
  - bush removal / de-bushing in areas suffering from bush encroachment
  - increasing the distance between boreholes / water points and, where existing boreholes / water points are too closely spaced, considering closing these.
- 90. The TE strongly recommends that all partners (including DAP, DFRR, DEA, DWNP) consider the recommendations and analysis put forward in the SEA and work together to identify the measures needed to achieve more effective and sustainable herd management practices within the SSP, that can help to decrease, and ideally reverse, land degradation. Alongside the practical measures outlined in the SEA, this is also likely to involve the development of strategies to strengthen market incentives for more sustainable livestock production and policies and regulations that support strengthened livestock control and management.

#### Recommendations 2: Considerations for Implementation of Future GEF Projects

Recommendation 2a: Establish mechanisms for monitoring and recording co-financing from project inception.

- 91. Co-financing is part of the contractual agreement between a country and UNDP / GEF. It is important that co-financing is both realised and recorded. A project's inception process should consolidate co-financing commitments and clarify how cash and in-kind co-financing will be used to support the achievement of results. A system for monitoring and recording co-financing contributions should be established with co-financing partners at project start and a Project Manager subsequently liaise with co-financing partners to ensure co-financing is recorded and monitored throughout implementation.
- 92. It is important that the Department of Environmental Affairs (DEA), as the GEF Focal Point, work with UNDP, as a core GEF Implementing Partner, to establish a standard mechanism which project co-financing partners can use to record and measure co-financing in future GEF projects. DEA confirmed that they are currently working on such a system.

Recommendation 2b: Establish a strategy for gender mainstreaming and monitoring at project inception.

93. It is recommended that UNDP provide guidance and support to project Executing Agencies and their partners for the development of a gender mainstreaming strategy at project inception. This should include the establishment of sex-disaggregated indicators and data collection systems for monitoring the gender impacts of project actions. The strategy should ensure that the aspirations and needs of women and men are considered, valued and favoured equally throughout project implementation. Monitoring of results and impact should examine the extent to which this has been achieved. It may be useful for UNDP to develop brief guidelines and a framework to support all future projects in achieving gender mainstreaming and monitoring. The Makgadikgadi SLM project considered gender implications of the support provided, both through engagement and provision of support to men and women in project activities, and gender sensitive approaches to consultation. However, the gender mainstreaming results could have been more clearly demonstrated if the project had established a strategy at project start and could demonstrate how it followed that strategy.

#### PART ONE: INTRODUCTION

#### Purpose of the Evaluation and Methodology

- 94. The terminal evaluation (TE) was an opportunity to review all aspects of the Makgadikgadi SLM project from design, implementation, monitoring and financing, to an assessment of the factors that affected attainment of results, and the extent of achievement of project Outputs, Outcomes and the overall Objective.
- 95. The TE provides information to GEF, UNDP and national partner agencies which is key to:
- promote accountability, transparency and learning
- assess the results achieved, how they have been achieved, and the extent to which this has contributed to intended project Outcomes
- capture stakeholders' perceptions of project impact (positive and negative)
- examine implementation and execution processes, including the extent of stakeholder involvement and partnership and whether the project followed good development practice, in line with required GEF and UNDP standards and protocols
- synthesise lessons that can help all partners to improve the selection, design and implementation of future initiatives
- provide feedback on issues that are of importance to national, UNDP and GEF portfolios
- provide information to GEF to enable the fund to assess progress towards achievement of its own strategic objectives at the global level, and to provide analysis which will enable GEF to strengthen its own processes.
- 96. The TE was undertaken by an independent monitoring and evaluation expert, with specialist expertise in the evaluation of UNDP/GEF projects. Analysis was undertaken using standard UNDP/GEF evaluation criteria, principles and approach to assess the level of achievement of intended results, the likelihood of sustainable impacts, the quality of project implementation and execution, including specific assessment of the quality of monitoring and evaluation, and the overall relevance, effectiveness and efficiency of the project. Based on this analysis, the TE provides an assessment of lessons learnt through the project and recommendations to strengthen the design and implementation of future initiatives and to guide the achievement of sustainable SLM outcomes in Makgadikgadi.
- 97. The TE report is considerably longer than would normally be the case for an MSP and provides a detailed review of both project implementation and design. Valuable lessons can be learnt from the consultative and partnership-based approach used by the project, and from challenges that the project faced, in particular in relation to land-use planning. The TE also includes a thorough review of the Project Document and provides recommendations on ways to strengthen the delineation of Outcomes and of OVIs / Targets so that these meet the SMART<sup>14</sup> criteria. The TE consultant felt that the potential learning from this project warranted the extra work and input, and hopes that the analysis will be of value to all partners, to guide the design and implementation of future initiatives. A concise summary of the TE findings is provided in the Executive Summary to the report, which will enable readers to get a clear overview of the TE findings, and to subsequently refer to the more detailed analysis within the report where they feel this is relevant to them.
- 98. The evaluation involved a process of document review, followed by consultation with project stakeholders, collation of additional 'in-country' information and visits to project sites. The project manager supported the evaluation and accompanied the evaluator throughout the consultation process, providing key background information, introductions to project

<sup>&</sup>lt;sup>14</sup> Specific, Measurable, Achievable, Relevant and Time-bound

stakeholders and translation where necessary. The Project Manger however ensured the independence of the evaluation process, providing the evaluation consultant ample opportunity to discuss alone with groups and individuals, to ensure that key stakeholders felt able to freely express their opinions. Eight days were allocated by UNDP Country Office in the TOR for the entire in-country assignment, to include meetings with stakeholders in Makgadikgadi, in-country travel, national-level consultations in Gabarone, analysis and feedback of initial findings at local and national levels. Stakeholder consultation time was therefore severely limited<sup>15</sup>. Judging one week to be too limited to support effective stakeholder consultation, the evaluation consultant provided two additional days<sup>16</sup> extending the timeframe for in-country stakeholder consultation to 10 days. The importance of consultative process for evaluation should be noted by UNDP CO for future evaluation processes; GEF guidelines recommend 2 to 3 weeks be allocated for in-country consultative evaluation missions and the TE recommends that UNDP follow these guidelines.

- 99. An outline of the evaluation schedule is provided in Annex 2. Consultations included group and individual meetings, through a semi-structured assessment approach whereby discussions focussed on key issues, processes and results, but scope was given to enable stakeholders to explore wider issues of importance to the overall assessment of the project's development impact. The evaluative analysis with stakeholders examined a wide range of issues including results, impact, project implementation processes, stakeholder involvement, partnership, synergy with ongoing and planned initiatives, relevance, effectiveness and efficiency, the likely sustainability of outcomes and overall stakeholder understanding of the project Outcomes and Objective. The evaluation explored whether gender issues had been adequately taken in to consideration within design and implementation and whether the project has supported equity across activities and decision-making processes.
- 100. Terminal project evaluation for the GEF requires rating of project performance against key criteria as outlined in the following table. The matrix of analytical questions used by the TE consultant to assess these criteria is provided in Annex 4.

Effectiveness, Efficiency, M&E, I&E Execution	Sustainability ratings:	Relevance ratings
Highly Satisfactory (HS): no shortcomings	Likely (L): negligible risks to sustainability	Relevant (R)
Moderately Satisfactory (MS)	Moderately Likely (ML): moderate risks	Not relevant (NR)
Moderately Unsatisfactory (MU): significant shortcomings	Moderately Unlikely (MU): significant risks	
Unsatisfactory (U): major problems	Unlikely (U): severe risks	
Highly Unsatisfactory (HU): severe problems		
Additional ratings where relevant:	Impact Ratings:	
Not Applicable (N/A)	Significant (S)	
Unable to Assess (U/A	Minimal (M)	
	Negligible (N)	

<sup>&</sup>lt;sup>15</sup> UNDP-GEF terminal evaluation guidelines (Project Level Evaluation Guidance for Conducting Terminal End of UNDPsupported GEF-financed Projects) state that 'In most situations, and especially when evaluations are carried out by international consultants, an 'evaluation mission' should be scheduled, providing an intensive 2-3 weeks for the evaluation team to hold interviews and visit project sites'

<sup>&</sup>lt;sup>16</sup> fully self-funded

- 101.Following discussions with the Director of BirdLife Botswana Dr Kabelo Senyatso and the project manager Motshereganyi Virat Kootsositse, meetings were held in Makgadikgadi with the Project Technical Reference Group and key stakeholder groups and agencies including: the Lethlhakane and regional Serowe office of the Department of Forestry and Range Resources (DFRR), the Department of Crop Production (DCP), Department of Animal Production (DAP), Department of Town and Country Planning (DTCP), Letlhakane Sub Land Board; Gaing O Conservation Trust; Community Fire Management Committee; Chiefs of Mmatshumo, Mosu, Mokubilo and Mmea communities, the Karekatea Farmers Association; Tikologo Small Stock Farmers Association; Boteti Beef Farmers Association and a number of farmers from different communities. Site visits were undertaken to farms in Mmatshumo, Mosu and Mokubilo including areas where the project had supported Conservation Agriculture.
- 102. The preliminary findings of the Terminal Evaluation were presented at a debriefing meeting in Gaborone attended by UNDP CO, the Department of Environment Affairs (DEA)<sup>17,</sup> Department of Forestry and Range Resources (DFRR) and BirdLife Botswana. The draft TE was circulated by UNDP CO to all key national partners, to invite comment, prior to finalisation. Comments and feedback were provided by BLB and UNDP in November and December 2018, respectively and the Terminal Evaluation report was subsequently finalised, with the TE response to the comments highlighted in Annex 8 'TE report Audit Trail'.

#### Structure of the Evaluation Report

103. The evaluation report is structured as follows:

- **Part 1** gives an **Introduction** to the Terminal Evaluation report outlining the purpose of the evaluation and the approach and methodology used
- Part 2 presents the Project and its Development Context
- Part 3 outlines the core Evaluation Findings and provides ratings against GEF Evaluation Criteria. Within Part 3 of this Terminal Evaluation report the following key elements are examined:

**3.1: Project Design** to assess whether the project is well conceived with clear and feasible Objective, Outcomes and Outputs, and a strategic approach, building on sound baseline analysis and including comprehensive stakeholder analysis and provisions for stakeholder involvement and partnership. Analysis of design assesses whether the Project Document includes a cohesive Project Results Framework with clear targets and indicators which reflects the project strategy outlined in the project description. The quality of the monitoring and evaluation approach and framework established in the Project Document is rated, as is the overall 'relevance' of the project to the objectives of the GEF Land Degradation focal area, and to relevant sustainable development priorities at local, regional and national levels.

**3.2: Project Implementation/Execution** to examine the quality of project implementation and execution, including how project execution processes and mechanisms have affected the achievement of intended results. Within this, ratings are provided on the quality of UNDP implementation, and of project execution by BirdLife Botswana, as well as a specific rating of the quality of project monitoring and evaluation plan implementation. The assessment of project management and implementation includes review of financial management, focussing on how GEF resources have been used, the efficiency of financial management in supporting achievement of results and the extent to which co-financing pledged in the Project Document has been realised. The financial assessment also looks at whether any additional resources have been leveraged by the project to support the achievement of results and post project sustainability of Outcomes.

<sup>&</sup>lt;sup>17</sup> also the GEF Focal Point

**3.3: Project Results** to determine the extent to which, and ways in which, intended development results have been achieved. Within a Terminal Evaluation report, the key focus of analysis is on the extent to which a project's Outcome and Objective level results have been achieved. Ratings are provided on the 'effectiveness' and 'efficiency' of the project in achieving intended Outcomes, whereby 'effectiveness' looks at the extent to which the project's intended development results have been achieved and how they have been achieved and 'efficiency' assesses how economically resources/inputs have been converted to results, and whether intended development results have been achieved with the least cost possible.

## 3.4 summarises Conclusions

**Part 4** examines the **Lessons Learnt** through the project and puts forward a series of **Recommendations** to support the achievement of long-term sustainable outcomes from the project, and to strengthen the design and implementation of future development interventions.

## PART TWO: THE PROJECT AND ITS DEVELOPMENT CONTEXT

#### Project Rationale and the Project Area

- 104. The Project 'Using SLM to improve the integrity of the Makgadikgadi ecosystem and to secure the livelihoods of rangeland-dependent communities', known as the Makgadikgadi SLM project, is a medium sized project supported under the GEF Land Degradation Focal area. It was approved in 2014 under GEF 5.
- 105. The Project was focussed in the Southern Sua Pan (SSP) area of the Makgadikgadi rangeland ecosystems and aimed to address the root causes of land degradation. The Sua Pan is located in the northeast of Botswana and is one of three large pans within the Makgadikgadi area, the other two being Nxai Pan and Nwetwe Pan. Sua Pan is a seasonal lake, filling with water during the rainy season, between December to March/ April. The brines of Sua Pan extend beyond the lake and affect around 24000 km<sup>2</sup>.



Image 1: The Makgadikgadi Pans

- 106. The Makgadikgadi Wetlands System (MWS) is delineated by the watershed boundary of the river catchments. The wetland area is divided into the eastern Sua Pan and western Ntwetwe Pan. Each pan has a different catchment area, and both these catchments are considered priority catchments under the Southern Africa Development Community (SADC) Shared Water Courses Protocol.
- 107. The Makgadikgadi area is of global biodiversity significance and the area supports many threatened species, including populations of at least ten globally threatened birds (IUCN Red Listed), and dependent on rangeland ecosystems. During the rainy season the pans attract many birds and are famous as a nesting area for large flocks of flamingos, the second largest flamingo population in Africa.
- 108. The resource management planning framework for the area, the Makgadikgadi Framework Management Plan (MFMP), covers a smaller area within the MWS. The MFMP boundary was delineated through a consultative process over several years, covering an area of 36,452 km<sup>2</sup>. Approximately 53.1% of the MFMP area is used for communal grazing, arable and residential

development, 44.7% is reserved for wildlife conservation, 2.1 % for mining lease areas, 1 % for commercial ranches and 0.4% for livestock quarantine camps. There are four protected areas in the Makgadikgadi: Orapa Game Park, Nata Bird Sanctuary, Flamingo Sanctuary and Makgadikgadi Nxai Pan National Park (DEA & CAR 2010)



Image 2: Makgadikgadi Framework Management Plan (MFMP) Boundary showing land use

109. The area MFMP area includes 32 villages with a total population of 57,118 (CSO 2011). The main economic sectors are agriculture (crops and livestock), mining, tourism and retail. Communities across the area rely on subsistence and small-scale arable and livestock production, complemented by harvesting of veld products.<sup>18</sup> There is also a limited amount of tourism in the area where the main attractions are the Makgadikgadi and Nxai Game Reserves and the salt pans. Livestock rearing takes place under the traditional, communal pastoral system. Communal livestock rearing is practiced on communal/tribal lands and is synonymous to subsistence agriculture. The main species of livestock are cattle and goats. The expansion of the livestock industry has to a very large extent depended upon the exploitation of underground water by means of boreholes, however forage availability in the long dry season limits the maximum number of cattle that can be kept and it is the dry season forage that is depleted if borehole densities become too high. Range degradation includes decreases in palatable and nutritious plant species, scrub bush encroachment, soil erosion and changes in soil structure leading to the decline in the primary and secondary productivity of rangeland. Human-wildlife conflict in the communal areas is also an increasing management problem.

<sup>&</sup>lt;sup>18</sup> Agriculture is complemented by the collection of veld products (such as reeds, thatching grass, wild fruits, medicinal plants etc), basket-making, fishing and community-based tourism.

- 110.Most households practice subsistence crop production that is rain-fed with national assessments undertaken in 2010 showing that 71 percent of the households in the MFMP stated arable farming as their main source of livelihood. National statistics from those surveys also indicate that 30.6% of the population in the area lived below the poverty datum line while 48% of household heads had never been to school (DEA and CAR, 2010). Two major mining activities are the Orapa-Letlhakane diamond mines operated by Debswana and the Sua Pan Soda Ash & Salt mining by Botswana Ash.
- 111.Although livestock production is core to the livelihoods of local communities, the Makgadikgadi Framework Management Plan (MFMP) stresses that the entire Makgadikgadi region, with minor exceptions in the north and south, is poorly suited for cattle. The salt-tolerant grass Odyssea dominates the areas surrounding the pans, but can be dangerous to cattle due to its high salt content and the fine silt-clay soils makes it one of the most wind erodible environments in Botswana.<sup>19</sup> Access to forage for water dependent herbivores is limited by the availability of surface water, leading to many farmers desire to increase borehole/well density.

**Image 3** 'Land Use Conflict Information System' map depicting livestock suitability based on borehole proximity



<sup>&</sup>lt;sup>19</sup> MFMP Chapter 11 Range Ecology p24



Image 4: Suitability Map for arable development identified within the MFMP

Image 5: Suitability Map for pastoral development identified within the MFMP


Key Issues and Barriers that the Project seeks to Address

- 112. The Makgadikgadi SLM Project Document stresses that 'prevalent land and livestock management processes in Botswana's Makgadikgadi ecosystem are likely to compromise the continued flow of ecosystem goods and services from the savannah ecosystem that are necessary to sustain the national economy, livelihoods and the rich fauna and flora diversity.' It identifies a number of key issues contributing to land degradation in the Makgadikgadi area including:
- Changing grazing regimes: Most palatable grasses near water points are becoming over grazed, less palatable species further from water points over rested, both resulting in lower grass vigour.
- Fire and impact of burning on rangeland areas, in particular linked to the increased frequency
  of uncontrolled fires.
- Arable farming and unsustainable harvest of veld products placing additional pressure on rangeland ecosystems.
- Lack of Integrated Management, whereby management efforts are carried out in isolation by different sectors, leading to disjointed management. The Project Document states that 'Natural resource management agencies admitted that there is limited or inadequate communication and participation by other sectors in their work. This has led to resource management and monitoring gaps, duplication of effort as well as clashing policies. Hence, coordination and even consolidation is not only desirable but also possible.'
- The need for local communities to 'participate meaningfully in mainstreaming SLM principles into rangeland management and governance'.
- 113. The Project Document stresses that 'If the current land and livestock management processes continue, they will compromise all efforts at securing the continued flow of ecosystem goods and services from the savannah ecosystem that are necessary to sustain the national

economy, livelihoods and the rich fauna and flora diversity. Two key barriers are identified as the root causes preventing sustainable land management (SLM) in the Makgadikgadi region:

- 114. **Barrier 1**: 'Inadequate knowledge and skills for adoption of SLM in livestock management and livelihood support systems.' Project design identified that 'although knowledge on how to effectively manage savannah ecosystems is increasing, very little of the currently available knowledge is being utilized to manage the livestock and livelihood support systems in Makgadikgadi. This is mainly due to low levels of skills amongst the land and resource managers, and weak technical expertise in the appropriate ministries.'
- 115. **Barrier 2:** 'Policy and market distortions have provided disincentives for adopting SLM and sustainable range management principles in the livestock production sector.'
- 116. The Project aimed to address these barriers though achievement of two key Outcomes:
- 117.**Outcome 1:** Sustainable Land and Livestock Management in over 1,900,000 hectares improves range condition and flow of ecosystem services to support livelihoods of local communities and biodiversity in Southern Sua Pan Region. Under Outcome 1 project support was focussed on the Southern Sua Pan area providing support for both community level initiatives and to strengthen district-level land-use planning process within the Boteti sub-district.<sup>20</sup>
- 118.Outcome 2: Effective Resource Governance Frameworks for SLM and equitable Resource Access. Under Outcome 2 the project aimed to support up-scaling of lessons from the subdistrict to the Makgadikgadi Framework Management Planning (MFMP) area.
- 119. Through achievement of these two Outcomes, the project's overall Objective was: 'To mainstream SLM in the rangeland areas of the Makgadikgadi for improved livelihoods'
- 120. Total project value is US\$7,587,832, comprising GEF allocated financing of US\$792,832, UNDP funding of US\$225,000, and national co-financing of US\$ 6,570,000. The timeframe for project implementation was 3 years, between June 2014 and December 2017. The national 'Executing Agency' for the project is the NGO BirdLife Botswana, key national partners include the Ministry of Environment, Natural Resources and Tourism (MENT) Department of Forestry and Range Resources (DFRR) and Department of Environmental Affairs (DEA), and the Ministry of Agricultural Development and Food Security Department of Animal Production (DAP), and Department of Crop production (DCP). UNDP Botswana Country Office is the project's overall 'Implementing Agency', ultimately accountable to GEF for ensuring the funds committed are used effectively to achieve intended project Outcomes. UNDP provides strategic oversight and guidance to the project and ensures that GEF fiduciary standards are applied and reporting requirements are met. UNDP's comparative advantage as Implementing Agency lies in its experience in the implementation of GEF funded projects, engagement in a range of sustainable land management initiatives in Botswana, ongoing partnership with relevant government agencies, and its strategic commitment to the achievement of sustainable development outcomes. Through the UNDP Regional Office, the Country Office also has access to learning and knowledge from a large global portfolio of projects and programmes and to detailed institutional knowledge of GEF operational procedures and standards.

<sup>&</sup>lt;sup>20</sup> specifically the region under the jurisdiction of the Letlhakane Sub land board

## PART THREE: EVALUATION FINDINGS

- 121. The following section of the Terminal Evaluation report presents the core of the evaluation findings, it is divided in to five sections:
  - Section 3.1 examines project design, including the quality of monitoring and evaluation plan design;
  - Section 3.2 assesses project implementation and execution, including the quality of monitoring and evaluation implementation;
  - Section 3.3 assesses the extent to which intended Outcome and Objective level development results have been achieved, and how they have been achieved;
  - Section 3.4 assesses the likelihood of sustainable environmental, socio-political, governance / institutional and financial impacts
  - Section 3.5 provides an overall rating of project relevance, effectiveness and efficiency.

# PART 3.1 PROJECT DESIGN

- 122. The evaluation of project design examines whether the Project Document provides a clear, well-conceived, strategic and feasible framework for achieving intended development results. It assesses the implications of design for project implementation and for the achievement of sustainable outcomes. The analysis looks at the extent to which project design effectively identifies key issues and barriers to sustainable rangeland management in the project area and whether the implementation strategy, including Outputs, Outcomes and Objective, established in the Project Document work to strategically address these barriers. A review of the Project Results Framework and rating of monitoring and evaluation plan design is also included in this section.
- 123. The design process for the Makgadikgadi SLM project was led by BirdLife Botswana with support from UNDP Country Office. Time allocated for project design was reportedly limited to less than one month, however, the NGO BirdLife Botswana already had a good knowledge of the area and good working relations with key stakeholder groups, which greatly facilitated the process. The design process involved consultation with key stakeholders and also drew on extensive data and analysis which had been undertaken for development of the Makgadikgadi Framework Management Plan (MFMP)..

# Baseline and Situational Analysis within Project Design

- 124. The situational analysis within the Project Document provides a clear outline of the environmental and socio-economic context of the project area. Annexes add further detail to the analysis of rangeland management and livelihoods. The document emphasises the role women play in livestock husbandry and subsistence crop production. Situational analysis within the Project Document outlines 'threats to the integrity of the MFMP area' highlighting that '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.' It emphasises that '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 Makgadikgadi Wetland Systems, people and the economy of Botswana.' The Project Document assesses the decline of rangeland ecosystems to be 'largely due to overstocking of livestock and consequent overgrazing.' It cites additional pressures as coming from arable farming and unsustainable harvesting of veld products by a growing population.
- 125.A core element of project design is the Stakeholder Analysis. This is concise but comprehensive, and results are presented in a tabular format identifying all key stakeholder groups including community-based, government, NGO and private sector. The table summarises their stakes and potential interest in sustainable land management, quantifies the

level of interest and influence of each group in SLM as either 'high', 'medium' or 'low', and provides comments to explain the assessment. The table also puts forward the proposed role and level of participation of each stakeholder within the project. As such the analysis provides a useful overview of the range of stakeholders relevant to the project, and of how they will be engaged in the project.

- 126. Project design also includes a useful assessment of the policy and legislative context for rangeland management in the Makgadikgadi area, summarising this within a table that outlines relevant policy and legislative instruments and assesses the extent to which these currently support sustainable land management. One key omission from the legislative assessment is, however, the requirement under Botswana law for Strategic Environmental Assessment (SEA). In any land use planning process in Botswana a SEA is required under the Environmental Assessment Act and under the Development Control Code. This omission had the potential to have a significant impact on the achievement of results under Outcome 1, as the project strategy includes support for the development of land-use plans for the SSP pilot area. The failure of the baseline assessments to include SEA, meant that it was not included as either an activity or a cost within project design. As will be seen in the analysis of project implementation and results, however, the project demonstrated remarkable adaptive management, leveraging additional support to undertake SEA to support land use planning in the pilot area.
- 127. The Project Document also includes assessment of the institutional context for SLM, providing an overview of key land-use management agencies / groups and their 'responsibilities and capacities relating to land resources'.<sup>21</sup> The institutional assessment is reasonably comprehensive and provides an important overview of the capacities of key groups. One important SLM stakeholder not included within the institutional analysis, however, is the Department of Town and Country Planning (DTCP) which is the national department responsible for spatial planning and for the control of land development in Botswana. DTCP supports land use planning through the preparation of spatial development frameworks and policies including Regional Master Plans, District Land Use Plans and District Settlement Strategies. It is also the department responsible for preparing the National Physical Plan and for implementation of the National Human Settlement Policy<sup>22</sup>. DTCP acts as the principal advisory agency on physical planning matters to the Ministry of Lands and Housing, Parastatals, Non-Governmental Organizations and Local Authorities including Councils and Land Boards. DTCP is therefore a key institution relevant to sustainable land use planning in the Makgadikgadi region. Given the project's overall focus on SLM and specifically the support proposed under Output 1.1 on the development of land use plans to support SLM, DTCP should have been included within the institutional assessment in the Project Document. Again here, however, as will be seen in the analysis of project implementation and results, due to effective adaptive management by the project, the omission in project design did not negatively impact on project results; DTCP became a key player in the development of landuse plans in the pilot area and a key project partner.
- 128. A brief overview is given of baseline programs on which the project builds at both national and district levels. It underlines the importance of the Makgadikgadi Framework Management Plan (MFMP) as 'the overarching governance, planning and coordination tool' for the Makgadikgadi area. The Project Document emphasises that: 'the MFMP is developed around integrated planning, monitoring and management of natural resources in the Makgadikgadi Wetland System. The overall aim of the MFMP is to improve people's livelihoods through wise use of the wetland natural resources.' The Project Document states that in particular the Makgadikgadi SLM project aims to support two of the key MFMP principles: (1) to encourage

<sup>&</sup>lt;sup>21</sup> The Project Document highlights that the capacity assessment was based on a 'rapid institutional analysis study to assess <sup>22</sup> The activities of the Department are guided by the Town and Country Planning Act and the National Settlement Policy.

holistic planning as opposed to sectorial planning, and (2) to instigate developments that benefit rural livelihoods and the environment (MFMP 2010, vol 1. page 13).'

- 129. There is also a useful assessment of concurrent initiatives and of how the project will coordinate and partner with relevant initiatives, including:
- The DWNP, World Bank funded Human-Wildlife-Coexistence Management Project in Northern Botswana which focuses on addressing wildlife/human conflicts and includes livelihood support for communities. Project sites include villages which border on the Makgadikgadi National Park. The Project Document proposes collaboration with this project in particular to support community participation in MFMP governance structures.
- The USAID funded SAREP Okavango River Basin NRM initiative which provided support for implementation of the Ngamiland Integrated Land Use Plan, including for SLM. The Makgadikgadi SLM Project Document highlights that 'these upstream SLM initiatives will have a bearing on SLM in the Makgadikgadi area'. Proposed collaboration includes sharing of information, knowledge and approaches, in particular the Makgadikgadi SLM project proposed to build on SAREPs work testing decision-support systems and tools for decision-making in land management.
- The GEF funded project 'Mainstreaming Sustainable Land Management in Rangeland Areas of Ngamiland-District Landscapes for Improved Livelihoods'. This project was running concurrently to the Makgadikgadi SLM project, having been initiated in 2014. It included support for mainstreaming of SLM principles in to the livestock production sector and to enhance communities' participation in rangeland governance. It covered many similar areas and issues to the Makgadikgadi SLM project including support to improve knowledge and skills for adoption of SLM in livestock management and to address policy and market distortions that provide disincentives for adopting SLM in Ngamiland. The Ngamiland project also covered aspects not covered by the Makgadikgadi SLM project including 'stocking rates in commercial and privately-owned ranches, facilitating new and alternative markets for zones with Foot-and-Mouth Disease, and removing barriers to small-scale, non-beef livestock product-based enterprises'. The Makgadikgadi SLM Project Document underlines the complementarities between the two projects and identifies 'ample opportunities for lessons and information-sharing in these two adjoining districts'.
- The Project Document highlights the relevance of the KAZA TFCA area and related initiatives, in particular support under that initiative for implementation of the fire management strategy for Makgadikgadi National Park; the development and implementation of a Management Plan for Lake Xau; development of a tourism diversification strategy for Northern Botswana; and development and implementation of the invasive species management strategy.
- Other donor funded initiatives highlighted as of relevance to the Makgadikgadi SLM project include the UNEP-UNDP Poverty Environment Initiative (PEI), the World Bank-funded Wealth Accounting and Valuation of Ecosystem Services (WAVES) project and the GEF funded project for Improved Management Effectiveness of the Chobe-Kwando-Linyanti Matrix of Protected Areas. The Project Document also includes reference to private sector funded initiatives including proposals by some mining companies regarding how mining operations could contribute to sustainable livelihoods during the post-mining (rehabilitation) periods.
- 130.Prior to outlining the overall project strategy and key areas of intervention, the Project Document presents a brief description of the overall rationale for GEF support through a table which contrasts the baseline situation with the alternative to be put in place by the project, highlighting 'selected benefits.'

### Project Strategy and Areas of Intervention

131. The Project Document outlines the overall strategy to be one in which: 'the long-term solution to reverse the degradation of rangelands in the Makgadikgadi is to mainstream SLM principles into the livestock production sector, specifically in areas where rangeland degradation is most intense.' It underlines that 'critically, local communities need to participate meaningfully in rangeland governance. The local-level institutions should be empowered with knowledge, financial, and capital resources to support farmers in managing their current livelihood portfolio and diversify it in the future.'<sup>23</sup>

- 132. The core Objective established for the project was: 'to mainstream SLM in rangeland areas of the Makgadikgadi for improved livelihoods.' To achieve this the project strategy outlines two Outcomes:
- 133.Outcome 1: Sustainable Land and Livestock Management in over 1,900,000 hectares improves range condition and flow of ecosystem services to support livelihoods of local communities and biodiversity in Southern Sua Pan Region.
- 134.Outcome 2: Effective resource governance frameworks for SLM and equitable resource access.
- 135. The Project Document specifies that the project 'will largely operate at two spatial scales with Outcome 2 at the larger spatial scale (Makgadikgadi Framework Planning area, and Boteti sub-district) and Outcome 1 (focussing on finer spatial scale, with activities in Southern Sua Pan, and the neighbouring BotAsh mining lease area).'



Image 6: Areas of Project Intervention

- 136.**Outcome 1** aims to improve range condition and flow of ecosystem services to support livelihoods of local communities and biodiversity in the Southern Sua Pan Region, through support for sustainable land and livestock management.
- 137. The Southern Sua Pan Pilot Area for Outcome 1 was selected during design through 'a systematic approach combining geophysical, hydrological and ecological characteristics and features with those of the social, administrative and infrastructural boundaries of the area.' The Southern Sua Pan area is described as an 'extensive area of rangeland (which) contains both wildlife and livestock.' The SSP covers an area of 5,450 km<sup>2</sup> and the Project Document outlines land use across the SSP area as comprising: '2,950 km<sup>2</sup> is salt pans, 1,800 km<sup>2</sup> is Mopane and sandvelt, and 700 km<sup>2</sup> is Mopane woodland. The current land uses for all the

<sup>&</sup>lt;sup>23</sup> Project Document p15 'Long Term Solution and Barriers to Achieving the Solution'

non-pan areas are pastoral, arable and residential. On the other hand, the salt pans area includes a 24 km by 7 km Flamingo Sanctuary, gazetted as a protected area in 2010.<sup>24</sup>

- 138.Although the 545,000 hectares (5,450 km<sup>2</sup>) Southern Sua Pan area is specified as the pilot area for Outcome 1, the result specified within the Outcome statement is to achieve 'sustainable land and livestock management' which 'improves range condition and flow of ecosystem services' across 1,900,000 hectares. Outcome 1 therefore aims to achieve a direct SLM and ecosystem level impact over an area almost three and a half times bigger than the pilot area.
- 139. The 1,900,000 hectares (19,000 km<sup>2</sup>) surface area over which Outcome 1 states it will achieve an SLM impact is not well explained in the project strategy. Consultation during the TE clarified that the reference to 1,900,000 hectares, refers to all rangeland areas within the Makgadikgadi Framework Management Plan (MFMP) area.<sup>25</sup>
- 140. It is somewhat unrealistic, within the 3-year project timeframe and with the limited resources available, that the project would be able to demonstrate 'improved range condition and flow of ecosystem services' across the whole Makgadikgadi rangeland area under Outcome 1. The Outputs and areas of intervention described under Outcome 1 are clearly focussed on the SSP area and would not achieve this Makgadikgadi wide result.
- 141.As will be discussed below, the Outcome statement given within the Project Results Framework is different to that given within the project strategy; within the Project Results Framework there is no reference to achieving an impact over 1,900,000 hectares at the Outcome level, only to the Southern Sua Pan Region<sup>26</sup>. Within the Project Results Framework this Outcome is cited as 'Effective range management to improve range condition and flow of ecosystem services to support livelihoods of local communities in Southern Sua Pan Region.' The geographic reference to SSP is more realistic and appropriate to the intervention and support proposed within the component Outputs and to the timeframe of project implementation.
- 142. The following section explores in further detail the proposed areas of intervention within Outcome 1, and how they work together to achieve the intended Outcome level result. Outcome 1 comprised of three Outputs.
- 143. Output 1.1: 'Local level participatory land use plans developed for the pilot area to support sustainable utilisation of range resources.
- 144. The Project Document describes the situation at the time of design to be one whereby 'the Central District has a regional Integrated Land Use Plan which defines broad zones of land use. Although traditional land zoning at local level still exists for most settlements, these are not recognized by government, and interference from the land authority, often without consultation with the local leaders and their community, has resulted in land-use conflicts between traditional land uses and the so-called alternative modern ones such as tourism.<sup>27</sup>
- 145. Under Output 1.1 the project aimed to develop a detailed land use plan for the SSP area. This was to fit within and add detail to the district level master plan and aimed to address land-use conflicts and support more sustainable patterns of land-use The description of proposed activities outlined within Annex 2 specifies that 'local land use plans will be developed for each of the four villages of Mmatshumo, Mokubilo, Mmea and Mokubilo, to ensure the existence of agreed-upon local-level land zoning on which the land authority will base its land allocations."

<sup>&</sup>lt;sup>24</sup> Project Document Annex 2

<sup>&</sup>lt;sup>25</sup> The MFMP covers a total area of 36,452km<sup>2</sup> (3,645,200 hectares) and rangeland covers approximately 53% of that area (1,931,956 hectares).

<sup>&</sup>lt;sup>6</sup> the 545,000 hectares pilot area

<sup>&</sup>lt;sup>27</sup> Description of pilot site and activities Annex 2

- 146.Output 1.1 was to be undertaken through a two-tier approach in which 'integrated range assessment studies for the area' would be undertaken as a first stage, covering '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 Project Document recognises the potential impact of climate change on rangeland ecosystem and on peoples' livelihoods and the importance of considering climate change among the dynamics likely to affect SLM. The assessments were to be undertaken by experts in partnership with relevant government departments and local communities, NGOs and private sector.
- 147. The second step under Output 1.1 was then development of the land use plans themselves. These would draw on the baseline information and on assessment of the challenges and opportunities for SLM identified through those assessments. The Project Document outlines the importance of participatory process and consultation to build capacity and understanding and to serve as a vehicle for conflict resolution and the identification of sustainable approaches to rangeland utilisation, particularly for livestock. It specifies that a multi-stakeholder forum would be established and that development of the Land Use Plans would be 'led by the Letlhakane Sub-Land Board and Sub-DLUPU with the active participation of communities, other government and non-government stakeholders.'
- 148.Participatory process is emphasised as being key to the entire process, both the assessments and the subsequent plan development process. The Project Document specifies that 'participatory methods will be used to conduct land use and land needs situational analysis studies as part of the broader integrated range management studies. This will form the basis for agreed local land use zoning.'
- 149. The strategy outlined under Output 1.1 also highlights the importance of consulting with relevant sub-district and district administrations as well as with protected area managers, to ensure that the local level plans for the SSP align with broader plans and strategies and have support from district leadership.
- 150.Overall a US\$143,000 was allocated in the project budget to support this work, with US\$50,000 to cover contractual services for development of the land use plans and other expenses including training, travel, material and publications. The project budget notes that the funds for contractual services 'will be used to contract a technical institution (e.g. consulting firm, the Okavango Resource Institute etc) to provide technical support to the PMU, government institutes and Letlhakane sub-Land Board, which will jointly facilitate the formulation of the land use plans. The technical support will be in undertaking integrated range assessments (social, cultural, economic, and ecological, levels of use, determining carrying/stocking capacities, etc.). This information will be used to inform the land use plans (all 4 to be produced within the first 2 years of the project, estimated at \$12,000 per plan). The contracted institution will also provide technical support in the actual design of the integrated land use plans'. Four land use plans were anticipated in the budget for Mmatshumo, Mosu, Mobukilo and Mmea, the four villages within the Southern Sua Pan region.
- 151. The TE assesses the overall approach outlined under Output 1.1 to be sound and wellconceived. The focus on provision of support for a consultative, participatory approach whereby communities and government agencies would be supported to work together to develop the land use plans, and to address conflicts within the overall context of achieving more sustainable land management, is excellent. As well as facilitating conflict resolution and increased understanding of the importance of sustainable land use/ SLM, a participatory approach would also foster strong ownership of and support for the resulting land-use plans, and increase partnership and understanding between key stakeholder groups including communities and relevant land-use planning and management agencies. The two-tier approach whereby development of the land use plans would be based on understanding of the 'social, cultural, economic and ecological' context is also good. The budget proposed is

reasonable given that the area is relatively small, only includes four communities and that considerable baseline data already exists for the area.

- 152.**Output 1.2**: Improved range management and mixed livelihood systems are piloted in line with the land use plans
- 153. This Output focuses on providing support for improved range management systems, to be based on the range assessments and recommendations of the land use plans, developed under Output 1.1. The project document specifies that '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.' Under Output 1.2 the project would support 'improvements to the cattlepost pastoral system' to be led by the Department of Agricultural Production (DAP) working with farmers associations, as well as for trialling of Conservation Agriculture (CA), to be led by the Department of Crop Production (DCP) working closely with farmers committees. Support for CA would build on experience under the SAREP project in Ngamiland. Support was also envisaged for 'practical projects aimed at enhancing the community livelihoods portfolio'. The Project Document notes the importance of considering the potential impacts of climate change on livelihoods and rangeland ecosystems and highlights the role of the project in supporting communities to develop 'adaptive measures to climate change, notably through the promotion of conservation agriculture.'<sup>28</sup>
- 154. The overall budget proposed for Output 1.2 was US\$225,125, with US\$70,000 allocated for purchase of materials and goods, US\$60,000 for contractual services, US\$40,000 for travel, US\$35,000 for training and US\$20,125 for audio-visual and print production.
- 155. The approach under Output 1.2 is again well conceived, with a good focus on consultative, participatory approach, to ensure that improvements in range management meet the livelihood needs of local communities and therefore have strong local support. The project strategy includes the provision of training, awareness raising and 'practical demonstration' to support communities and relevant government extension services to develop and implement the improved range management systems. The budget proposed is appropriate for the level and type of practical support proposed. The Project Document also underlines the importance of gender assessment, which should '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 and other disadvantaged groups are identified and addressed.' However there is little specific guidance on ways to achieve gender mainstreaming within project implementation.
- 156. The intent of the project strategy, whereby support for improved range management systems, would be based on the range assessments and recommendations of the land use plans, developed under Output 1.1 is sound, however, the practical implications of achieving this within a 3-year project are questionable. Output 1.1 estimates that the land use plans would be developed over the first two years of project implementation, which would leave just one year for piloting 'improved range management and mixed livelihood systems'. This would not be an adequate timeframe to develop, build capacity for, pilot and demonstrate the effectiveness of, improved range management and livelihood strategies, especially given the intended focus on conservation agriculture and trialling of improvements to the cattle-post pastoral system. To build effective capacity for, and demonstrate the potential benefits of, new agricultural and livestock rearing systems would require more than a year.
- 157.Annex 3 to the Project Document includes a table outlining in more detail the proposed project strategy and support for alternative livelihoods to communities in the SSP area. The table looks at livelihoods relating to livestock, crop production, veld products, wildlife tourism and minerals and assesses the current situation, issues for expansion and challenges. The

<sup>&</sup>lt;sup>28</sup> Detail on project approach provided in Annex 2 to the Project Document

additional assessment and information provided in this Annex and in accompanying Annexes 2 to 5 was important, as this provided key information to support project implementation.

- 158.**Output 1.3**: Fire management strategy is developed and implemented in Southern Sua Pan in line with the provisions of the land use plans
- 159.Under this Output the project was to '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.' A fire management strategy was to be developed for the SSP area and a multi-stakeholder 'Southern Sua Plan Fire Management Committee' established to oversee implementation of the strategy.
- 160. The Project Document provides a very brief outline of the support to be provided under Output 1.3, but it gives an adequate overview of the proposed areas of intervention and overall strategy. It specifies that the management committee would be trained in control and management of fires as well as in monitoring of fire incidences using the Management Oriented Monitoring System (MOMS), with training to be provided with DFRR. The total budget proposed for Output 1.3 was US\$60,500, consisting of training US\$25,000, travel US\$20,000 and materials US\$15,500.
- 161.**Output 1.4**: Water conservation, water harvesting and water re-cycling by BotAsh and farmers in southern Sua
- 162. The strategy outlined within the core of the Project Document also includes an Output 1.4 with an associated budget, however relevant indicators and targets pertaining to this Output are not included within the project's Results Framework. Under Output 1.4 the project was to partner with the mining company BotAsh who would provide co-financing by piloting new technologies to reduce their own consumption of water within mining operations and to improve monitoring. Correspondingly BotAsh were to provide support to farmers in the Southern Sua Pan to strengthen water management. GEF funds would be used to support outreach and education and for the implementation of activities with farmers. The GEF budget allocated within the Project Document was US\$28,375, comprising US\$16,00 for materials and goods and US\$12,375 for travel. Co-financing by BotAsh was US\$280,000.
- 163.Consultations during the TE suggest that prior to finalisation of project design BotAsh had not given any firm commitment to support Output 1.4. This Output was therefore not included in the project's Results Framework. However it was not removed from the core description of the project strategy within the Project Document, nor from the GEF budget or proposed co-financing. A co-financing commitment letter from BotAsh was included as an annex to the Project Document, along with other pledged co-financing support. In its co-financing letter BotAsh outlines the 'past, present and future commitment of BotAsh to conservation in the Makgadikgadi Pans area'. The letter gives estimated US\$ figures for support provided to conservation in the Makgadikgadi region, however in terms of financial commitment to support Output 1.4 of the project the letter merely refers to 'discussions with BirdLife Botswana' on a 'possible role' in the project. The figure given in the letter comprises an estimate of their support to 'ongoing and planned initiatives in the region over the four-year period between 2014 and 2018'. It is not a commitment of funding to support Output 1.4.
- 164. Evaluation of the strength of the Outcome 1 strategy
- 165.Assessment by the TE of the extent to which Outputs work cumulatively to achieve the intended end of project Outcome result, obviously depend on which Outcome statement is used for Outcome 1, whether the one in the project strategy which refers to achieving SLM results over the whole of the 1,900,000-hectare Makgadikgadi rangeland area, or the one used in the Project Results Framework which refers to achieving results only within the SSP

pilot area<sup>29</sup>. This lack of consistency is a major flaw in project design as it has significant implications for assessment of the quality of the project strategy proposed for Outcome 1 and of the results achieved.

- 166.Due to the fact that within the Project Document all key references and maps highlighting the intended area of influence for Outcome 1 relate to the SSP pilot area; and due to the fact that the focus of support under all Outputs within Outcome 1 is clearly on the SSP pilot area, the TE will use the Results Framework Outcome statement as the intended end of project Outcome result. This is also backed up by consultations in Botswana which indicate that the intended results area for Outcome 1 was the SSP and not the whole 1,900,000-hectare Makgadikgadi rangeland. The error in design appears to have been in the wording of the Outcome within the project strategy description
- 167.In assessing the extent to which the project strategy under Outcome 1 establishes Outputs which work together to achieve the intended EOP Outcome result, the TE therefore is assessing whether within project design the cumulative result of the Outputs could achieve: 'Effective range management to improve range condition and flow of ecosystem services to support livelihoods of local communities in Southern Sua Pan Region'
- 168. The participatory and consultative approach proposed under Outcome 1 is excellent, particularly given the emphasis within the project strategy on use of this approach to achieve conflict resolution and increased understanding and agreement between all key stakeholder groups on sustainable land management and land-use zoning. The emphasis within the project strategy on ensuring that the development of the land use plans and of improved range management and livelihood systems builds on the integrated range assessments is also good development practice; this will work to ensure that support provided through the project is based on sound data and analysis. The fact that the participatory process aims to bring together traditional rangeland management systems and contemporary ones is also excellent.
- 169. The strategy under Outcome 1 includes consideration of gender and highlights the importance of ensuring that project support considers the needs and role of women, however there is little guidance within the Project Document on ways to achieve gender mainstreaming within project activities and products, and few gender related targets are set. Under Outcome 1 the Project Document also notes the relevance of climate change to sustainable rangeland management. However again little guidance is provided on ways to ensure that the implications of climate change are assessed and internalised within land-use planning and livelihood support to support SLM.
- 170. Further emphasis and information should have been given within the strategy description under each of the Outputs, on existing data and analysis on which the project should build, particularly given the considerable amount of work that has been done in the area. However, it should be noted that this omission does not appear to have had a negative impact on project implementation, due to the knowledge of lead agencies, including national partners and BirdLife Botswana, of existing studies and data, and due to pro-active, informed project management.
- 171.Although the focus of Outcome 1 is clearly on the SSP area, the approach proposed in the Project Document stresses the importance of ensuring that development of land-use plans is linked in to broader district, sub-district and MFMP plans, strategies and planning processes. The Outcome 1 strategy also gives good reference to the potential to scale up impacts and replicate successful pilot initiatives to areas outside the SSP area, through the involvement of key government agencies and extension support services, including DCP, DAP, DVS and DFRR. The strategy description under Outcome 1 does not provide detail of how this

<sup>&</sup>lt;sup>29</sup> Noting also that an additional confusion is that in the Results Framework the Outcomes are labelled back to front, such that this is labelled as Outcome 2!

upscaling would be supported, or indeed *if* it will be supported through the project, and the limited 3-year timeframe would perhaps make it unrealistic to think that replication outside the SSP area would be possible. However, it is important within the overall strategy that replication and upscaling is considered, so that any opportunities to do so are harnessed during project implementation, and so that support provided builds capacity and momentum for this to happen following project end. The project strategy description also makes good links to baseline initiatives, including to work undertaken by SAREP to support conservation agriculture. Again, this is good development practice

- 172.Each of the three Outputs under Outcome 1 address key issues highlighted within the situational analysis. The Project Document highlights that 'rangelands in the Makgadikgadi are characterized by resource competition, conflicts, land degradation and rural poverty'. Outputs under Outcome 1 directly work to address all of these issues.
- 173.It is somewhat unrealistic within the three-year project timeframe and with the resources available that the project could establish 'effective range management' and demonstrate an improvement in 'range condition and flow of ecosystem services to support livelihoods of local communities in Southern Sua Pan Region'. The Outcome statement, even when restricted to the SSP area, could have been clearer and more concise, to capture a realistic end of project result. However, this will be discussed in more detail in the analysis of the Project Results Framework which specifies the indicators and targets through which achievement of this result will be measured. The overall intent of the Outcome is clear and the Outputs address key issues in a strategic way, based on good development practice.
- 174.**Outcome 2:** Effective resource governance frameworks for SLM and equitable resource access
- 175. This project's second Outcome was designed to have an impact at a larger spatial scale over the whole Makgadikgadi Framework Planning area<sup>30</sup> and Boteti sub-district<sup>31</sup>. Under Outcome 2 the project was to provide support for SLM at this broader level. It both builds on and supports the results to be achieved within the SSP pilot area under Outcome 1.
- 176.Under Outcome 2, the project aimed to 'empower local institutions to improve resource governance and stakeholder participation in regional dialogues on the importance of mainstreaming SLM into rangeland management for local development.' Outcome 2 had three Outputs:
- 177.**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.'
- 178. Through Output 2.1, the project aimed to 'support the formation of a regional multi-stakeholder SLM forum (at the Makgadikgadi Sub-region level) to lead dialogue on mainstreaming SLM considerations in planning and implementation of critical national and regional policies, plans and strategies.' <sup>32</sup>
- 179.Experiences from the project's pilot interventions under Outcome 1 were to be used to inform the dialogue under Output 2.1 and to increase capacity and awareness outside the pilot area. The project aimed to 'mobilize local institutions around the concept of SLM' and to relate academic information and concepts to indigenous knowledge and management systems. To do this the Project Document outlines that the PMU would work in partnership with leading government institutions including DEA, DFRR and the Ministry of Land and Housing, alongside local CSO groups.

<sup>&</sup>lt;sup>30</sup> The MFMP covers a total area of 36,452km<sup>2</sup> (3,645,200 hectares)

<sup>&</sup>lt;sup>31</sup> The Boteti sub-District covers an area of 35,000km<sup>2</sup> (3,500,000 hectares).

<sup>&</sup>lt;sup>32</sup> Output 2.1 description ProDoc p21

- 180.Membership of the forum was to include representatives from government, NGOs, water and land user groups such as farmers' associations, community trusts, community leaders and the private sector. The Project Document envisaged that the forum would 'function through different sub-groups/committees' linked to different land use groups. Under Output 2.1, the project aimed to 'mobilise local institutions around the concept of SLM' and to build their capacity. The Project Document stresses that 'particular emphasis will be placed on ensuring community participation in this forum as this has been identified as a weakness in resource governance in Botswana'.
- 181.Project design identified the Makgadikgadi Wetlands Committee as the most appropriate forum to lead the dialogue on SLM. The Project Document outlines that it this Committee is considered the most well suited to work as a multi-stakeholder SLM forum due to the fact that 'it includes community stakeholders as well as the private sector, although it will need to improve farmers' representation; it also involves most of the typical DLUPU members. This is important as DLUPU already has a land use planning and environmental advisory mandate.' However, the Project Document states that 'creativity is required to harness the land use planning mandate of DLUPU and benefit from the wide stakeholder representation characteristic of the wetlands committee.'
- 182. The concept outlined under Output 2.1 was for the forum to 'actively seek opportunities to participate in national discussions on policy reform, as well as initiate such discussions where appropriate' and to '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, Wildlife Conservation and National Parks Act, and the Botswana Beef and Trade Policy'. The Project Document specifies that the forum would be 'led by the PMU, the Ministry of Land and Housing together with the Department of Environmental Affairs (MENT) and the Department of Forestry and Range Resources (DFRR), and with technical support from local CSO groups'.
- 183. The strategy proposed under Output 2.1 builds on the baseline analysis in the Project Document, in particular the governance and institutional assessment. It is focussed on the broader planning framework of the MFMP and even beyond that to the national level, with the aim of linking the multi-stakeholder forum in to national policy reform processes.
- 184. The project strategy includes consideration of how the project will support the forum to sustain its role following EOP, in particular to ensure the ongoing participation and engagement of civil society members in SLM following EOP. The Project Document outlines that 'the capacity of civil society to lobby and advocate for SLM will be developed' highlighting that alongside this it will be important to have 'a budget allocation for their activities through Government and NGO support', including supporting 'NGOs to access donor funding.'
- 185. The focus under Output 2.1 on establishing a multi-stakeholder forum to advocate for and support SLM beyond the SSP pilot area is good and the emphasis on strengthening community involvement in such a forum, in particular participation of farmers associations, is key. However, the description of the intended results under this Output is rather vague and it is not clear how the project will support the forum to 'lead dialogue on mainstreaming SLM considerations in planning and implementation of critical national and regional policies, plans and strategies'. The focus of the Output 2.1 description is on formation and capacity building of the forum; the Output strategy description would have been greatly strengthened by a clearer outline of the ways in which the project would support the forum to upscale results and influence resource governance, to support achievement of the overall Outcome level result.
- 186.**Output 2.2** Decision-making support tool for Letlhakane sub-land board and Physical Planning Unit (Boteti sub district council)
- 187.Under Output 2.2 the project aimed to improve the capacity of both the Letlhakane Sub-Land board and the Physical Planning Unit under the Boteti District Council to facilitate effective rangeland planning. Project support was to include both the production of a rangeland

management and monitoring manual for planners and users in the Boteti Sub-district and adaptation of a GIS-based decision-support tool. The project strategy built on work undertaken by SAREP in Ngamiland to support land use planning and conflict resolution.

- 188. Training and support under the project aimed to strengthen the capacity of key land use decision making and extension support institutions including the Land board, Sub-District Land Use Planning Unit (DLUPU) and Department of Forestry and Range Resources. The project aimed to increase capacity indicators by at least 30%, as measured by the capacity score card to bring their average capacity score to at least 70%.
- 189. The focus of this Output on capacity building and the development of management and monitoring tools to support SLM is strategic and contributes to both Outcomes 1 and 2. The proposed link with the work undertaken by SAREP in Ngamiland is good, helping to ensure that the project builds on existing knowledge and lessons learnt. The description under Output 2.2 does not however establish a clear link with the land-use planning support to be provided under Outcome 1. This is unfortunate as the two processes should work together, whereby facilitation of effective rangeland planning under Output 2.2 should build on the assessments and participatory planning process supported under Output 1.1. Equally the products developed under Output 2.2 should support planners to implement and monitor the land use plans developed under Output 1.1 within the broader context of achieving sustainable rangeland management in the Makgadikgadi region.
- 190. **Output 2.3:** System for monitoring of range condition and productivity is in place
- 191. This output aimed to establish a 'decision-support tool for farmers to help them in planning and implementing SLM strategies.' The project would use data from the integrated range assessments carried out under Output 1.1 as the baseline, and support DFRR to train communities in the management-oriented monitoring system (MOMS). DRFF would work with communities to identify key monitoring plots and attributes and to develop the monitoring system that could provide information of direct relevance to their livelihoods.
- 192.Under Output 2.3, the project also aimed to support public-sector partners in undertaking conventional rangeland assessments. Examples given include measurement of total system carbon, rangeland biodiversity, grass composition and cover as well as tree composition and density, invasive plants and land cover measured by Normalised Difference Vegetation Index. The Project Document underlines the importance of ensuring consistency with UNCCD impact indicators to support national reporting to the Convention. Little information or detail is provided however as to how the project would support partners to undertake the conventional rangeland assessments, or how this data would be incorporated within a 'system for monitoring of range condition and productivity'. The project strategy description under Output 2.3 does not establish a clear link with the use of monitoring data/systems to support implementation of the integrated land-use plan to be developed under Output 1.1, nor for updating of the 'decision making support tool' to be developed under Output 2.2. This is unfortunate as monitoring should be core to all land-use planning and management systems.
- 193. To achieve sustainable rangeland management an overall system for monitoring range condition and productivity would need to be established which includes and integrates technical data collection by relevant government agencies (including DCP, DAP, DVC, DFRR and DWNP), community-based MOMS assessments and specific data from monitoring by NGOs such as BirdLife Botswana.
- 194. The intended result under Output 2.3 to establish a 'system for monitoring of range condition and productivity' is core to achievement of the overall project Objective; effective monitoring is essential to support planning for SLM. The TE suggests that project support could have been designed more strategically, to establish an integrated monitoring system for sustainable rangeland management. A more effective approach might have been to include an additional Output under Outcome 1, focussed on development of monitoring systems within the SSP pilot area. The establishment of effective monitoring within the SSP area would support

implementation of the land-use plans (Output 1.1) and enable communities and public-sector partners to assess the sustainability and effectiveness of range management and mixed livelihood systems (Output 1.2). Under Outcome 2, project support could then have focussed on developing a multi-sector, integrated system for overall monitoring of rangeland ecosystems and patterns of land use across the Makgadikgadi region. An effective rangeland monitoring system would incorporate both technical rangeland assessments and data from MOMS, and would directly inform SLM strategies across the region. Such a system would link in to project support under Output 2.2 for development of the 'decision-making support tool' as it would provide the monitoring data required to regularly update the data in the tool on which land-use planning decisions are made.

Evaluation of the strength of the Outcome 2 strategy

- 195. The information given under Outcome 2 on the intended results, areas of intervention and the overall strategy for achieving results is a lot less clear than that under Outcome 1. The Outcome 2 statement itself is vague and the overall strategy description under Outcome 2 is extremely brief, it does not clarify how 'effective' resource governance frameworks for SLM and 'equitable' resource access is defined as an end of project result, nor what the key issues are that will be addressed through Outcome 2. The reference to 'equitable resource access' in particularly is unclear; there is little analysis within the Project Document to explain what the key 'equity' issues are that the project aims to address, nor how it intends to address them.
- 196. The component strategy descriptions for the Outputs under Outcome 2 do not add much clarity to help define the intended Outcome level results. The combined impact of the three Outputs does not clearly achieve 'effective governance frameworks for SLM and equitable resource access'. As will be seen in the analysis of the Project Results Framework, the OVIs and Targets add little clarity; the sum of each of the OVIs and Targets specified under Outcome 2 does not equal achievement of the Outcome statement.
- 197.A key weakness under Outcome 2 is the lack of any assessment of gender equity issues, or any guidance on ways to support gender equality within resource governance. Achievement of gender equity should have been established as a key target within project support for 'effective resource governance frameworks for SLM and equitable resource access' under Outcome 2. The project strategy should have provided clear guidance on the approaches to be used to ensure women have the opportunity to play a core role in resource governance within SLM frameworks, and equal access to resources.
- 198.An additional weakness in Outcome 2 is that it does not clearly address the barriers identified within the baseline analysis<sup>33</sup>. The second barrier identified in project design is that: 'Policy and market distortions have provided disincentives for adopting SLM and sustainable range management principles in the livestock production sector.' Under Outcome 2, there is not however a clear focus within any of the Outputs on actions to directly address 'policy and market distortions' in the livestock production sector, and there is no clear strategy to remove market related disincentives.
- 199.Under Output 2.1 support through the project is intended to establish and build the capacity of the multi-stakeholder forum so that it can influence policy and 'lead dialogue on mainstreaming SLM considerations in planning and 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).' However, the Output and overall project strategy description give very little indication as to how this forum will actually effect changes to relevant policies, nor what concrete results are anticipated to address 'policy and market distortions'.

<sup>&</sup>lt;sup>33</sup> Within a Project Document the strategy for each Outcome is normally designed to addresses one of the key barriers identified.

200. Support under both Outcomes 1 and 2 includes the establishment and strengthening of farmers associations, including livestock farmers associations. The project aims to increase the understanding and engagement of these associations in more sustainable livestock production and rangeland management. However, again, the strategy description under Outcome 2 does not clearly outline how project support will directly address policy and market related barriers and create market incentives for more sustainable production.

## **Project Results Framework**

- 201. Within a Project Document, the project strategy description should explain the intended results and approach and the Project Results Framework provides the means to measure progress towards achieving core Outcome and Objective level results. It is important within the Results Framework that the 'logic' connecting the various elements of the framework is clear, and that it aligns with the strategy outlined in the Project Document<sup>34</sup>. In the Results Framework, project Objective and Outcomes should have clear objectively verifiable indicators (OVIs) and Targets to enable measurement of the level of achievement of intended development results, against clear baseline data. Indicators and Targets should be Specific, Measurable, Achievable, Relevant and Time Bound (SMART).<sup>35</sup>
- 202. Analysis of risks and assumptions is also included within a Project Results Framework to highlight issues or events that might hinder achievement of the intended results. It provides key information to enable the project manager and partners to develop a risk mitigation strategy and to assess levels of risk throughout project implementation.
- 203. A Project's Results Framework should establish an evaluative framework to support project partners in measuring progress towards achievement of intended overall development results throughout project implementation;<sup>36</sup> it is also a key tool for independent evaluators.
- 204. The Makgadikgadi SLM Project Results Framework has some major inconsistencies with the project strategy description, both in terms of its structure and wording. Within the Project Results Framework Outcome 1 and 2 are reversed, so that in the Project Results Framework Outcome 1 is listed as 'Effective resource governance frameworks for SLM and equitable resource access' and Outcome 2 is listed as 'Effective range management to improve range condition and flow of ecosystem services to support livelihoods of local communities in Southern Sua Pan Region'. This is the inverse of Outcome references given in the Project Strategy and throughout the rest of the Project Document, including within the maps showing areas of influence of the two Outcomes. The wording of the latter Outcome is also different to that given in the project strategy (and in all other references in the Project Document). Within the Project Strategy this Outcome is worded as: 'Sustainable Land and Livestock Management in over 1,900,000 hectares improves range condition and flow of ecosystem services to support livelihoods of local communities and biodiversity in Southern Sua Pan Region' whereas in the Project Results Framework there is no reference in the Outcome statement to achieving 'sustainable land and livestock management in over 1,900,000 hectares'; the focus is solely on the SSP area.
- 205. Within the Project Results Framework the only reference to achieving an impact over the whole of the 1,900,000-hectare MFMP rangeland area is within the Objective level Target. As discussed in the analysis of the project strategy, the TE suggests that this is more appropriate and fits more clearly with the strategy and approach described in the Project Document. The focus of Outcome 1 (listed as Outcome 2 in the Results Framework) is on the SSP area

<sup>&</sup>lt;sup>34</sup> within the Project Document Outputs should work together to support achievement of Outcomes, which should together support achievement of the Project Objective.

Indicators for Outputs should be included within the Multi Year Workplan annexed to the Project Document and are an important tool for project management teams and partners in planning, executing and monitoring of project progress. <sup>36</sup> The Results Framework and indicators within it are also a core part of annual PIR.

(545,000 hectares) and of the project as a whole on the 1,900,000 hectares MFMP rangeland area, with specific support for land-use planning within Boteti sub-district.

- 206. The inverted and different wording for the two Outcomes between the description in the core of the Project Document and that in the Project Results Framework is highly inconsistent and reflects badly on the quality of the overall Project Document. It also causes a lack of clarity as to the intended Outcome result, and causes confusion within project reporting. As will be seen in the assessment of project implementation, quarterly progress reports and PSC meeting reports use the Outcome 1 and 2 reference as it is given in the core of the Project Document. The project Mid-Term Review also followed this structure. However, annual Project Implementation Reviews (PIR) are based on the Project Results Framework and therefore use the opposite Outcome 1 and 2 reference to all other project reporting!
- 207. For the purpose of this TE assessment, and in order to avoid confusion, the TE will use the Outcome 1 and 2 order cited in the Project Strategy, as opposed to that cited in the Project Results Framework. The reason for this is to ensure consistency with the structure used by project executing agencies and their partners throughout the course of the project.<sup>37</sup> When reference is given to Outcomes within this TE report the following apply:
- 208.Outcome 1 is: 'Effective range management to improve range condition and flow of ecosystem services to support livelihoods of local communities in Southern Sua Pan Region'
- 209.Outcome 2 is: 'Effective resource governance frameworks for SLM and equitable resource access'.
- 210. The TE will use the Outcome 1 statement which focuses on the Southern Sua Pan region, rather than the Outcome 1 wording which refers to achieving an impact over the whole 1,900,000 hectares MFMP rangeland area. The focus on the SSP region fits more clearly with the description of intended support within the project strategy, the targets and OVIs established within the Results Framework, and also reflects the focus of project reporting throughout implementation which for Outcome 1 was on the SSP pilot area.<sup>38</sup>
- 211. The following section of the TE report examines the Project Results Framework to assess whether it provides a clear and cohesive structure for monitoring and evaluating project results and impact. The TE will examine the OVIs and Targets alongside the baseline data provided, to assess whether these provide a clear and appropriate means for measuring intended project results. Correlation between the description of intended results in the project strategy and the way this is captured within the Results Framework will also be examined to look at the internal 'logic' of the framework itself and assess whether it is an effective tool for measuring progress towards achievement of overall results.
- 212. The Makgadikgadi SLM Project Results Framework follows the standard GEF template. It outlines the Project Objective and each Outcome, with OVIs, Baseline Data, Targets, Sources of Verification and Risks provided against each of these. The relevance and strength of the OVIs and targets will be examined below.
- 213.A mid-term review (MTR) is not mandatory for medium sized projects (MSP), however it is very commendable that the Project Document includes an MTR as part of its implementation strategy. It would have been appropriate if the Results Framework had also included mid-term targets as these would have provided useful guidance for both the project management team and the MTR consultant in monitoring progress at mid-term.
- 214. The Project Document as a whole does not establish any indicators at the Output level. Although Output level OVIs are not required as part of the Results Framework, they should be included within the framework of a multi-year project workplan<sup>39</sup>. The Output level indicators

<sup>&</sup>lt;sup>37</sup> Throughout project implementation, all progress reports and PSC meetings follow the project strategy description.

<sup>&</sup>lt;sup>38</sup> although again as will be discussed in the assessment of project implementation different wording was often used

<sup>&</sup>lt;sup>39</sup> this is required by GEF as a mandatory Annex to the Project Document

within the workplan are an important implementing tool for the project management team and executing partners, supporting effective planning and day to day monitoring of progress throughout the year. The Makgadikgadi SLM Project Document did not include Output level indicators as part of the required multi-year workplan annex to the Project Document. The need for a more robust Output level monitoring framework was not picked up on until the midterm review.

- 215.At the <u>Objective level</u> the Results Framework cites just one OVI and Target. The OVI is 'hectares of rangeland that are under improved management' and the Target is '1,900,000 hectares by project end' with text added in brackets to state that: '(In addition, it is expected that project lessons can be replicated to an additional 1,440,000 hectares post-project, notably in the Tutume sub-district planning area)'.
- 216. The Objective level OVI and Target do not meet the criteria of being SMART and do not enable measurement of the level of achievement of Objective level results. 'Improved management' is a very vague description, and neither the Objective nor component Outcome level OVIs / Targets provide a clear means to measure its achievement. The Results Framework should have included specific indicators to enable measurement of the ways in which the project supported mainstreaming of SLM in the Makgadikgadi region and to measure related livelihood improvements. Indicators at the Objective level should reflect the combined impact of Outcome level results. They should be Specific, Measurable, Achievable, Relevant and Time Bound (SMART) and should highlight the way in which the project has addressed key issues and barriers identified in design.
- 217. The inclusion of wording in brackets within the Objective level target is inappropriate. Unless the wider Tutume sub-district results are going to be measured before project end, to demonstrate how 'lessons learnt' have been 'replicated', additional hectares of 'post project' impact is not an appropriate project target.
- 218. The baseline data within the Results Framework is also very uninformative, it merely states 'zero', the reference being to 'zero' 'hectares of rangeland under improved management'. No data is provided to capture the start of project situation relative to the key issues which the project aims to address. The baseline column in the Results Framework at the Objective level should provide specific data to quantify and qualify the start of project situation, reflecting the analysis of barriers in the Project Document. If the start of project situation is clearly captured within the baseline, then the OVIs and Targets can be used to measure the extent to which the project has addressed those issues.
- 219.At the <u>Outcome</u> level, the quality of the OVIs is mixed, some meet the criteria of being 'SMART' and are appropriate for measuring Outcome level impact, others much less so, being either too descriptive to enable measurement of results, or focused at the Output level.
- 220. The Outcome for 'Effective Range Management to Improve Range Condition and Flow of Ecosystem Services to support Livelihoods of Local Communities in Southern Sua Pan Region'<sup>40</sup> has a number of OVIs and associated Targets. These reflect the key areas of project intervention described in the project strategy.
- 221.A number of the OVIs under this Outcome are directly relevant to the intended Outcome level result:
  - Indicator 2: 'No of farmers with improved livelihoods' with the associated Target which clarifies that 'improved' refers to increased farm generated income linked to improved herd management and CA;
  - Indicator 3: 'Off-take rate for cattle'. This indicator is highly relevant to achievement of
    effective rangeland management in the SSP; it refers to measurement of the rate at which

<sup>&</sup>lt;sup>40</sup> Cited as Outcome 2 in the Results Framework but Outcome 1 in all other references in the Project Document.

cattle are taken off the rangelands, normally for market. However, as will be discussed further in the analysis of project results, the target and baseline are not appropriate for the indicator. The target given in the Results Framework against this indicator is for a 3% increase in calving rate against the baseline of 92% (being the proportion of cows bearing a live calf per year). This target/baseline is not relevant to the indicator and is not an effective means of measuring the cattle off-take rate.

- Indicator 4: 'Area of Southern Sua Pan rangeland with improved grass and herbaceous cover', where the specific area is to be determined in the range assessments but a specific Target increase is given;
- Indicator 9: 'Extent of uncontrolled fires' whereby the Target is to reduce the fire affected area by 50% in year two and three;
- Indicator 10: 'Incidence of fires' whereby the Target is to reduce fire incidences by 50%
- 222.All of the above indicators and targets address key issues highlighted within the Project Document and reflect the project strategy description. The measurement of 'improved grass and herbaceous cover' provides one means to measure 'range condition', although other indicators of rangeland condition and flow of ecosystem services should (and could from the range assessments and monitoring data proposed) have been included. The cattle off-take rate and improved control of rangeland fires reflect two core 'range management' issues and are therefore useful indicators of more 'effective range management' relating to those two core issues. The measurement of increased farmer income directly linked to improved herd management and CA provides a means to measure livelihood impacts which are linked to more sustainable land management practices.
- 223. The first OVI referring to the development of 4 land use plans and the fifth OVI referring to the number of farmers practicing conservation agriculture are essentially statements of the intended Output product. These are basic Output level indicators and are not appropriate for measuring Outcome level impact. At the Outcome level the type of OVI and Targets that should have been included would be those that enable measurement of actual improvements in range management and livelihoods; they would demonstrate how the land-use plans and use of CA addressed relevant issues and were supporting more 'effective range management' and 'flow of ecosystem services to support livelihoods.'
- 224. The other OVIs and targets given under this Outcome have limitations as a means of measuring the achievement of effective range management, improved range condition and flow of ecosystem services to local SSP communities. For example:
  - Indicator 7 is the 'No of farmers practicing improved and effective herd management', however the Target is merely a specific number<sup>41</sup> of farmers 'enrolled for participation in the project'. There is nothing within either the OVI or the target which clarifies how 'improved and effective herd management' will be measured; the number of farmers participating in the project is not a clear means of measuring Outcome level impact.
  - Indicator 8 refers to 'revenue from non-timber forest products, including soils and salt'. The
    associated EOP Target is an increase of revenue by 33%. The TE suggests that it would
    have been appropriate to also include a means of measuring the sustainability of levels of
    harvesting. Over-harvesting of veldt products is a concern in some areas and the use of
    an OVI/Target solely focused on revenue increase could be misleading; a significant
    increase in revenue could also be linked to unsustainable levels of harvest. An example of
    an indicator which could be used to demonstrate the establishment of more effective range
    management systems supporting sustainable use, would be one which demonstrates
    monitoring of 'range condition' alongside harvesting levels/revenue (livelihood benefits).
    For example, the OVI: 'MOMS system established to monitor the sustainability of levels of

non-timber forest product harvesting / sale, through assessment of the health/abundance of key resources alongside harvesting/sale levels.' The associated target could for example be x number of monitoring teams, undertaking x monthly surveys over x area.'

- 225. The Result Framework specifies that the baselines for the majority of OVIs are to be determined as part of the range assessments to be undertaken by the project in year 1. This is not ideal, but is understandable given the short time available for project design.
- 226. Overall the OVIs and Targets for this Outcome could be strengthened, but five of the total of 10 indicators and targets do provide a means for measuring Outcome level results across a number of core issues within the SSP pilot area. The areas where OVIs and Targets for Outcome 1 could have been strengthened include for measurement of improved participation by communities in land-use planning, and for measurement of reduced land-use conflict and competition (ie: the core issues which the land-use plans aimed to address, rather than the documents themselves). Additional OVIs and targets to measure EOP improvements in range management systems and range condition would also have been appropriate, and would have enabled better measurement of Outcome results.
- 227. There are no specific gender indicators or targets, nor any sex disaggregation of OVIs and targets within the Results Framework, which is a major weakness under Outcome 1, particularly given the intended impact of this Outcome to support community livelihoods.
- 228. The other project Outcome:<sup>42</sup> 'Effective Resource Governance Frameworks for SLM and Equitable Resource Access' does not have any SMART OVIs and Targets which would enable measurement of the level of achievement of Outcome level results. As discussed in the assessment of the project strategy, the Outcome statement itself is imprecise and the description of intended results and strategic approach is much less clear than that under Outcome 1<sup>43</sup>. The OVIs, Targets and Baseline Data provide little clarification as to intended Outcome level results and do not enable measurement of the extent to which 'resource governance frameworks for SLM' are 'effective' nor whether 'resource access' is more equitable.
- 229.A number of the Outcome OVIs and Targets are essentially descriptions of Output level results. For example, the first OVI 'No of functional farmers associations' and the associated Target of 2 by project end, does not enable measurement of 'effective governance' or 'equitable resource access.' The second OVI 'No of farmers practicing improved and effective herd management' is the same OVI as used under the other Outcome, although the Target here is focussed on the number of farmers enrolled for participation in the project through the farmers associations. Again here, enrolment of farmers for participation in the project is not a useful measure of Outcome level impact.
- 230. The third OVI and Target also describe the Output level product, rather than being an indicator of an Outcome level result: The OVI is for the 'No of integrated district-wide plans with spatially-explicit (GIS-based) maps of where particular sectors (tourism, settlements, agriculture) could best be allocated land parcels in a manner that minimises conflicts amongst these sectors.' Its associated Target is 'An integrated plan covering all of the Boteti sub-district planning area developed and approved with involvement of all stakeholders'. The OVI reference to the *number* of integrated plans is not appropriate given that the target is for one integrated plan. Although development and approval of the integrated plan is an appropriate and valuable Output level result, it again does not enable Outcome level measurement of 'effective resource governance frameworks' or 'equitable resource access.'
- 231. The fourth OVI 'Capacity of key land management institutions for SLM' with the associated Target 'raise to 75% and improving by the end of the project' is a SMART OVI. The tool to

<sup>&</sup>lt;sup>42</sup> Cited as Outcome 1 in the Results Framework but Outcome 2 in all other references in the Project Document.

<sup>&</sup>lt;sup>43</sup> the sum of the Outputs does not achieve the Outcome statement

measure capacity is given in Annex 4 of the Project Document. Measurement of SLM capacity of key land management institutions is an appropriate indicator/target and is relevant to the Outcome. However, on its own it does not enable measurement of the extent to which the project has established 'effective resource governance frameworks for SLM and equitable resource access.' Increased capacity can contribute to increased effectiveness, but this indicator would need to be used alongside other Outcome level OVIs and Targets.

- 232. The fifth and seventh OVIs and Targets are relevant, but again do not provide a means for measuring the Outcome level result of 'effective resource governance frameworks for SLM and equitable resource access.' In the Target for the fifth OVI, the reference to active *use* of monitoring reports on the condition of rangelands 'for tracking yearly change in rangeland conditions' is good as it demonstrates improved monitoring. Given their focus on monitoring of rangeland condition, these two OVIs<sup>44</sup> would perhaps have been more appropriate under the previous Outcome; monitoring is core to achieving 'effective range management' and 'improved range condition'. It is not however a particularly effective means of measuring 'equitable resource access' or 'effective resource governance frameworks'; part of the problem, as outlined above, is the lack of clarity within the project strategy description as to how these core results are defined.
- 233. The sixth OVI: 'Multi-stakeholder forum for mainstreaming SLM issues in national and regional policies, plans and strategies' and the associated Target of 'Active participation from government, NGOs, water and land user groups, community trusts, community leaders, private sector by project end' is a description of the intended result under Output 2.1. To be effective as a means of measuring achievement of an Outcome level result<sup>45</sup>, this OVI and Target would need include some measure of the 'effectiveness' and 'equitability' of the 'multi-stakeholder forum' so as to demonstrate the way in which this forum had actually resulted in improvements to 'governance' and 'resource access' issues. The baseline for this indicator should in tern clarify what these issues are.
- 234. The baseline data within the Results Framework under all of the indicators for Outcome 2 provides little relevant data, the reference in most cases is 'zero', referring to 'zero' plans or reports.
- 235.A key weakness under Outcome 2 is that no gender related OVIs, Targets or baseline data are included, nor any sex disaggregation within the OVIs and Targets, and this is again a significant omission.

<u>Risks</u>

236. The analysis of risks in the Results Framework is not comprehensive and indeed appears to not have been finished as there is a note in brackets 'to insert more, refer to risk Analysis Annex'. A more detailed assessment is provided in Annex 5 to the Project Document which examines risks, levels of risk and potential mitigation measures. The risk assessment in the Annex is reasonably comprehensive as a basis for development of a more detailed risk management strategy during project implementation.

### Implementation and Execution Approach

237.Project implementation and execution arrangements were laid out in the project document and followed a standard structure for NGO execution modality. The Executing Agency for the project was BirdLife Botswana, with strategic oversight of the project the responsibility of a Project Steering Committee (PSC). The PSC was to be chaired by the Permanent Secretary of MENT with key members including DFRR, DEA, DWNP, DAP, DCP, DTCP, UNDP and

<sup>&</sup>lt;sup>44</sup> number of annual status reports on the condition of rangelands, and on the status of common birds in the Boteti sub-district

<sup>&</sup>lt;sup>45</sup> 'effective resource governance frameworks for SLM and equitable resource access.'

BirdLife Botswana. The PSC were to meet twice a year, with the first meeting to be held within the first 2 months following the inception workshop. The main duties of the PSC were listed in the Project Document as 'to receive project reports and documents, make recommendations and approve budgets and work plans.'

- 238.UNDP were the overall GEF Implementing Agency for the project, ultimately accountable to the GEF Council for delivering global environmental benefits. The Project Document states that UNDP would be responsible for ensuring regular operational oversight through the UNDP Country Office, with the UNDP Regional Office providing strategic oversight.
- 239.A project management unit (PMU) was to be established, based in Letlhakane, for day to day project management and coordination. The PMU would comprise BirdLife Botswana staff and report to UNDP and the Project Steering Committee (PSC). Day-to-day supervision of the PMU was to be provided by the BirdLife Botswana Director, who, in consultation with the PSC, had the overall authority to approve annual work plans and annual reports. The Project Document specifies that PMU staff would include a National Project Coordinator (NPC) as the Project Manager, with technical back-stopping support provided by a Technical Assistant, who would play a lead role in M&E and in site-based livelihood activities, 'working effectively as project extension staff'. This position would be fully-funded by BirdLife Botswana. The PMU would also have a Finance Assistant which would be a GEF-funded position. PMU staff were to be recruited by BirdLife Botswana in consultation with UNDP, DFRR and DEA. Annex 6 to the Project Document provides Terms of Reference. BirdLife Botswana would be accountable to UNDP for the delivery of outputs, and for financial management of the project.
- 240. The project was also designed to have a Makgadikgadi-based Project Advisory Committee (PAC). This was to be 'a platform that engages all stakeholders relevant for the project at the site-level (to meet quarterly)'. The Project Document emphasises that the project 'would also work closely with the MFMP Thematic Working Group on Natural Resources (meets quarterly), which structure would provide technical advice to the project, and assure linkages and synergy with other MFMP natural resources initiatives'.
- 241.Key national government partners and lead agencies for project implementation include the Department of Forestry and Range Resources (DFRR) Department of Environmental Affairs (DEA), Department of Animal Production (DAP), and Department of Crop production (DCP). The Project Document specifies that project activities will be undertaken by relevant governmental, non-governmental, parastatal, private sector and community-based entities.
- 242.In describing the project implementing framework, the Project Document places good emphasis on the importance of working in close partnership with 'government agencies and their staff, at HQ and district-levels', to support them to 'mainstream SLM and the project activities into their policies and processes'. It specifies that 'to operationally ensure key institutions mainstream SLM into their policies, projects and plans, DFRR, DEA, DCP and DAP will each nominate counterparts to work with the PMU team. This will include senior officers at headquarters (Gaborone, may or may not be PSC members), and at the district level (based in Letlhakane, ideally members of the Project Advisory Committee) to ensure there are responsible officers for site-based actions.' At the national level the Project Document specifies that 'in addition to bi-annual Project Steering Committee (PSC) meetings, the PMU will at least twice per year brief the HQ based senior officials (collectively) on project progress, and appraise them on opportunities, implications and obligations of the project for their respective departments, further enhancing government buy-in and ownership of the project.'
- 243. The PAC, PSC and linkages with the MFMP Thematic Working Group on Natural Resources also provide important mechanisms for upscaling project impact and increasing institutional awareness of both the importance of and ways to achieve sustainable rangeland management. Annex 6 to the ProDoc outlines the relationships between the PMU, PSC,

Project Advisory Committee and the MFMP Thematic Working Group on Natural Resources. The MFMP thematic groups include participation by community stakeholders.

- 244.At the local level, the project strategy description also places good emphasis on establishing strong linkages with existing community based organisations when it states that 'at the site-level the project will take advantage of the already established Community Based Organisations, including the Gaing-O community Trust representing the community of Mmatshumo and the Gumakutshaa Conservation Trust representing the communities of Mmeya, Mokubilo and Mosu.'
- 245.Overall the project execution and implementation arrangements specified in the Project Document meet the structure and procedures required for GEF projects and place good emphasis on establishing national and local partnership, the importance of strategic guidance at all levels, links with existing structures within MFMP and on the importance of generating strong ownership of project initiatives and results to support mainstreaming of sustainable rangeland management.

#### Monitoring and Evaluation Plan Design

Monitoring and Evaluation Plan Design Rating	Moderately Satisfactory
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- 246. The Project Document sets out standard monitoring and evaluation procedures. A basic Monitoring and Evaluation Plan outlines overall M&E responsibilities and budget. It provides an overview of UNDP-GEF monitoring and evaluation requirements, with particular emphasis on the project inception process, work-planning, quarterly progress reporting, annual Project Implementation Reviews (PIRs) / Annual Project Reports (APR), periodic monitoring by UNDP CO and RCU through site visits and the mid-term and end of project evaluation
- 247. The importance of the inception process is highlighted, in particular the inception workshop and subsequent inception report which will record and formalise key agreements and plans developed at the workshop. As is standard for GEF projects, the workshop is to be held within the first six months of project implementation, and to be attended by all key stakeholder groups. The Project Document specifies that the inception workshop would focus on the following objectives to: (a) ensure all partners 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 project's decision-making structures and clarify roles and responsibilities of all project organization structures including roles, functions, and responsibilities of relevant groups, and reporting, communication, and conflict resolution mechanisms; (d) discuss, the Terms of Reference for project staff; (e) review the Results Framework and agree on the indicators, targets and their means of verification, re-check assumptions and risks subsequently finalize the first annual work plan based on the project results framework and the relevant GEF Tracking Tool; (f) confirm reporting, monitoring and evaluation (M&E) requirements, including agreement and scheduling of the Monitoring and Evaluation work plan and budget; (g) discuss financial reporting procedures, obligations, and arrangements for the project's audit; (h) plan and schedule Project Steering Committee (PSC) meetings. Points a to h cover most core areas, however one key omission is the need for the inception workshop to reaffirm co-financing commitments by all key partners, clarify and reach agreement on the way in which co-financing support will be provided and to establish the means for recording and monitoring co-financing, both in-kind and cash.
- 248. The Project Manager would be responsible for day to day monitoring of project activities and for the preparation of regular reports. Quarterly reports were to be given to the Project Advisory Committee and the MFMP Thematic Working Group on Natural Resources and were to be shared with members of the PSC. Regular review and updating of the risks log, Issues log and Lessons Learnt log was also a core part of project monitoring by the PMU. PSC meetings were to be scheduled bi-annually, with associated reports focussed on policy issues and strategic project management issues, including budgets.

- 249. The Project Results Framework is a key monitoring and evaluation tool. It specifies the indicators and targets for measuring achievement of project results, along with their corresponding means of verification and associated risks and assumptions. Inconsistencies between the project strategy description and the Results Framework, and weaknesses in the OVIs, Targets and baselines within the Results Framework, limit the extent to which it provides a sound basis for M&E.
- 250. The Project Document includes a table outlining 'Monitoring and Evaluation Activities, Responsibilities, Budget and Time Frame. This follows standard format and captures overall M&E activities and responsibilities. The indicative budget is US\$75,000 which is appropriate.
- 251.Project monitoring and evaluation activities will build on UNDP's existing monitoring and evaluation framework for land degradation. As is standard for all projects under the GEF Land Degradation portfolio, the GEF LD-PMAT is to be used to monitor the project's progress in addressing key land degradation issues and to provide information to enable monitoring at a global level, including to capture lessons learnt and best practice. It forms part of the overall M&E tool kit for the project. A baseline LD-PMAT is appended as Annex 7 to the Project Document. Part I of the LD PMAT provides data on the overall area. Part II 'Outcomes and Learning' provides a basic outline of intended outcomes and learning, although sections 3 'Knowledge application', 4 'Knowledge contribution as global public goods' and 5 'SLM leaning' do not capture relevant contributions described within the project strategy description. In particular the LD-PMAT does not capture support described in the project strategy under Output 2.2 for development of the GIS-based decision-support tool for SLM, and support proposed under Output 2.3 to enable project partners to undertake conventional rangeland assessments.<sup>46</sup>
- 252.Overall, the TE assesses the M&E plan to be 'moderately satisfactory'. The Project Monitoring and Evaluation Framework includes key UNDP / GEF monitoring and evaluation procedures and processes and the budget and proposed reporting procedures are appropriate, however inconsistencies and weaknesses in the Results Framework weaken the overall monitoring and evaluation plan design.

### **Project Budget and Financial Management**

- 253. The Project Document outlines a budget for each Output and for Project Management. As is standard for the ATLAS system predicted expenses are listed under the following categories (where relevant): contractual services; training; travel; materials and goods; publications. Expenditure is specified under each category for each year of project implementation with accompanying budget notes to explain the estimated sums provided. Total allocated GEF expenditure for each Output is as follows:
  - Outcome 1 total budget US\$457,000 comprising: Output 1.1 US\$143,00; Output 1.2 US\$225,125; Output 1.3 US\$60,500; Output 1.4 US\$28,375.
  - Outcome 2 total budget US\$298,078 comprising Output 2.1: US\$79,970; Output 2.2: US\$75,000; Output 2.3: US\$143,108
  - Project Management total budget: US\$37,754 categorised under 'contractual services; travel; office and furniture'.
- 254.More detailed analysis of the proposed use of the budget to support achievement of results under each Output has been provided above in the analysis of the project strategy.
- 255.Executed through the NGO modality, BirdLife Botswana were to be responsible for financial reporting to UNDP each quarter using the FACE and HACT reporting mechanisms.

<sup>&</sup>lt;sup>46</sup> including measurement of total system carbon, rangeland biodiversity, grass composition and cover as well as tree composition and density, invasive plants and rangeland condition measured by Normalised Difference Vegetation Index.

- 256. Transfer modalities for requesting cash and for reporting on its utilization are specified in the Project Document and include Direct Cash Transfer for advance disbursements to BirdLife Botswana; Direct Payments to vendors and other third parties for activities/products agreed in AWPs; Reimbursement to BirdLife Botswana for expenditure incurred outside of direct cash transfers on activities agreed in AWPs. The Project Document specifies that 'since the project will be implemented through an NGO modality, the preferred method of cash transfer is the Direct Cash Transfer (i.e. Advance). Direct Payments and Reimbursements will only be allowed in emergency cases which cannot await processing of an advance (Direct Cash Transfer) and/or UNDP is unable to honour the request for an advance at the time of request (e.g. in cases where the UNDP account has not yet been replenished).' The Project Document specifies that 'in the case of BirdLife Botswana and Government procurement, BirdLife Botswana or Government procurement rules respectively apply, while UNDP rules will apply in the case of Country Office support'
- 257.Quarterly Progress Reports are to provide the basis for managing project disbursements and should include a brief summary of the status of activities, explaining variances from the work plan. Changes within the stipulated budget of an Output would not require PSC approval. However, changes across Outputs would require approval by the PSC.
- 258.An audit clause is also included in the Project Document specifying that the project will be audited at least once in its life-time, with the audit conducted according to UNDP Financial Regulations and Rules and applicable audit policies.

### **Co-financing**

259.Co-financing is core to effective implementation of a project and to the achievement of anticipated results. It comprises project resources that are committed by the Executing Agency or by other non-GEF sources at the inception of the project.

Co-financing Category	Name of co-financier	Туре	Amount \$
Multi-lateral	UNDP	Cash	225 000
Bilateral	Japan International Cooperation Agency	Cash	150 000
	(JICA)		
National Government	Department of Forestry and Range	Cash	2 000 000
	Resources (DFRR)		
National Government	Department of Environmental Affairs	Cash	1 500 000
National Government	Department of Animal Production	Cash	500 000
National Government	Department of National Museum and	Cash	50 000
	Monuments		
National Government	Boteti sub-district Council	In kind	200 000
Private	Botswana Ash Pty Ltd	Cash	280 000
Civil Society Organisation	BirdLife Botswana	Cash	1 440 000
Civil society organisation	Gaingo-O Community Trust	Cash	150 000
National Government	Letlhakane Sub-Land Board	Cash	150 000
Civil society organisation	Gumakutshaa Conservation Trust	In kind	150 000
Total Co-financing			6 795 000

260. The Project Document outlines total co-financing agencies and contributions as follows:

261.Letters confirming 'cash' co-financing commitments are given in an annex to the Project Document and include UNDP CO, BirdLife Botswana, DFRR, DEA, DAP, the Department of Museums and Monuments, LetIhakane Sub-Land Board, Boteti sub-district Council and Japan International Cooperation Agency (JICA). The Gaingo-O Community Trust and Gumakutshaa Conservation Trust also submitted letters officially pledging 'in-kind' co-financing. The mining company BotAsh submitted a letter outlining their 'past, present and future commitment .... to conservation in the Makgadikgadi Pans area'. The letter gives estimated US\$ figures for support provided to conservation in the Makgadikgadi region, however it does not pledge any specific support to the Makgadikgadi SLM project, the letter merely refers to 'discussions with BirdLife Botswana' on a 'possible role' in the project.

- 262.Within the Project Document budget, a breakdown of co-financing per Outcome is not specified for the majority of co-financing agencies except for UNDP. A breakdown of UNDP co-financing is provided in the overall Project Budget breakdown table. UNDP committed a total of US\$225,000 as follows:
  - UNDP contribution to Output 1.2 'Improved range management and mixed livelihood systems are piloted in line with land use plans' total to be allocated for 'materials and goods': US\$219,125
  - UNDP contribution to Project Management: US\$5875
- 263. The Project Document does not provide any detail as to how co-financing will be sourced, managed or monitored and this is a weakness in the Project Document. It is an issue which needs to be addressed in the design of future GEF funded projects.

# Alignment with GEF, UNDP and National Strategic Priorities and Plans

- 264. The project is well aligned with the GEF 5 Land Degradation (LD) Focal Area Outcomes under LD Objective 3.
- 265. The GEF Land Degradation Focal Area aims to achieve global impacts which increase or maintain the flow of ecosystem services; sustain crop, livestock, and forest production within existing areas and correspondingly support sustainable livelihoods. The project can be clearly seen to be relevant across these areas. The overall goal of the GEF Land Degradation Focal Area is to contribute to arresting and reversing current global trends in land degradation, specifically desertification and deforestation. To achieve this goal, the GEF 5 strategy has four objectives:

(i) maintain or improve flow of agro-ecosystem services to sustaining the livelihoods of local communities;

(ii) generate sustainable flows of forest ecosystem services in arid, semi-arid and sub-humid zones, including sustaining livelihoods of forest-dependent people;

(iii) reduce pressures on natural resources from competing land uses in the wider landscape;

- (iv) increase capacity to apply adaptive management tools in sustainable land management
- 266. The Project Document was designed to contribute to Objective 3 of the Land Degradation Focal Area: Reduce pressures on natural resources from competing land uses in the wider landscape and to all three Outcomes of this Objective:

'Outcome 3.1 Enhanced cross-sector enabling environment for integrated landscape management)

Outcome 3.2 Integrated landscape management practices adopted by local communities

Outcome 3.3 Increased investments in integrated landscape management; Under Outcome 3.3 the Project Document notes however that 'although the project will aim to leverage more investments for SLM, the implementing agency will focus on the first two outcomes LD 3.1. and 3.2, so as not to overpromise and overly stretch the limited resources.'

267.Project design is also aligned with achievement of relevant UNDAF and UNDP Outcomes and Outputs as follows:

**UNDAF Outcome:** By 2016 the rural poor, especially women, are deriving greater benefits from environment and natural ecosystems

**Country Programme Outcome indicators:** No of community-based organisations with capacity to develop and implement plans in natural resources and ecosystem management and benefit distribution.

**Country Programme Action Plan Output(s):** Evidence-based responsive policies, legislation, programmes and projects formulated by government to accelerate progress towards Vision 2016 goals.

**UNDP Strategic Plan Environment and Sustainable Development Primary Outcome**: Growth and development are inclusive and sustainable, incorporating productive capacities that create employment and livelihoods for the poor and excluded

**UNDP Strategic Plan Secondary Outcome**: Countries are able to reduce the likelihood of conflict and lower the risk of natural disasters, including from climate change

- 268. The focus of the Makgadikgadi SLM project on sustainable land management (SLM) in order to increase the flow of ecosystem services and improve range condition to support the livelihoods of communities in the SSP and on strengthening resource governance frameworks for SLM and equitable resource access clearly aligns with the above UNDAF and UNDP strategic objectives. The project approach includes capacity building for community-based organisations 'to develop and implement plans in natural resources and ecosystem management and benefit distribution'. Project support for sustainable livelihood practices, increased efficiency of production and for community participation in land-use planning and governance, works towards achieving benefits for the rural poor, including women, from natural ecosystems, and also supports capacity building. Project support for the development of planning tools, data collection and monitoring alongside support for increased consideration of SLM in decision making and in relevant policies and strategies works to support 'evidenced based' decision making and growth and development that is inclusive and sustainable.
- 269.At the national level the project's objective, approach and intended development results align with and support achievement of strategic objectives under Botswana's National Biodiversity Strategy and Action Plan (NBSAP). The proposed approach also directly supports the national CBNRM Policy aim to 'improve conservation benefits for communities that co-exist with natural resources'.
- 270. The Project directly supports and aligns with the key planning framework for the Makgadikgadi region the 'Makgadikgadi Framework Management Plan' which aims to improve people's livelihoods through wise use of wetland ecosystems. The Project Document specifies that 'Two of the most important MFMP principles that this project will operationalize are (1) to encourage holistic planning as opposed to sectorial planning, and (2) Instigate developments that benefit rural livelihoods and the environment'. The Project Document stresses that 'The MFMP encourages implementation where shared responsibility is observed from all stakeholders including community members. This project will capacitate mainly farmers in rangelands on resource management, monitoring, and planning. To secure sustainability beyond the project the project, it will strengthen the recently formed Makgadikgadi Wetlands Management Committee to engage and take advantage of indigenous knowledge from communities in the pilot site.'

#### **Summary Conclusions on Project Design**

271. The Project Document provides a good situational analysis which builds on existing literature, and outlines the strategic and planning context, providing a sound platform on which to develop the project strategy. The analysis includes a comprehensive assessment of stakeholders and their stakes, influence and capacity, and from this the Project Document determines their proposed role in the project. Useful further detail on stakeholder institutions and the project area is also provided within Annexes. The Project Document establishes links to past and concurrent projects and initiatives and highlights how the project will build on / collaborate with these initiatives, to support information sharing and upscaling of results. The project is well aligned with relevant planning frameworks and strategies, in particular the MFMP and SSPMP. However, there are a few significant gaps within the baseline analysis in particular relative to the importance of, and requirement for, SEA within land-use planning in

Botswana and of the role of the Department of Town and Country Planning (DTCP) as a key stakeholder in land-use planning in Botswana. The Project Document also provides very little analysis of the 'policy and market distortions' and how these are creating 'disincentives' for SLM and sustainable range management in the livestock production sector.' A clearer assessment of these distortions was needed to provide the basis for project support to address the second barrier.

- 272 Within the project strategy, the consultative, participatory approach is excellent and there is a core focus on environmental sustainability and on the importance of sustaining ecosystems to support livelihoods. The focus on capacity building and on the establishment of partnership and conflict resolution is also excellent. Within the description of the alternative situation to be established through the project, the approach outlined under Outcome 1 is clear and responds directly to the key issues identified in the situation analysis, however under Outcome 2 the strategy is much less clear. There is a very weak description of the intended Outcome level result within the Project Document to define what the 'effective resource governance frameworks for SLM and equitable resource access' will be. Support under Outcome 2 also does not clearly address the second barrier identified in the Project Document, in that no focused support is included to remove 'policy and market distortions' in the livestock production sector, and there are no clear mechanisms through which the project aims to increase market related incentives for more sustainable livestock production. The overall project strategy and areas of intervention should directly address the two barriers identified during design as the key factors preventing the mainstreaming of SLM principles in rangeland management in the Makgadikgadi region. To be consistent with the baseline analysis of barriers, Outcome 2 should therefore have included a clearer focus on addressing policy and market distortions and disincentives.
- 273. There are also several inconsistencies within the Project Document. The most significant are the differences in the wording and ordering of Outcomes between the project strategy description and the Results Framework. The Results Framework inverses the numbering of Outcomes to that given in the project strategy, which causes confused referencing in the Project Document. Outcome 1<sup>47</sup> is also worded differently in the Project Strategy and Results Framework and the different wording creates a significant discrepancy in the area of influence over which the project intends to achieve a 'sustainable land and livestock management<sup>48,</sup> impact in order 'to improve range condition and flow of ecosystem services to support the livelihoods of local communities'. It makes a significant difference to the evaluation of project results whether the geographical area over which the Outcome result is intended to achieve impact, is the entire 1,900,000 hectares of the Makgadikgadi rangelands, or solely the 545,000 hectares of the Southern Sua Pan. In the project strategy description within the Project Document, Outcome 1 is worded as 'Sustainable land and livestock management in over 1,900,000 hectares improves range condition and flow of ecosystem services to support livelihoods of local communities and biodiversity in the Southern Sua Pan Region. In the Results Framework the corresponding Outcome is 'Effective range management to improve range condition and flow of ecosystem services to support livelihoods of local communities in Southern Sua Pan Region<sup>49</sup>.'
- 274.Within Outcomes, a key weakness in the project strategy is that the areas of support described under each of the Outputs don't add up to achieve the Outcomes; even if the project effectively implemented all areas of work envisaged under each Output, it would not achieve the two Outcomes at project end. This is particularly the case under Outcome 2, and if the Outcome 1 statement is taken to refer to an impact achieved over the entire 1,900,000

<sup>&</sup>lt;sup>47</sup> Referred to as Outcome 2 in the Results Framework

<sup>&</sup>lt;sup>48</sup> Also worded differently in the relevant Outcome statement in the Results Framework as 'effective range management'

<sup>&</sup>lt;sup>49</sup> Although due to the inversed numbering it should be noted that this is numbered Outcome 2 in the Results Framework.

hectares of the Makgadikgadi region. The description of intended Outcome level impact is very limited within the project strategy, and again this particularly so under Outcome 2.

- 275. The project Objective is also not clearly defined. The Project Document does not provide a clear outline of the intended end of project result in terms of 'mainstreaming SLM in rangeland areas of the Makgadikgadi for improved livelihoods.' Only one OVI and Target are given in the Results Framework which refers to achieving 'improved management' over '1,900,000 hectares of rangeland'. There is nothing which indicates how 'improved' management will be measured and no indicator which enables measurement of 'improved livelihoods'; the OVI and Target do not enable measurement of results achieved. There is also the need within the project strategy for a clear explanation of how Outcomes 1 and 2 will work together to achieve the overall project Objective, in particular how Outcome 2 would support the upscaling of, and institutionalisation of, results and approaches developed under Outcome 1, and how an Objective level impact of 'mainstreaming SLM' across the Makgadikgadi region<sup>50</sup> will be achieved. Within a three-year medium sized project, the anticipated end of project results is somewhat unrealistic. It would be extremely difficult if not impossible for the project to demonstrate improvements in range condition and 'flow of ecosystem services to support livelihoods' and mainstreaming of SLM across the entire 1,900,000 hectares of the Makgadikgadi region. The support outlined under each of the project Outputs also does not support achievement of this result by EOP.
- 276.Within the Results Framework there are a number of weaknesses. The majority of the OVIs and Targets describe Output level products/results, rather than being SMART indicators that would enable measurement of Outcome level results. Baseline data in the Results Framework is weak across most OVIs, although under Outcome 1 the Results Framework adds a caveat to say that baselines will be established at project start. This is not ideal, but is understandable given the limited time allocated for project design. Risk assessment in the Results Framework is not comprehensive, however the Project Document does include a much more comprehensive assessment of risks within Annex 5. Another inconsistency between the project strategy description and the Results Framework under Outcome 1 is that the project strategy contains an Output 1.4, with an associated budget and relevant co-financing, however, no related indicators or targets are included within the Results Framework that relate to Output 1.4<sup>51</sup>.
- 277. The MTR raised concerns about weaknesses in project design when it assessed that 'project design is flawed and overambitious' and 'is highly unlikely to achieve aspirations of each of the two outcomes with the current outputs.' It described the Results Framework as 'seriously flawed' and recommended that both the strategic logic of project design and the results framework should be reviewed and amended. Following the MTR, the project developed a milestone based workplan, and addressed the majority of MTR recommendations, it did not however make any official changes to the project's Results Framework, and no further clarifications were provided as to the scope of intended Outcome and Objective level results and impact. The weaknesses in the project's overall strategy design and in the Results Framework therefore continue to affect the Terminal Evaluation.
- 278.Overall, the Project Document is well focused on addressing some of the key causal factors of land degradation in the SSP region and the participatory and partnership based approached is excellent. The situational analysis in the Project Document provides a good bedrock on which project implementation can build. Design of the project strategy, including the Results Framework, however, has a number of key weaknesses which affect the extent to which it would be possible for the project to achieve its stated Outcomes and Objective. The

<sup>50</sup> Note this wording implies an impact over a 1,900,000 hectare rangeland area affecting 32 communities' livelihoods. 51 Consultations during the TE seem to indicate that this Output should have been entirely removed from the Project Document and that the inconsistencies between the core of the Project Document and the Project Results Framework were likely to be largely due to the limited time available for project design, leading to a somewhat cursory review of the Project Document by all partners before submission to GEF.

inconsistencies and weaknesses in the Project Document appear to have been due in large part to the limited amount of time made available for project design, which did not allow the design team and partners adequate time to develop a clear project strategy and results framework and to effectively review the Project Document prior to submission.

### PART 3.2 PROJECT IMPLEMENTATION

- 279. The following section of the report assesses project implementation mechanisms to see whether these meet GEF / UNDP standards and whether project planning, monitoring and evaluation have supported adaptive, results-based management, towards the achievement of intended development results. It examines project implementation modalities, including the quality of day to day management, reporting and strategic oversight, cost effectiveness and financial planning and the quality of monitoring and evaluation to support results-based, adaptive management. Ratings are required by GEF on the quality of 'Implementing' and 'Executing' Agency performance. A specific rating is also required on the quality of monitoring and evaluation.
- 280.Within the Makgadikgadi SLM Project Document there is some confusion over GEF definitions of 'implementing and executing agencies<sup>52</sup>'. To ensure use of terms in this TE report is clear, the GEF definition is used:
  - The 'Executing Agency' is the partner directly responsible for managing the project: 'executing' project activities, monitoring project progress, managing project staff and funds, and carrying out other project management functions. The Executing Agency for this project is BirdLife Botswana.
  - The 'Implementing Agency' is the organisation ultimately accountable to GEF for effective use of funds to achieve the Outcomes agreed in the Project Document: responsibilities include ensuring fiduciary standards are applied and providing strategic oversight of project implementation, including the quality of monitoring and evaluation. The Implementing Agency acts on behalf of the GEF to ensure the project works to deliver global environmental benefits. The Implementing Agency for this project is UNDP Botswana Country Office.

#### **Project Execution and Implementation Modalities**

- 281. The project was implemented between 2014 and 2017 by BirdLife Botswana under the NGO modality, on behalf of the Government of Botswana's Ministry of Environment, Natural Resources and Tourism (MENT). It was a medium sized project with core funds of US\$ 792,832.00 provided by the GEF through UNDP Botswana, and with national co-financing of US\$ 6,570,000.00 (cash and in-kind) and from UNDP of US\$225,000. The lead national partner agency was the Department of Forestry and Range Resources (DFRR) as the statutory agency responsible for rangelands in Botswana, with the Department of Environmental Affairs (DEA) as the GEF focal point and lead agency for the Convention on Biological Diversity (CBD). As the Executing Agency, BirdLife Botswana were accountable to UNDP and the PSC for the effective delivery of project Outputs and ultimately Outcomes.
- 282.UNDP were the overall Implementing Agency for the project and throughout project implementation provided valuable strategic guidance and support. As Implementing Agency UNDP are accountable to GEF for ensuring that funds are used as agreed in the Project Document, to achieve the development Outcomes and Objective specified. UNDP CO participated in all PSC meetings, facilitating discussions and providing strategic guidance across a wide range of areas, including on GEF Land Degradation focal area strategic objectives. UNDP remained closely engaged in the project throughout its three-year lifespan and provided valuable support to the Project Manager whenever requested, including guidance on GEF / UNDP reporting requirements and formats, and specific training by the RTA on results-based reporting. UNDP CO also provided relevant training to the project team and partner agencies on gender mainstreaming, environmental compliance, and financial

<sup>&</sup>lt;sup>52</sup> Within the Project Document BLB are sometimes referred to as the Implementing Partner and in some cases the Implementing Agency. In GEF terminology they would be termed the Executing Agency. The TE has used the official GEF terminology to ensure it is clear to GEF and to ensure consistency with other project evaluation reports.

management. In addition to specific training, the feedback and recommendations provided by the CO and RTA in annual PIR reports provides valuable guidance and was used by the Project Manager to strengthen project execution.

- 283. The project office was opened in 2014 in Letlhakane. PMU staff were members of BirdLife Botswana (BLB) and comprised a Project Manager, Assistant and Accountant. The Director of BirdLife Botswana was the overall Project Coordinator, based in BLB headquarters in Gabarone. Dedicated office equipment was purchased along with a project vehicle.
- 284.BLB is a membership-based conservation NGO which focuses on bird conservation; a core part of their work involves the conservation and sustainable management of habitats important for birds. Established in 1980, BLB affiliated with Birdlife International in 2000. The Makgadikgadi area, in particular the internationally recognised 'important bird area' (IBA) within the Southern Sua Pan, contains key habitats for a range of rare and endangered species. Achieving sustainable land management within the Makgadikgadi rangelands aligns with the core objectives of BLB.
- 285. Strategic oversight of the Makgadikgadi SLM project was undertaken by a Project Steering Committee (PSC), chaired by the Deputy Permanent Secretary of the Ministry of Environment, Natural Resources and Tourism (MENT). Membership of the PSC included the Department of Forestry and Range Resources (DFRR) Director, Chief Forest and Range Resources Officer and District Coordinator, Department of Environmental Affairs (DEA) Director and District Environmental Coordinator, Department of Wildlife and National Parks (DWNP) Regional Wildlife Coordinator, Ministry of Agricultural Development and Food Security (MoA) Regional Agriculture Coordinator, Department of Animal Production (DAP) Chief Scientific Officer, Department of Crop Production (DCP) Chief Scientific Officer, Deputy District Commissioner Boteti-sub District, Council Secretary (Boteti), Sub-Land Board Secretary (Letlhakane), Department of Town and Country Planning (DTCP), Makgadikgadi Wetlands Management Committee Chairman, UNDP and BirdLife Botswana. The first PSC meeting was held in April 2015, in Letlhakane and this group subsequently met quarterly. The PSC was well attended throughout project implementation and provided sound strategic guidance, supporting the PMU to establish a results-based approach to its work and to achieve cost-effectiveness. The PSC provided advice on relevant policies, strategies and initiatives. It reviewed and assessed guarterly work plans, budgets and progress reports, and was responsible for approving annual work plans and budgets. It also reviewed and approved key documents and Terms of Reference (TOR), and provided guidance on a range of challenges and externalities that the project encountered during its three-year implementation period.
- 286.At the local level a Technical Reference Group (TRG) was established in Letlhakane to provide guidance to the PMU and to support co-ordination and collaboration between project stakeholders. The TRG involved all key stakeholders and was an important forum for planning and decision making at the local level. The key responsibilities of the TRG were to facilitate work on the ground, provide guidance and information, review technical and quarterly/annual project progress reports before they are forwarded for endorsement by the PSC and to provide technical input to, and approval of, key documents including the Land Use Plans and associated studies and reports, consultants TOR and the SSP Fire Management Strategy. The TRG met quarterly prior the PSC meetings. Members of the TRG included: DFRR and DWNP heads of station (LetIhakane); DWNP Regional Wildlife Coordinator, DEA District Environmental Coordinator and MFMP Desk Officer, DFRR; Botswana Tourism Organization (BTO), Department of Tourism (DOT), Department of Animal Production (DAP), Department of Crop Production (DCP), Department of Veterinary Services (DVS) and Department of Agri-Business, Boteti Famers Association, Letlhakane Sub Land Board; Boteti Technical Advisory Committee Chair and secretary; Boteti Sub-DLUPU Chair and Secretary; one representative each from Deputy District Commissioner's office, Council Secretary's office, and Tribal Admin; one representative from each of the four villages at the project site, i.e. Mmatshumo, Mosu, Mmea and Mokubilo, these being the members of the Makgadikgadi Wetlands Management

Committee (MWMC) from each village; one representative from each of the Community Trusts in the four villages; and members of the two livestock associations (Boteti Beef Farmers Association and Tikologo Small Stock Farmers). The mining companies Debswana and BotAsh were also members of the TRG although these companies participated less than the other key stakeholder groups as they were not directly involved in project implementation. The first meeting of the TRG was in March 2015 in Letlhakane and they subsequently met quarterly throughout project implementation. TRG meetings were well attended and were an important forum for stakeholder collaboration and coordination. All key stakeholder groups were actively involved throughout the project and provided core guidance and inputs to support the achievement of results.

- 287. The MFMP Natural Resources Thematic Working Group (MFMP-NRTWG), chaired by the DWNP Regional Wildlife Coordinator, was another technical advisory forum linked in to the project. The role of this group was to provide advice at the wider Makgadikgadi regional level. An already existing group established to support implementation of the Makgadikgadi Framework Management Plan (MFMP), it was agreed at project start that the MFMP-NRTWG would meet 'as and when required, to review scientific deliverables and consultancies commissioned by the SLM Makgadikgadi project'. In order to limit costs and time input required by MFMP-NRTWG members the main mechanism for communication with was agreed to be via email. This was a sensible level of engagement for the MFMP-NRTWG. Public sector agencies and NRM groups often get overrun with demands to attend meetings and the decision to keep this group well informed and request their input when needed was entirely appropriate.
- 288.At the community level the project worked directly with Kgosi as the traditional authority and with all relevant CBOs, including farmers associations and community trusts. It worked to raise the capacity of existing CBOs and farmers organisations and to establish a new SSP fire management committee. The project also supported the re-establishment of two livestock farmers associations, the Boteti Beef Farmers Association and Tikologo Small Stock Farmers Association, with which it worked closely. At the regional level the project engaged with communities on SLM issues through forum of the Makgadikgadi Wetlands Management Committee (MWMC) and supported communities to attend MWMC meetings.
- 289. Lead public-sector agency partners providing active support 'on the ground' within the SSP pilot area included the: Department of Forestry and Range Resources (DFRR), Department of Animal Production (DAP), Department of Crop production (DCP) and Department of Veterinary Services (DVS). These agencies worked to execute many core project activities. Although not originally recognised as a lead partner within the Project Document, the Department of Town and Country Planning (DTCP) provided core support for the development of land-use plans working closely with local land-use planning agencies including the Land Board and Physical Planning Unit. The Department of Environmental Affairs (DEA) provided strategic guidance and support as the chair of the Makgadikgadi Wetlands Committee, member of the TRG and PSC and national GEF focal point. The project encouraged leadership and engagement from public-sector partner agencies from the start and the inception workshop and TRG and PSC meetings all included presentations from lead agencies<sup>53</sup>. The inception workshop confirmed their roles in and support for the project and outlined the strategic links between the project and departmental objectives. All key partners agencies provided valuable support and leadership throughout project implementation, working closely with the PMU. At TRG and PSC meetings partners provided regular updates on project progress, and the project also incorporated reporting on, and discussion of, project related issues within sub-DLUPU meetings, to ensure broad public sector engagement in and support for project related issues and results.

<sup>&</sup>lt;sup>53</sup> presentations were given by DFRR, DEA, DCP and a representative of the MFMP

#### Project Inception

- 290. The project inception workshop was held in Letlhakane on 5th March 2015, attended by over 50 participants. Facilitated by BirdLife Botswana and the Department of Environmental Affairs (DEA), with UNDP engagement and support, the workshop brought together all key project stakeholders including public sector agencies, NGOs, community leaders, farmers and community-based associations, parastatals, representatives of the business community and the University of Botswana Okavango Research Institute. The purpose of the inception workshop was cited as being threefold to: (i) mark the commencement of the project; (ii) confirm the project scope, partners and their support; (iii) validate the intended project results, partnerships, strategy and implementation arrangements. It provided the opportunity to ensure all key stakeholder groups fully understood the rationale, approach and intended results to be achieved through the project. Three national partner agencies gave presentations including representatives from: The Department of Forestry and Range Resources (DFRR) who outlined 'Key rangeland issues and challenges in Makgadikgadi'; the Department of Animal Production who gave a presentation on 'Key livestock management issues and challenges in Makgadikgadi' and the Department of Crop Production (DCP) on 'Key crop management issues and challenges in Makgadikgadi'. The presentations were then followed by facilitated discussion amongst participants on the issues raised and opportunities offered by the project to address them. The workshop supported discussion on stakeholder roles, responsibilities and anticipated benefits from the project. There was no specific discussion on how the project would ensure that the different needs and issues faced by men and women would be considered and addressed within project implementation, nor on how to monitor and measure different gender impacts of project support. The lack of any formal consideration of gender mainstreaming at project inception reflects the lack of a clearly defined strategy, and the lack of sex disaggregated indicators and targets, within the Project Document<sup>54</sup>. A brief presentation on the standard UNDP/GEF monitoring and evaluation procedures and plan as it was laid out in the Project Document was presented by the Project Manager, however the inception workshop did not review the baseline data, OVIs, Targets and risks within the project Results Framework or develop a detailed monitoring strategy/plan to guide stakeholder involvement in data collection, to support monitoring and evaluation.
- 291. The project inception report was circulated to partners following the workshop and provides a summary of the workshop objectives, activities, conclusions and next steps. It outlines the agreed workplan, budget and the 'monitoring and evaluation plan' as it was laid out in the Project Document. Key next steps that were agreed at the meeting included producing outreach material and visiting Southern Sua Pan villages to inform them of the project and opportunities for engagement, alongside briefing of local authorities including DLUPU, TAC, DDC, MP, Councillors, Dikgosi, and Tribal Administration. The workshop also agreed that the PMU and partners should start work on all activities that do not need PSC endorsement 'with immediate effect' recognising the limited three year project implementation timeframe.

### Quality of Project Management and Reporting

- 292. The Project Management Unit (PMU) operated from Letlhakane coordinating implementation of the project on a day-to-day basis. The PMU consisted of the Project Coordinator, also Director of BirdLife Botswana, a Project Manager, Administration Officer and an accountant, all of whom were employed by BirdLife Botswana.
- 293. The Project Manager was responsible for overall management of the project including supervision of the PMU, consultants and sub-contractors, reporting and ongoing monitoring.

<sup>&</sup>lt;sup>54</sup> Although not formalised in any structured way, it should be noted however that the important issue of gender, and in particular the challenges faced by women in agriculture were considered within project implementation. The weakness within project design, inception and monitoring was that this was not clearly defined or captured in any way.

He also played a key role in facilitating partnerships with lead agencies and stakeholders and in raising awareness on the project and issues that it sought to address. The Project Manager reported to the Project Coordinator, Technical Reference Group<sup>55</sup> and ultimately the Project Steering Committee. He worked closely with the TRG in the planning and monitoring of project activities. The focus and clarity of reporting by the Project Manager strengthened throughout project implementation and provided a sound basis to support results-based management.

- 294. The PMU produced Quarterly Progress Reports, these were presented by the Project Manager to the TRG and PSC and formed the basis of discussions on project progress and forward planning. Once approved by both groups, the reports were sent to MFMP-NRTWG to keep them informed of project progress. During the first year of project implementation quarterly reports were text-based PDF reports which gave an overall outline of the project purpose, scope and governance structure, followed by progress reporting against each of the Outputs. The reports also include an outline of project expenditure during the quarter and an outline of the overall financial plan for the year. During the first year of implementation, quarterly reporting also included a section on co-financing, although no data was provided, the entries simply record that these amounts are 'to be determined'.
- 295. In mid-2016, the PSC approved the use of a standard reporting format for all GEF-financed projects in the country, as a mechanism to improve and standardise results-based reporting. Following this decision in 2016, quarterly progress reporting for the SLM project changed to a more visual power-point presentation format. The presentations provide a brief summary of project delivery over the quarter, including both financial and narrative reporting. Financial analysis is presented within the power-point reports against each of the Outputs, using the Output numbering as it is presented in the project strategy<sup>56</sup>. The progress reporting in the power-point reports shows only the status of progress, whether it is 'on track' or 'delayed'. The presentations lack the narrative on project progress provided in the quarterly progress reports in year 1. However, reports from TRG and PSC meetings demonstrate that further detail on activities undertaken and issues faced by the project was provided by the Project Manager at these meetings, and that subsequent discussions by TRG and PSC members provided valuable input and guidance to support project implementation. The format of reporting within the quarterly power-point progress reports included the following:
  - An overall outline of project expenditure per quarter for the year to date, against the budget allocated in the annual plan, indicating also the target amount for that quarter as it had been agreed in the annual plan, and a current financial 'delivery rate'. This overall expenditure / budget information was also presented graphically in a pie and bar chart.
  - A detailed overview of expenditure per Output, again showing annual budget, expenditure and delivery rate.
  - An 'Integrated Narrative and Delivery Report' which shows key results /milestones achieved during the reporting period. This lists key activities over the quarter, against relevant targets and baseline information. A rating is given by the project manager as to the extent to which related Output deliverables are 'on track' or 'delayed', but no narrative is provided.
  - The Project Manager then provides a descriptive assessment of 'challenges, opportunities and lessons learnt' by the project over the quarter.
- 296. Following the mid-term review quarterly powerpoint presentations also reported back on the 11 core recommendations of the MTR, showing the 'status' of progress against each recommendation. In the final year of project implementation, progress reporting was

<sup>&</sup>lt;sup>55</sup> In the Project Document this structure is referred to as the Project Advisory Committee (PAC)

<sup>&</sup>lt;sup>56</sup> This difers fom the numbering of Outcomes in PIR reports, reflecting the confusion created by inverted numbering between the project strategy description and the Results Framework within the Project Document.

strengthened further, based on the development by the project of a results-based workplan which allocated key indicators and targets to Outputs, with subdivision of several of the Outputs into component products / results.<sup>57</sup>

- 297.At the end of each year the Project Manager/ PMU produced a Project Implementation Review /Annual Project Review, following the procedures and format required by UNDP/GEF projects. Reporting within PIR is based on the Project Results Framework, following standard UNDP/GEF PIR structure. This includes assessment of progress made over the year towards the project Objective and Outcomes against each of the OVIs and Targets. Reporting follows the structure given within the Project Document Results Framework: the reference to Outcomes 1 and 2 is therefore the inverse of the referencing given in quarterly progress reports, and no Outputs are included. PIR also include a cumulative expenditure report which provides a breakdown of project expenditure over the year. No data is provided on cofinancing. Project quality assurance assessments and rating of project performance by the Project Coordinator, UNDP Country Office and UNDP Regional Office were provided each year within PIR. The lead Project Implementing Partners, including the GEF Focal Point should also provide assessment and ratings, however their input was only provided in the final year of project implementation.
- 298. The PIR report format also includes assessment of project progress in: 'advancing gender equality and women's' empowerment', 'communication', 'partnership', 'social and environmental grievances' and 'critical risk management'. During the first two years of project implementation there was no assessment of project support for 'gender equality', the entry is merely that this 'will be carried out in the future', nor of 'environmental and social grievances' In the final year of project implementation a brief entry records that no formal gender assessment has been carried out but that the project has considered the different needs of men and women and ensured that both are addressed and that women actively participate and benefit from the project. The 2017 PIR includes assessment of 'environmental and social grievances' and how these have affected project implementation, highlighting lessons learnt.
- 299. The Project Manager also prepared meeting minutes following each of the TRG and PSC meetings. These are informative and clear reports highlighting key elements of presentations, discussions, comments, conclusions and recommendations moving forward. They provide an important record of TRG and PSC guidance and agreements.
- 300.Overall, reporting under the project provides an informative assessment of project progress and of the core issues affecting project implementation. Progress and PIR reports when read alongside the minutes of PSC and TRG meetings, demonstrate sound assessment and progress monitoring all levels.
- 301. The errors and inconsistencies in the Project Document<sup>58</sup>, however, resulted in a level of confusion and inconsistency within report referencing. Annual Project Implementation Reviews (PIR) are based on the Results Framework. As discussed in section 3.1, the Results Framework inverts the numbering used throughout the core of the Project Document, numbering Outcome 1 as 2 and vica-versa. It also gives different wording for the Outcome 1 statement to that in the core of the project strategy. Quarterly Progress Reports use the Outcome 1 and 2 referencing as it is given in the core of the project strategy (ie the opposite numbering to that in the Results Framework). In implementing the project, the PMU and all partners followed the core logic and Outcome/Output referencing as it is outlined in the project strategy and hence progress reporting reflects this. Within quarterly progress reporting, references to Outcome 1 are somewhat confused (reflecting the lack of clarity in the Project Document). In the first two years of project implementation some reports give no reference to

<sup>&</sup>lt;sup>57</sup> The workplan built on the MTR recommendation that the project should develop an evidence based workplan and milestone linked to Outcomes and Outputs, assessed quarterly.

<sup>&</sup>lt;sup>58</sup> As discussed in section 3.1 of this TE report the description and referencing in the core of the project strategy is the opposite to the references and numbering given in the Project Results Framework<sup>2</sup>
Outcome statements at all, others use Outcome 2 wording for both Outcomes. In the final year of project implementation, Progress Reports use the project title, not the Outcome 1 statement. Although Outcome wording in Progress Reports is incorrect and inconsistent, it does not affect the core of the analysis within Progress Reports which is focussed at the Output level. The inconsistency and errors in Outcome reporting do not appear to have been picked up by UNDP or any partners throughout the project implementation period.

Stakeholder Engagement: Consultation, Communication and Partnership

- 302. The project fostered strong partnership with all key stakeholder groups; consultation and stakeholder engagement lay at the heart of the project's modus operandi and its effectiveness in achieving results can be seen to be closely tied to the good working relationships and commitment fostered with all partners.
- 303. The local level Technical Reference Group (TRG) involved all key stakeholder groups with representatives from communities, farmers associations, government departments, planning agencies and the private sector. It provided an important forum for stakeholders to work together to plan, monitor and co-ordinate project activities and review progress towards results results. The TRG were a committed group, providing sound advice and support across all areas of project engagement. The project manager and lead government agencies provided good leadership, ensuring the TRG maintained its focus on project outputs and facilitating stakeholder involvement.
- 304. The project worked hard to facilitate integrated engagement by all departments and to overcome challenges. Challenges included trying to integrate the support of agencies in the project, when many had different strategic priorities and work plans which did not specifically incorporate support for project related activities. Frequent change-over of staff within government departments at the local level was another challenge as this disrupted the momentum of project support. Each time staff changed this required re-briefing by the Project Manager and re-engagement of new officers with other partners and stakeholder groups. The Project Manager worked extremely hard to maintain the momentum of project support and facilitate the engagement of, and partnership between, all key groups, with remarkable success.
- 305. The project established an effective system of regular briefing and updates on project progress by key partners and the Project Manager at all district decision making and advisory structures, including the sub-District Land Use Planning Unit (Sub-DLUPU); Physical Planning Committee (PPC) and Technical Advisory Committee (TAC). Presentations by leading government partners within these meetings helped to entrench their ownership of core results and reflected their lead responsibility for the delivery of actions and results. This will help to facilitate the integration of approaches developed through the project into departmental work plans and strategies, internalise experience and lessons learnt, and therefore increase the likelihood of on-going support and engagement in SLM approaches following project end.
- 306.Key partners within government agencies led relevant components of the project, and the project helped to facilitate a good inter-sectoral and inter-stakeholder collaborative approach.
  - The Department of Forestry and Range Resources (DFRR) took the lead in project support for improved fire management, sustainable harvesting of veld products, rangeland monitoring and mapping and provided valuable inputs to land use planning and overall guidance on sustainable rangeland management and governance.
  - The Department of Crop Production (DCP) led project support for Conservation Agriculture, through training and awareness raising, with their extension services providing direct on-farm support for piloting of CA approaches. They directly supported baseline data collection on production levels and types of farming and the socio-economic status of farming households, and provided valuable support for monitoring of production and

yields. DCP also provided guidance, data and support for development of the land use plans.

- The Department of Animal Production (DAP) led project support for more sustainable livestock production through awareness raising workshops, field days and training of farmers on livestock husbandry as well as direct support for livestock associations. It also supported monitoring to enable the project to measure improved herd management and cattle off-take.
- The Department of Veterinary Services (DVS) provided training to individual livestock farmers on effective herd management and supported data collection and research.
- The Department of Environmental Affairs (DEA) provided strategic oversight and advice on all issues linked to environmental sustainability and on alignment with relevant regulations and policies. This included key advice on strategic environmental assessment (SEA) and its integration within land-use planning.
- The Department of Town and Country Planning (DTCP) provided core support for development of the land use management plans and key guidance on the alignment of the LUMPs with broader strategic planning documents and processes. They worked closely with the Sub-Council Physical Planning Unit (PPU) who provided key support for the preparation of land-use plans for the four villages and with the Letlhakane Sub-Land Board.
- Alongside core input to the land use plans the Letlhakane Sub-Land Board and the Sub-Council Physical Planning Unit (PPU) also worked closely with key partners to identify key land use planning information needs to support development of the land-use conflict information system (LUCIS).
- 307. The project also fostered strong partnerships with community associations, trusts, and with individual farmers piloting new techniques through the project. It worked extremely hard to ensure that communities were directly and meaningfully engaged at all levels. Community representatives and associations participated actively in the TRG and provided valuable input and advice. The TRG provided an important platform for representatives from all of the villages in the SSP pilot area to come together to discuss issues and plan action with relevant public sector agencies. The project also facilitated community participation in the Makgadikgadi Wetlands Committee, supporting community representatives from across the Makgadikgadi region to participate in meetings and events. Within the pilot villages in the Southern Sua Pan, the project worked directly with the Kgosi (traditional leaders) of each community and with community trusts, including the Gumakutshaa Conservation Trust, representing the three villages of Mmatshumo, Mokubilo and Mmea and the Gaing-O Conservation Trust representing Mmatshumo Village. Direct support was also provided by the project to Karakatea Farmers Association and to two livestock associations (Boteti Beef Farmers association and Tikologo Small Stock Association) as well as to the Mosu Small Stock farm, a community farming initiative which had been initiated under an earlier Debswana funded project.
- 308. Given the limited funds and short project timeframe the TRG identified the need to identify cost effective and efficient methods for engaging with communities in the SSP pilot area. The TRG decided that the best approach would be to identify a lead village for each core area of project support under Outcome 1 and to focus training and capacity building in that village, with other villages supported to attend. This approach had the beneficial impact of establishing 'flagship' communities for key areas of project intervention, whilst also supporting all villages to come together to achieve results and share learning on a broad range of interrelated SLM issues. The lead village for conservation agriculture was Mokubilo, for sustainable livestock management Mosu, sustainable use of veldt products Mmea and for fire management Mmatshumo.

- 309. The project did not have a clear strategy for achieving gender equality. There was also no clear monitoring of sex disaggregated indicators to enable assessment of the gender impacts of project support, nor for assessment of the level of involvement of women in decision making. This was a key area of weakness within the overall project implementation strategy. This weakness again reflects weaknesses in project design in that the Project Document does not establish an approach or strategy for ensuring gender equality and the Results Framework does not incorporate sex disaggregated indicators or targets. Although there was no structured approach for supporting gender equality or for assessment of gender related impacts, it is clear from discussions with stakeholders and from meeting reports that both the PMU and the TRG did internalise consideration of gender issues in the delivery of support to beneficiaries, in particular in providing support for Conservation Agriculture, given the core role of women in arable farming.
- 310.A number of private sector companies are engaged in providing support for livelihood or sustainable development initiatives in the region, in particular linked in to the Makgadikgadi Framework Management Plan and its associated structures. BirdLife Botswana has good working relationships with some private sector companies which it has engaged in providing support for biodiversity conservation and sustainable livelihood initiatives. The project kept these groups informed of project progress and investigated opportunities for private sector support following project end. The Debswana Diamond Company and BotAsh mine are actively engaged in providing support for community projects in the region and BirdLife Botswana has provided support to assess opportunities for engaging these companies and to support communities to link in to available financial support. The tourism companies 'Unchartered Africa' and 'Makgadikgadi Lodge' have facilities in the Makgadikgadi region and are members of the Makgadikgadi Wetland Management Committee (MWMC).
- 311. The project established links with other relevant initiatives including two projects funded by the GEF SGP in the Makgadikgadi area and with other full-sized projects funded by GEF in Botswana including the Sustainable Land Management initiative in Ngamiland.
- 312.Consultation was core to all areas of project support and the PMU and partners used a diverse range of approaches to engage with all relevant groups and initiatives. Direct communication by the project with all partners helped ensure that the different needs, aspirations and strategic priorities of different groups were understood, and to raise awareness on the project, the core issues it aimed to address and the anticipated results. The Project Manager worked extremely hard to communicate directly with all key groups, at all levels, organising meetings to brief counterparts in government departments, liaising directly with community associations and Kgosi to establish a direct working rapport, facilitating meetings and taking a pro-active approach to address issues. This ongoing personal communication and discussion was core to the partnerships established and the extent to which all partners engaged in and supported the project. Clear reporting and facilitated discussion within TRG and PSC meetings also helped to ensure that there was a clear understanding of issues and project progress amongst partners, to support informed decision making. Awareness raising was also core to project communication. At project inception brochures and posters were produced and distributed. In the second year of implementation the project used wall murals within villages as an effective approach to raise awareness on fire safety and management. Communities commented that this was a more effective method of getting communities to take note of issues, than brochures or leaflets; the murals stay there for a long time are eye catching and the slogans written on them stick in peoples' minds; when combined with project support and awareness raising this helps to change behaviour. For the first year and a half of implementation the project did not have a communication strategy. The mid-term review (MTR) picked up on this and a strategy was developed following the MTR. This helped to better structure communication mechanisms within the overall project implementation strategy.

#### **Financial Management and Cost Effectiveness**

- 313.Executed through the NGO modality, BirdLife Botswana were responsible for financial reporting to UNDP and the PSC. The project followed the financial management structure laid out in the Project Document which prioritised the Direct Cash Transfer process. The PSC approved all annual expenditure, based on the annual work programme and budget prepared by the PMU at the end of each year, and on review of results achieved and budget expenditure over the previous year.
- 314.Annual Financial Audits were undertaken at the beginning of each financial year and the Project Manager provided financial updates to the PSC each quarter, within Progress Reports enabling them to track expenditure over the year<sup>59</sup>. Reporting each quarter on past and planned expenditure was clear and accurate and the information contained in these reports and associated discussion at PSC meetings provided the basis for strategic oversight of project disbursements. It is clear from PSC meeting reports that on numerous occasions they provided valuable advice to increase the cost effectiveness of project support. The Project Manager provided the following graphical breakdown of expenditure over the life of the project and this has been validated by the TE.



Graph 1: Spending levels per year over the life of the project in Botswanan Pula

315. The Project Document allowed for the following budget:

- Outcome 1 total budget US\$457,000 (comprising: Output 1.1 US\$143,00; Output 1.2 US\$225,125; Output 1.3 US\$60,500; Output 1.4 US\$28,375.)
- Outcome 2 total budget US\$298,078 (comprising Output 2.1: US\$79,970; Output 2.2: US\$75,000; Output 2.3: US\$143,108)
- Project Management total budget: US\$37,754 (categorised under 'contractual services; travel; office and furniture'.)
- 316. The following table outlines actual expenditure against that allocated in the Project Document per Outcome and for Project Management.

<sup>&</sup>lt;sup>59</sup> As outlined in the Project Document, changes within the agreed budget for an Output did not require PSC approval, however, changes across Outputs did.

**Table 2:** Overall Planned and Actual Makgadikgadi SLM Budget Expenditure between 2014

 and 2017

Outcome	Total Budget allocated US\$	%	Actual Expenditure	%	% Difference
Outcome 1.	US\$457,000	57.64%	US\$344,723.36	43.48%	- 14.16
Outcome 2.	US\$298,078	37.60%	US\$254,261.22	32.07%	- 5.6
Project Management	US\$37,754	4.76%	US\$193,847.42	24.45%	+19.69
Totals	US\$792,832	100%	US\$792,832	100%	

- 317. There is no evidence of tracking by the PSC of expenditure levels per Outcome / for Project Management, relative to the budgets allocated in the Project Document or that they considered and assessed the deviation between allocated and actual expenditure as part of annual decision making and approval of the budget. This is a weakness in PSC and in particular UNDP CO financial oversight of the project and as can be seen above there has been significant over expenditure on Project Management and significant under expenditure on Outcome 1. Under GEF regulations a 10% flexibility between intended and actual Outcome expenditure is acceptable. The SLM Makgadikgadi project is 19.7% over-spent on Project Management, 14% under-spent on Outcome 1 and 5.5% under-spent on Outcome 2.
- 318. This is an issue that needs to be addressed in future projects by UNDP CO. Each year, when approving the annual work and financial plan, the PMU and PSC should assess the level of actual/proposed expenditure per Outcome and Project Management, relative to that allocated in the Project Document. Where there is significant over or under expenditure, the PSC should assess why this is the case and provide clear guidance to the Executing Agency and partners on how to keep expenditure within the 10% flexibility that is acceptable to the GEF. If it is necessary to allocate more than a 10% increase or decrease in expenditure per Outcome / for Project Management, then there needs to be a clear explanation within project reporting, including PSC meeting reports, as to why this is the case and how the decision was made to allow it. UNDP CO, as the agency that is ultimately accountable to the GEF Council for ensuring that the project works to deliver the global environmental benefits outlined in the Project Document, should be able to clearly explain any major difference between 'planned' (in the Project Document) and actual expenditure per Outcome / for Project Management; major differences may need approval by the GEF.
- 319. The deviation from budget allocations given in the Project Document appears to have been largely due to the impact of a number of unforeseen events and processes which required extra investment by the PMU to maintain project momentum and achieve intended results. As will be seen in the assessment of results achieved through the project, the PMU had to adapt to a wide range of 'externalities' such as the establishment of an additional village, frequent turn-over of staff in Government departments, changes in national policies and the need for incorporation of strategic environmental assessment within the land-use planning process. This required extra time and resource inputs by the PMU, which were not envisaged in the original budget. The under-expenditure across both of the project Outcomes largely reflects the leveraging of additional resources by the project and effective cost saving measures including development of the land-use plans due to 'in-house' through support from DTCP. It may also reflect less investment than was originally planned in undertaking rangeland assessments and monitoring activities under Output 2.3. The over expenditure on Project Management also reflects some core costs being higher than anticipated in design including the rental cost for the Letlhakane office which was significantly more than was allocated in the ProDoc and the salaries paid to the Project Manager and accountant being higher than the US\$8k/year allocated in the ProDoc. The benefits of a local office, easily accessible to project stakeholders, and a skilled and committed project management team are evident in the

analysis of results achieved and the TE would comment that the additional Project Management expense was justifiable.

- 320.Although the deviation from allocated budgets reflects a certain level of weakness in financial oversight of the project, overall the project sought to achieve cost efficient and effective management and was able to achieve significant results within the project's financial and time constraints. This was remarkable given the number of externalities which affected project implementation. The PMU's core focus on facilitating partnership and collective responsibility in itself supported cost efficiency on many levels: partners contributed time and resources, their commitment and understanding led to more effective and efficient actions, and issues were overcome through discussion, finding solutions to logistical or financial barriers.
- 321. The project's approach to awareness raising is another example of the use of a well targeted and cost-effective support. The PMU maintained ongoing dialogue with all partners throughout project implementation, constantly raising awareness on key SLM issues and potential solutions. Awareness raising was tied directly in to action to address issues of importance to varying stakeholder groups, increasing both the effectiveness and cost efficiency of project support. The project also used innovative awareness raising techniques such as the use of local artists to paint village murals with key fire-awareness messages. This was a more cost efficient and high impact way to get the message across to communities than the standard approach of producing brochures, reports and posters.
- 322. The project also appears to have struck a sensible balance in decision making on the level and type of equipment to be provided under the project, providing essential equipment to support effective implementation, whilst maintaining the core focus on cost-effectiveness for the achievement of strategic results. The PMU discussed directly with project partners including farmers to ensure decisions were well informed and explained.
- 323. The PSC provided insightful guidance, recognising that donor supported projects are often overwhelmed by requests for equipment from national partners at all levels, and that this can have a negative impact both on partnership within a project and on the finances available to support the achievement of intended results. In the first year of project implementation the PSC advised the PMU that when it came to equipment it was better for the SLM project to 'under promise and over deliver than over promise and under deliver'.<sup>60</sup> In response to requests from national partners for the purchase of tractors and vehicles, the PSC decided that these should not be approved under the SLM Makgadikgadi project due to the fact that they were not vital for the achievement of results; limited project funds meant that to do so would jeopardise the achievement of core results. The PSC also advised that other opportunities were available to source this equipment through the Ministry of Agricultural Development (ISPAAD) which has a scheme that enables Departments and farmers to access equipment such as tractors.
- 324.Where additional equipment was required, that the project could not itself provide, PMU/BLB and their partners helped to facilitate access to that equipment through links to other projects or sources of funding.
- 325.BLB as an organisation has a strong focus on cost-effectiveness, thinking 'outside the box' on ways to achieve sustainable financing, both for themselves as an organisation, and for partners at all levels. The organisation does not rely solely on donor and project funding but looks at ways to engage the private sector in sponsorship and support, and at approaches that will enable communities to develop capacity to address issues themselves, establishing self-sufficiency without the need for ongoing external support. Such approaches help to increase the consistency and sustainability of the work BLB undertake. An example of an innovative approach used under the project to help increase cost efficiency, was in linking in

<sup>&</sup>lt;sup>60</sup> PSC meeting second quarter 2016

to a national scheme which trains prisoners to make equipment. The project used this scheme to procure additional fire beaters for the SSP Fire Management Committee at a low cost. The provision of locally made fire beaters also had the added benefit that these were made out of materials that could be easily repaired or replaced locally. To support this, one of the project's partners (Debswana) donated used conveyor belts to make the fire beaters, further improving cost effectiveness.

- 326. The project was subject to one independent audit, completed in March 2017, undertaken by RBM Botswana. This does not provide any analysis as to whether finances are being spent in line with the allocated project budget, as it is outlined in the Project Document, or towards achievement of intended results. It merely assesses whether 'the statement of cash position' is accurate. The Audit concludes that 'in our opinion, the attached statement of expenditure represents fairly, in all material respects, the expenditure incurred...by the project'.
- 327.BirdLife Botswana also audited the project as part of their annual auditing process for all projects they operate, with clean audits throughout project implementation.

### **Co-Financing**

328.Co-financing is core to effective implementation of a project and to the achievement of anticipated results. It comprises project resources that are committed by the Executing Agency, national partner agencies and by other non-GEF sources. Meeting co-financing obligations and reporting on them is part of the legal agreement with GEF.

Co-financing Category	Name of co-financier	Туре	Amount \$
Multi-lateral	UNDP	Cash	225 000
Bilateral	Japan International Cooperation Agency (JICA)	Cash	150 000
National Government	Department of Forestry and Range Resources (DFRR)	Cash	2 000 000
National Government	Department of Environmental Affairs	Cash	1 500 000
National Government	Department of Animal Production	Cash	500 000
National Government	Department of National Museum and Monuments	Cash	50 000
National Government	Boteti sub-district Council	In kind	200 000
Private	Botswana Ash Pty Ltd	Cash	280 000
Civil Society Organisation	BirdLife Botswana	Cash	1 440 000
Civil society organisation	Gaingo-O Community Trust	Cash	150 000
National Government	Letlhakane Sub-Land Board	Cash	150 000
Civil society organisation	Gumakutshaa Conservation Trust	In kind	150 000
Total Co-financing			6 795 000

329.Co-financing pledged for the Makgadikgadi project in the Project Document comprised of:

- 330. Tracking of co-financing including both 'cash' and 'in-kind' co-financing should be established from project start and reported on annually. The project inception workshop should provide the forum at which co-financing partners re-affirm their commitments and at which a system for sourcing and recording co-financing contributions throughout project implementation is agreed. This system should involve recording by both national partner agencies and the PMU and should enable both the PMU and PSC to monitor the extent to which the contributions pledged by key partners in the Project Document have actually been committed to the project. It is a key part of monitoring the cost effectiveness of project implementation.
- 331. The need to establish co-financing at the start of the project was in fact noted in the project's first meeting of the technical reference group (TRG), the report of which notes that: 'co-finances have to be captured right from the onset. There is also a need to discuss how this will be reported.' The issue was referred to the PSC for discussion and finalisation. However, no system for recording and reporting on co-financing was established under the project.

- 332. The MTR raised the concern that no co-financing data was recorded and no system for recording co-financing had been established; following the MTR, the PSC requested DEA, as the GEF Focal Point, to collate co-financing data for the project. However, this was not undertaken and the Special PSC meeting called on the 14th February 2018 notes that 'To track core financing from different departments by DEA was not accomplished due to time consumption when gathering information from different departments. They apologized for the delay since the due date was not met.' During consultations by the TE, DEA and UNDP CO confirmed that there has been no assessment of co-financing contributions over the life of the project and no data is available. UNDP CO clarified that the UNDP co-financing contribution was through oversight, strategic monitoring and training rather than through any cash injection in to the project, but that this contribution has not been quantified. BLB indicated that it was likely that JICA have met their co-financing obligations because they attached a JICA volunteer to BLB from 2014 to 2016, covering his salary, living costs and travel; the JICA co-financing specified in the ProDoc was based on the estimated cost of assignment of a JICA volunteer to BLB.
- 333.It should be noted here that the failure to record co-financing is not a specific weakness of this project but appears to be a problem generic across UNDP/GEF projects in Botswana; both DEA and UNDP CO stated to the TE that there is as yet no national system or framework for recording co-financing, but that DEA are working to develop such a framework. There is an urgent need for UNDP CO and DEA, as the national GEF focal point, to work together to establish a system for recording co-financing.
- 334.BirdLife Botswana have provided the feedback on the draft TE report that: 'JICA met their obligations because they attached a JICA volunteer (Mr Shougo Moroishi, working on Ecotourism) with BirdLife Botswana from 2014 to 2016. JICA directly covered all his salaries + living costs (+ travel costs from Japan to Botswana), and so we can assume that they met the US\$150,000 target --- this figure was based on an estimate given to us by someone managing the JICA scheme as an estimate of how much it costs them to assign a JICA specialist of the calibre attached to BirdLife (i.e. a degree holder).'

#### Leveraged Resources

- 335.Resources which are not committed as part of the financing package agreed in the Project Document but which are mobilized subsequently, are not considered by GEF to be 'cofinance' but resources 'leveraged' during project implementation. These resources should also be tracked and recorded. The project successfully leveraged additional financing across a number of areas, the following examples highlight this.
- 336. One example of the way in which the project leveraged additional support was in the solution found to include strategic environmental assessment (SEA) within development of the landuse plans. The Project Document had not included SEA as part of the land-use planning process and therefore the budget was not available to commission one. However, SEA is a regulatory requirement within land use planning in Botswana and is core to sustainable land use planning and management; it was vital that the project found a way to incorporate SEA and this required additional financial resources. The PSC worked hard to try to find a solution but national funding and support was not forthcoming. The solution was identified by BLB which contacted its international network through Birdlife International and sourced expertise from the UK Royal Society for the Protection of Birds (RSPB) to undertake this work. Support was provided through Birdlife International and as such it came at a low cost to the project. The project also faced a shortfall in the budget available to cover the cost of a land-use planning expert, to lead design of the SSP land-use management plans. The project was unable to identify a consultant willing to take on this work within the budget allocated in the Project Document, all bids were at least twice the amount available. The PSC therefore decided that the work should be done 'in-house' and leveraged support through the Department of Town and Country Planning (DTCP) who seconded a land-use planning

specialist to lead the process with a team of local experts. Another example of the way in which the project has helped to leverage additional support was in partnership with DFRR who approached an Australian AID agency funded initiative to request protective clothing for community fire-fighting teams.

- 337. The project also supported community-based organisations to develop project proposals to apply for funding from the GEF SGF, the National Environment Fund (NEF), and to local mining companies. The following proposals have been agreed to:
  - GEF SGP support to the Moreomaoto Conservation trust for environmental education projects involving the establishment of a campsite near the Makgakgadi National Park, associated environmental education support and capacity building. The information provided to the TE is the BWP 385, 220 figure for the grant amount, at today's exchange rate this is approx. US\$ 37,000.
  - GEF SGP support to the Lenao Laga Kwalabe Conservation Trust for establishment of a campsite by lake xau, and for the development of a strategy to strengthen management of bird and fish resources. The information provided to the TE is the BWP 500,000 figure for the grant amount which at today's exchange rate is approx. US\$47,500.
  - National Environment Fund (NEF) support (BWP 860,000 / approx. US\$ 82,000) to the Gumakutshaa Conservation Trust for a project to strengthen management of veld products in the Southern Sua Pan and to tackle erosion at Mosu.
- 338. The project also supported the Boteti Beef Famers Association to develop a proposal for funding from Lucara Mine of BWP 2,800,000 (approx. US\$266,850). At project end this has not yet been agreed to by the mine but if supported the initiative will support the development of a beef management centre for all beef farmers in Boteti, and capacity building for farmers in cattle management to achieve more effective and sustainable use of communal range lands.
- 339. Overall at project end it is possible to confirm that there has been significant co-financing, and additional support leveraged, however the project did not record or monitor amounts throughout project implementation and at EOP no co-financing data is available to quantify contributions. It is clear from the assessment of results achieved and of the implementation approach which it adopted that the project facilitated strong partnership and commitment from all key stakeholder groups, which in turn translated into both time and resource inputs to the project. It is unfortunate that the project did not measure or monitor this support as this is active co-financing. In the 2016 PIR report the UNDP Regional Technical Advisor highlights this stating: 'Government institutions are availing staff and assigning them to key tasks under implementation by the project, and this is a good demonstration that the project is able to draw on the co-financing that the different stakeholders have pledged.'

## Monitoring & Evaluation to support Results-Based Management

## **TE Rating** Monitoring and Evaluation Plan Implementation Satisfactory

- 340.Monitoring of progress has been undertaken regularly by the project team through quarterly progress reporting and annual performance implementation review (PIR). A mid-term review (MTR) was also undertaken. The project followed the standard UNDP/GEF project monitoring and evaluation procedures as they were laid out in the Project Document including: inception workshop/report, annual work planning, project implementation reviews, quarterly progress reports, an independent mid-term review and terminal evaluation.
- 341. The project did not undertake a review of the OVIs, Targets and Baseline data within the Results Framework at project start, and no amendments were made to the Results Framework over the course of the project. The PMU did develop a simple tabular 'monitoring and evaluation plan' which outlines key M&E related actions, the agencies/groups responsible for undertaking those actions, activity due date and completion date. The main actions

included in the table are the inception workshop, TRG and PSC meetings; MTR and TE. It also includes core actions such as the establishment of the project office, purchase of equipment and completion of key products. It is a basic but useful tool enabling the Project Manager to keep track of key activities and ensure they were undertaken on time, however is more of an activity monitoring tool than a 'monitoring and evaluation plan' per se.

- 342. The project did not develop a comprehensive Monitoring and Evaluation Strategy/Plan at the start of the project, to outline how partners would work together to collect and review the data and information required to establish baselines, measure OVIs and Targets, and to monitor risks over the life of the project. This was a weakness in the project's overall monitoring strategy. However, the strong partnerships established under the project and inclusion of data collection within project activities<sup>61</sup> meant that data was collected by the project as integral to project support and this was used to support monitoring. The Project Manager also worked with partners to identify data that was already available through government systems and other initiatives, which again supported monitoring. The absence of a sound Monitoring and Evaluation Strategy/Plan did not have the negative impact that it might have done had the project not established such strong partnerships and not had such a good focus on progress reporting and results-based management.
- 343.Reporting and analysis under the project was consistent and informative and ensured that a good record was kept of activities, issues and decisions made. The core monitoring reports produced under the project were the quarterly Progress Reports and annual Project Implementation Reviews, as is standard practice for all UNDP/GEF projects. Each report was discussed at TRG and PSC meetings and the PIR provided the basis for decision making on annual work-plans and budgets. They were also the mechanism through which formal guidance and input from UNDP and lead national agencies was recorded each year.
- 344. The structure of the Project Implementation Review (PIR) is based on the project's Results Framework. A project's Results Framework should establish the overall structure for measuring results at all levels, to support monitoring and evaluation. It should provide the indicators, targets and baseline information against which the project can measure progress towards the achievement of intended end of project Outcome and Objective level results.
- 345.As outlined in the analysis of project design in section 3.1 of this TE report, there are many weaknesses in the project's Results Framework: Baseline data is not comprehensive, wording and referencing is inconsistent with that in the core of the project strategy, and the majority of OVIs and Targets do not enable monitoring and evaluation of progress towards the achievement of Outcome and Objective level results. Most OVIs and Targets describe Output level products, rather than enabling measurement of Outcomes. Weaknesses in the baseline data, OVIs and Targets within the Results Framework place corresponding limitations on the effectiveness of the PIR as a monitoring tool that can be used by the project to effectively assess and measure project progress towards the achievement of project Outcomes and Objective. The Project Manager completed PIR reports on time and provided a useful outline of project progress and assessment of factors affecting progress, against each of the OVIs in the Results Framework. The weakness is not so much in reporting by the PMU, but is in the quality of the Results Framework established within the Project Document, and the fact that the PMU was not supported to review and revise it.
- 346.Against several of the OVIs and Targets in the Results Framework, the Project Document notes that baseline information is 'to be determined during range assessments'. The intention at design was for baseline data to be updated in the Results Framework once these range assessments had been completed in year 1 of project implementation. A number of relevant assessments were undertaken during the first year of project implementation, however,

<sup>&</sup>lt;sup>61</sup> in particular to support the land use planning process, conservation agriculture and livestock production initiatives, in developing the Land Use Conflict Information System and the range monitoring support provided under Output 2.3

baselines within the Results Framework were never updated. Each year the PIR report continues to refer to the fact that the start of project baseline is 'to be determined'. This detracts from the value of the Results Framework as a means for effectively measuring progress. To support monitoring and evaluation of results, the Results Framework should clearly define the start of project situation.

- 347.As discussed earlier in this TE report, an additional layer of confusion in monitoring of Outcome level results is created by inconsistencies in the wording and ordering of Outcomes in the Project Document. The ordering of Outcomes in the Results Framework is the inverse of that given in the project strategy description. The reference to Outcomes 1 and 2 in the PIR report, therefore gives the opposite Outcome numbering to other project reports, including quarterly Progress Reports and TRG/PSC meeting reports. The discrepancies and inconsistencies are a weakness in design, however they should have been addressed at project inception, and amendments made to the Results Framework, to ensure that reporting and referencing throughout all monitoring reports was consistent.
- 348.Quarterly Progress Reports were completed by the Project Manager and provided a consistent and informative assessment of progress towards each of the project Outputs, and of issues affecting implementation. Quarterly Progress Reports were presented to TRG and PSC meetings, both of which were directly engaged in monitoring project progress and provided valuable input and strategic advice to guide results-based management. There is however inconsistent referencing within Progress Reports on the Outcome statements to which the Outputs relate. In the first two years of project implementation, some reports give no reference to Outcomes at all, others use Outcome 2 wording for both Outcomes. In the final year of project implementation, the wording used for Outcome 1 is the project title, not the Outcome statement. The confusion comes back again to the issue of weaknesses in project design: inconsistencies in the Project Document have lead to confusion in Outcome wording and referencing in project monitoring reports.
- 349.A Mid Term Review (MTR) was conducted in July 2016, funded and facilitated by BirdLife Botswana. Within a medium sized project GEF do not require an MTR, however PMU and project partners recognised the benefits of having a mid-term review as a mechanism to take stock of progress, access independent expert advice and re-focus work on the achievement of intended results by EOP. The MTR was organised by BLB internally, through its international networks within Birdlife International.
- 350. These MTR was undertaken through a 'rapid review approach.' The MTR report highlights that due to the limited time available the consultant was not able to consult with all stakeholders due to 'unavailability of some stakeholders for consultation/interview and time constraints.' However the consultant was able to meet with a number of key stakeholders including DEA, regional officers in Serowe and with farmers and dikgosi in all four villages. The MTR findings were also presented to both the TRG and the PSC. The MTR provides useful analysis of both the project strategy and progress towards results, with a number of strategic recommendations.
- 351. The MTR report notes the strong support and 'buy-in' from stakeholders at all levels and the good linkages made between the project and village, district and national level initiatives. It also recognises that the project has made 'significant progress and catalysed actions that will benefit the project and other sustainable nature resource management initiatives in the Makgadikgadi ecosystem'. However, it raises concerns that the project is behind schedule in a number of key areas including the land use plans, the delivery of livelihood results from improved rangeland management and for Outputs 2.2 and 2.3 it just records 'not done'. The report also highlights many of the flaws in project design particularly relative to the Results Framework which it describes as 'seriously flawed' stressing that 'the results framework has no indicator, baseline information and most of the measurable variables are not consistent with project Outcomes and Outputs'. Weaknesses in design it warns 'will make achievement

of results and uphill task'. The report suggests that 'weaknesses in project design and implementation can be rectified to achieve project aspirations' and provides a number of recommendations to do this.

- 352. The MTR provided a total of 17 recommendations. The three overarching recommendations were: prioritisation of actions to develop the land use plans and SEA; production of a project update report that highlights key achievements and lessons; and drafting of an evidence-based project work plan underpinned by a robust M&E protocol. The report highlights more detailed recommendations clustered for the key project execution and implementation agencies. There are three recommendations to the 'Project Management Team', six for BirdLife Botswana; one to UNDP; two for DEA, MENT and government partners and two for the PSC.
- 353. Following the mid-term review BirdLife Botswana prepared a management response form to identify the actions that the project would take to address the MTR recommendations, this was subsequently approved by UNDP. The PMU distilled the recommendations down to eleven, clustered for the above five actors, reporting back on progress to the PSC each quarter. The core recommendations distilled from the MTR report were as follows:
  - 1. Review the SMARTness of project outcomes and outputs, and how the outputs under each outcomes measure up to the aspiration of the outcomes;
  - 2. Develop evidence-based work plan and milestones. The milestones should be linked to project Outcomes and Outputs and assessed on quarterly basis;
  - 3. Delete Output 1.4 from project document and notify relevant organisations, including GEF
  - 4. Prioritise development of the LUP and get the process started by August 2016 at the latest
  - 5. Recruit a Senior Project Officer position to coordinate the development of the LUP in close collaboration with the project management team and representatives of the local communities
  - 6. Develop a communications strategy that takes into account internal and external reporting
  - 7. Prepare a project update report, highlighting key achievements, challenges and lesson learned
  - 8. Assist in the development of a robust Monitoring and Evaluation framework to track project implementation. The framework should be integrated in the proposed work plan and result chain framework
  - 9. The successful start of the LUP is contingent upon a SEA. Noting DEA's strategic positioning in project implementation, particularly the interlink with the actualisation of the MFMP, it is of upmost importance that DEA and relevant Government Departments provide guidance, finance and leadership in the development of the SEA. This will enhance DEA's legitimacy in project implementation and demonstrate good leadership to project stakeholders.
  - 10. The LUP is the single most significant project deliverable. The PSC should provide guidance on the development of the plan and effective monitoring of progress. It is important to ensure the LUP development starts no later than August 2016 and is completed by September 2017.
  - 11. Review project performance against proposed work plan and milestone on quarterly basis
- 354.As can be seen from the above, a considerable number of the recommendations relate to project implementation mechanisms, only 4 of the 11 recommendations relate directly to project Outputs, three of these relate to the Land Use Plans under Output 1.1, the other recommends official 'removal' of Output 1.4 from the Project Document, through agreement with GEF, due to the fact that this Output is not being implemented. Recommendations 1,2 7,8

and 11 focus on strengthening aspects of project management and implementation which will support more effective monitoring and evaluation of project progress and results.

- 355. The project took direct action to address each of the recommendations and in quarterly progress reporting, the Project Manager reported back against each, highlighting the 'status' of progress; most recommendations were addressed satisfactorily during the last year and a half of project implementation. The only areas of shortfall were recommendations 1 and 8 above, which have significant implications for monitoring and evaluation of results. The project did not conduct a satisfactory assessment of the SMARTness of project Outcome level indicators and did not develop a 'robust' Monitoring and Evaluation framework that enables measurement of Outcomes. What it did do is develop a robust framework for monitoring and measuring achievement of Outputs.
- 356.Perhaps the most important recommendation in relation to strengthening monitoring and evaluation was the recommendation in the MTR report that 'The project management team should revamp project design (if possible, re-jig weak outcome and outputs) and develop a work plan with milestones to measure progress.' The MTR report recommended that the project should develop 'a revised results framework and work plan' immediately following the MTR'. The PMU subsequently captured this advice as recommendations 1, 2 and 8 in the condensed list following the MTR.
- 357. The extent to which the project could 're-jig' design is limited: it is not possible to revise project Outcomes or Objective or to change the scope of a project without re-submitting the Project Document to GEF for re-approval. However, what the project could have done was clarify what the intended Outcomes and ultimately end of project Objective results were by developing a clear description under each Outcome and Objective statement, to fill the gaps in the Project Document. It could also have revised and strengthened the Results Framework by developing Objective and Outcome level OVIs and Targets to reflect the Outcome and Objective definitions. It would have been valuable for either UNDP or BirdLife Botswana to source the support of a monitoring and evaluation expert to support this process.
- 358. Following the MTR, the project did, however, develop an Output based framework in the form of a workplan for the remaining life of the project which clearly allocated OVIs and Targets to each of the Outputs. BirdLife Botswana were able to leverage additional support to do this through their international network, enlisting the services of a retired statistics professor to measure progress against OVIs and develop the results-based workplan. The tool greatly strengthened work planning and monitoring in the final year of implementation, enabling clear tracking of progress towards achievement of each Output. As discussed above, many of the OVIs and Targets in the Results Framework describe Output level results and were well suited to being scaled down to an Output level workplan framework. The 'revamped' work plan also in some areas subdivided Outputs in to subcomponent results / products and established a means of measuring each. The Output Framework/workplan provided the basis for quarterly reporting and supported effective monitoring of progress towards achievement of Output level results. What was still lacking from the monitoring framework, however, was both definition of, and the means to measure, Outcomes and Objective, i.e. how all of the Outputs worked together to cumulatively achieve the overall project result, including the global benefits of particular interest to GEF.
- 359. The recommendations of the MTR, and the way in which the project responded to them, supported more effective and efficient project implementation. The PMU themselves noted in progress reporting that one of the lessons learnt from amendments they made following the MTR was that 'Adherence to M & E principles enhances the chance of implementation success throughout the project cycle.' However, monitoring and evaluation under the project would have been greatly strengthened by a full review of and amendments to the project Results Framework as described above.

- 360.Alongside weaknesses in the M&E framework for monitoring Outcome level results, another area of weakness was in monitoring of gender equality and the gender impact of support under the project. Again, this is a reflection of weaknesses in design and in the Project Results Framework which did not include sex disaggregated indicators, targets or baseline information, and did not include a clear strategy for achieving gender equality.
- 361. The GEF Land Degradation Focal Area Portfolio Monitoring and Assessment Tool (LD PMAT) is an important SLM monitoring tool, enabling GEF to scale up results and learning at the global level. The LD PMAT supports assessment over time of a projects agro-ecological and socio-economic context, land degradation problems, the effects of land degradation on ecosystem services, global environmental benefits and sustainable development benefits. An LD PMAT assessment was undertaken at project design and was submitted with the Project Document. It was not however subsequently used or referred to during project implementation and was not assessed as part of the project more as a GEF requirement, to be completed at project beginning and end, than as a valuable tool for monitoring SLM issues and impacts. In future SLM projects it would be useful for UNDP to provide guidance and support to project partners including PMU to ensure that this tool can be used to support monitoring as an integral part of monitoring and evaluation processes.
- 362. Overall, under the Makgadikgadi SLM project, monitoring has focused on the assessment of progress towards the achievement of Output level results. Monitoring at this level has been both consistent and well informed and has formed the basis for decision making by all partners. The PMU, TRG and PSC all provided valuable inputs and guidance to increase the effectiveness and efficiency of project interventions towards achieving Output level results. Monitoring of progress towards achievement of key Outputs was greatly strengthened following the MTR with the development of a clear results-based workplan with OVIs and Targets allocated to each Output. The weakness in monitoring under the project arises in scaling up Output level reporting to demonstrate achievement of Outcomes and project Objective. This will be explored further in the analysis of results. The weaknesses in monitoring of progress at the Outcome and Objective level are ultimately due to flaws in the Project Document. To effectively monitor Outcome level results, the project would have needed to significantly revise the Results Framework and to clearly define intended Outcome level results, including as to how Outputs would work together to achieve these broader results. UNDP and the PSC could have provided more effective guidance and support to resolve weaknesses in design and strengthen the Results Framework and this is perhaps an area where capacity needs to be built and is a valuable lesson for future projects.

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Quality of Execution – Executing Agency	Highly Satisfactory
Quality of UNDP Implementation	Satisfactory
Overall Quality of Implementation / Execution	Satisfactory

363. The partnership-based approach to project implementation was exemplary, it effectively engaged all key stakeholder groups, generating strong ownership of project results and improved understanding and collaboration. The Executing Agency was pro-active and committed and was highly praised by all stakeholders during terminal evaluation consultations. Local level stakeholders highlighted in particular the dedication of the Project Manager and the extent to which he went 'out of his way to provide support' when-ever needed.

- 364. The TRG and PSC were key fora for co-ordination, planning and monitoring; both groups provided valuable strategic advice and inputs over the life of the project and helped to guide results-based management. Reporting by the PMU was clear and consistent and formed the basis for well-informed decision-making. Lead public sector agencies, including DFRR, DCP, DAP, DVS, DEA and DTCP provided good leadership and support across relevant areas of project intervention; the Letlhakane Sub-Land Board and the Sub-Council Physical Planning Unit (PPU) also provided core input and support. Communities were directly engaged across most areas of project intervention, including through representation on the TRG. The project worked hard to ensure that there was effective consultation and community engagement, so that project support was well-targeted, addressing community needs and aspirations, whilst supporting SLM.
- 365. The ability of the project to adapt effectively to a range of challenges, and to leverage additional resources, was also linked to the nature of the project Executing Agency as an independent, experienced NGO, with good international and local partnerships. BirdLife Botswana already had good working relationships with most partners in the project area, including community groups, is well respected at all levels, and through Birdlife International has an extensive international network on which it can draw to access external expert support and advice. It was therefore able to manoeuvre quickly and effectively to mobilise support, in order to support partners to address numerous challenges and externalities.
- 366.Project implementation has focussed heavily on achieving project Outputs and the project has demonstrated sound results-based management at the output-level. The issue arises in scaling up output-level results to demonstrate how these have worked together to cumulatively achieve Outcome and Objective level results, including to demonstrate the 'global benefits' of particular interest to GEF. This shortcoming stems largely from weaknesses in design: poor definition of intended Outcome and Objective level results in the Project Document, weaknesses in OVIs and Targets within the Results Framework which focus on Output level results, and inconsistent use of language and structure in the Project Document, limit the effectiveness of monitoring and strategic planning at the Outcome and Objective levels.
- 367. The project has achieved cost efficiency across a number of areas and has leveraged considerable extra support. Financial reporting has been clear and transparent. However, there are weaknesses in the extent to which the PSC considered and monitored expenditure against the Outcome budget allocations in the Project Document. The project has gone outside the acceptable 10% margin of variation and is over-spent on Project Management and under-spent on Outcome 1. There has been no recording of co-financing contributions and at EOP it is therefore not possible to quantify co-financing levels against those pledged in the Project Document. However, there is ample evidence of contributions by partners at all levels and there has been a high level of input and support from most co-financers listed in the Project Document; it is unfortunate that this contribution was not recorded. The same situation arises in relation to resources leveraged by the project; considerable additional support has been leveraged, but this has not been recorded and no data is available at EOP to quantify this contribution.
- 368. Overall, however, the results achieved through the project can be seen to be closely tied to its effective implementation approach, in particular the good working relationships and commitment fostered by the project with all stakeholder groups, and the way in which it worked to support adaptive management. The UNDP RTA summarised the effectiveness of the project's implementation approach well in the final PIR report when she notes that: 'This project is an MSP (under \$795,000) but has achieved a significant amount within this budgetary constraint and this largely has to do with the approach the project has taken, which has been to focus on partnerships and deep engagement and consultative processes with all levels of land use management and planning at the site level...The project has had a strong focus on raising awareness, training and capacity building, and leveraging additional

resources from other partners and other financial instruments (including from the National Environment Fund) to scale up some of the good practices that have been well accepted. The successes of the project's ability to mobilise participation and uptake at the local level is largely attributable to the fact that the Responsible Party is an NGO and has established partnerships and relationships at both local community and local authority levels within the project area.'

#### PART 3.3 PROJECT RESULTS

- 369.A project's Terminal Evaluation (TE) is required to assess the extent to which the project has achieved its intended development results at the Outcome and Objective level. End of project results should demonstrate a clear development change which addresses the core 'barriers' identified in the Project Document and achieves global biodiversity benefits.
- 370. In assessing the overall results and impact at project end, the TE will examine project achievements against both the Results Framework and the description of intended project impact outlined in the project strategy description. In this way the Results Framework is placed in context of the project's strategic approach, the issues and barriers the project is trying to address, and intended development impacts at all levels. The TE also considers any changes over the life of the project, including 'externalities' which affect the project context, and any formal amendments made to the Results Framework or areas of project intervention.<sup>62.</sup>
- 371.A project should be designed to have a clear cause-and-effect flow of results from Outputs<sup>63,</sup> through Outcomes<sup>64,</sup> up to Objective, whereby the combined results of Outputs work to achieve Outcomes, which in turn support achievement of the overall Objective. The project's Results Framework should provide the means to measure progress towards achieving results at various levels, against the baseline. As discussed in Section 3.1, the Makgadikgadi SLM Project Document has a number of weaknesses and inconsistencies, in particular within the Results Framework. The majority of OVIs and Targets are not well focussed at the Outcome level, limiting the extent to which they can be used to measure achievement of Outcome level results; Outcome numbering is the inverse of that used in the project strategy; and one Outcome is worded differently to that in the project strategy, with significant implications for the intended scale of results. The Objective level OVI and Target do not enable measurement or assessment of the extent to which the project has achieved its intended overall 'development result'. Within the project strategy description, there is unclear definition of intended Outcome and Objective level results, and the Outcome statements themselves are vague. Outcome 2 in particular is poorly defined: there is no clear definition of the intended end of project Outcome, the sum of the Outputs does not add up to achievement of the Outcome statement and does not directly address the corresponding barrier identified in the situational analysis. Under Outcome 1, the results to be achieved under each of the component Outputs are clear, however the wording for Outcome 1 varies between the project strategy description and the Results Framework, therefore the scale of intended impact is unclear, and the Outcome level result is poorly defined.
- 372. The weaknesses and inconsistencies in the Results Framework and project strategy have significant implications for the evaluation and measurement of results achieved; when the Outcomes and Objective are poorly defined and the means to measure achievement of results is not clear or appropriate, and if the bar is set too high in terms of the anticipated end of project results, then project implementing partners will have difficulty attaining and demonstrating Outcome and Objective level results by project end. The TE will take this in to consideration in the following assessment of the results achieved through the project and of the 'effectiveness and efficiency' of project partners in working to achieve those results.
- 373.As outlined in Section 1 of this report the terminal evaluation of results is based on consultation with key stakeholders, the data and information provided in all project reports, a review of key products and of relevant national and international literature and strategic documents. The evaluation involved a process of document review, followed by consultation

<sup>&</sup>lt;sup>62</sup> Any amendments that affect the results to be achieved at Outcome or Objective level require approval by GEF.

<sup>&</sup>lt;sup>63</sup> Outputs are: Tangible products of an intervention that are directly attributable to the initiative. Outputs relate to the completion (rather than the conduct) of activities and are the type of results over which project managers have most influence.

<sup>&</sup>lt;sup>64</sup> Outcomes are: Changes in development conditions that an intervention seeks to support, the combined effect of Outcomes should work to achieve the overall Project Objective

with stakeholder groups in Makgadikgadi, collation of additional 'in-country' information and visits to project sites.

374.As part of the analysis of results achieved, the Global Environment Facility (GEF) requires a project to be rated according to its 'relevance' 'effectiveness' and 'efficiency'.

**Relevance** is defined as the extent to which, and ways in which, the objectives of a development intervention are consistent with local and national development priorities and policies, as well as those of the GEF. If national, local or GEF policies have changed dramatically over the course of the project, the TE will assess the extent to which the project remains relevant to any changed strategic conditions.

**Effectiveness** is defined as the extent to which the project's intended development results have been achieved.

**Efficiency** is defined as a measure of how economically resources/inputs (funds, expertise, time, etc.) have been converted to results, and whether intended development results have been achieved with the least cost possible.

- 375.Each of the criteria above must be rated as either highly satisfactory, satisfactory, moderately satisfactory, moderately unsatisfactory, unsatisfactory or highly unsatisfactory.
- 376. The **Project Objective** is: To mainstream SLM in rangeland areas of the Makgadikgadi for improved livelihoods.
- 377. The Project Document specifies that the project 'will largely operate at two spatial scales with Outcome 2 at the larger spatial scale (Makgadikgadi Framework Planning area, and Boteti sub-district) and Outcome 1 (focussing on finer spatial scale, with activities in Southern Sua Pan, and the neighbouring BotAsh mining lease area).'



Image 7 Map showing areas of intervention linked to project Outcomes

378. The situational analysis in the Project Document identifies a range of issues threatening rangeland ecosystems in the Makgadikgadi region and distils these down in to two core barriers to sustainable land management (SLM):

**Barrier 1**: 'Inadequate knowledge and skills for adoption of SLM in livestock management and livelihood support systems'. The Project Document identifies that 'although knowledge on how to effectively manage savannah ecosystems is increasing, very little of the currently available knowledge is being utilized to manage the livestock and livelihood support systems in Makgadikgadi. This is mainly due to low levels of skills amongst the land and resource managers, and weak technical expertise in the appropriate ministries.'

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

- 379. The Project Document stresses that 'If the current land and livestock management processes continue, they will compromise all efforts at securing the continued flow of ecosystem goods and services from the savannah ecosystem that are necessary to sustain the national economy, livelihoods and the rich fauna and flora diversity.
- 380. The project strategy was designed to address these barriers through two Outcomes. As outlined in Section 3.1 of this TE report, the Outcome statements and numbering differ between the project strategy and the Results Framework. The TE will use the numbering for the two key Outcomes as it is presented in the project strategy description as this is also the structure used by project partners throughout implementation. All references to Outcome 1 and 2 in this section refer to the following:

**Outcome 1**: 'Effective range management to improve range condition and flow of ecosystem services to support livelihoods of local communities in Southern Sua Pan'

**Outcome 2**: 'Effective resource governance frameworks for SLM and equitable resource access'

381.In evaluating results achieved through the project, the TE will use the relevant indicators and targets cited within the Results Framework, whilst also taking in to consideration the project strategy description and situational analysis outlined in the Project Document. It is particularly important in this project to assess results in the context of the descriptive in the Project Document, due to the fact that the OVIs, Targets and Baselines in the Results Framework do not allow for adequate assessment of results achieved.

**EVALUATION OF RESULTS ACHIEVED UNDER OUTCOME 1:** Effective Range Management to Improve Range Condition and Flow of Ecosystem Services to support Livelihoods of Local Communities and Biodiversity in Southern Sua Pan Region

- 382. The Southern Sua Pan (SSP) was selected as the Pilot Area for Outcome 1 through 'a systematic approach combining geophysical, hydrological and ecological characteristics and features with those of the social, administrative and infrastructural boundaries of the area.' The SSP covers an area of 5,450 km<sup>2</sup> and is an extensive area of rangeland, with seasonal lakes and wetlands. It is semi-arid, with most rain occurring in summer months. Vegetation in the southern half of the area is primarily tree and shrub savannah of various types. Vegetation around Sua Pan itself is restricted to salt tolerant species around the pan fringes. There are few permanent streams or rivers in the area, with nearly all of the water required by the local population coming from groundwater, which, in some areas, is saline. Part of Sua Pan is designated as a Flamingo Sanctuary and the whole of Makgadikgadi Pan has been designated as an Important Bird Area because of its international importance for birdlife.
- 383. Four communities live within the area and most households practice subsistence crop and livestock production. The main land use and livelihood in the SSP area is livestock grazing. However, a number of factors are causing rangeland ecosystems to deteriorate and this is putting pressure on the livelihoods of local communities. High stocking densities are

contributing to land degradation, especially around cattle post boreholes, where the livestock tends to congregate during the dry season; this results in palatable grasses near water points are becoming over grazed, less palatable species further from water points over rested, both resulting in lower grass vigour. Subsistence arable farming is mostly for subsistence use and takes place around villages mainly on poor quality soils with low productivity. Unsustainable harvest of veldt products is another problematic issue in the SSP area as is unsustainable collection of wood for fuel and uncontrolled rangeland fires.

384.Under Outcome 1, the Makgadikgadi SLM project aimed to pilot a range of measures to address these issues to support more sustainable and integrated rangeland management and patterns of resource use. It has three Outputs:

**Output 1.1** Local level participatory land use plans developed for the pilot area to support sustainable utilisation of range resources.

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

**Output 1.3:** Fire Management Strategy is developed and implemented in southern Sua Pan in line with the provisions of the land use plans.



Image 8: Southern Sua Pan, Outcome 1 Pilot Area

**OUTPUT 1.1** Local Level Participatory Land Use Plans developed for the pilot area to support Sustainable Utilisation of Range Resources.

The Results Framework cites the following indicator, target and baseline for this Output:

**OVI:** Number of Integrated Community Participatory Land Use and Management Plans

#### Baseline: Zero

**Target:** Four produced for southern Sua Pan villages, one for each of the villages of Mosu, Mmatshumo, Mokubilo and Mmea; and an overarching summary document covering all of southern Sua Pan. Plans would be approved and with ongoing implementation by End of Project.

385.Under Output 1.1 the project aimed to develop a detailed land use plan (LUP) for the Southern Sua Pan (SSP) area, to support more sustainable patterns of land-use and address land-use conflicts. The LUP was to be focussed on land use zoning for the key settlements in the area but also provide the basis for broader decision making on sustainable land use management across the SSP. The Project Document describes the end of project situation as one in which: 'The land use plan will guide decisions on livestock management and the sustainable utilization of other range resources.' The target was for the plans to be approved with ongoing implementation by EOP, and a number of the other project Outputs were designed to support plan implementation.

- 386. The Project Document outlines a two-tier approach for development of the land use plans in which 'integrated range assessment studies for the area' would be undertaken as a first stage, covering '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.' The second step was then development of the land use plans themselves. These would draw on the baseline information and on assessment of the challenges and opportunities for SLM identified through those assessments. The Project Document outlines the importance of using an integrated participatory land-use planning process to build capacity and understanding and to serve as a vehicle for conflict resolution. It states that 'a consultative process is essential to address land use conflicts because the participatory land use planning process to rangeland utilization, particularly for livestock farming.'
- 387.As discussed in Section 3.1 of this TE report, the approach outlined for development of the land use plans is well thought through and represents good development practice, where land use planning draws on a thorough baseline assessment, and on consultation and direct engagement of key stakeholders, including the communities who will be affected by the LUP and should therefore guide its development. The indicator however is not well conceived in that measurement of the development result is not how many LUPs are developed; the OVI should have enabled measurement of the extent to which the ILUP addresses the key land-use issues affecting the SSP area. The Target given in the Results Framework is essentially a description of the intended Output product.
- 388. The land-use plans were a core element in the overall project strategy; in assessing the results achieved, the TE will examine the end of project results against both the description of the intended impact in the project strategy and the Target/OVI.
- 389. To get a clear understanding of the results achieved, it is important to review in some detail the process used and the wide range of challenges which the project overcame. Throughout implementation a strong emphasis was placed on participatory process and full stakeholder engagement; the approach used was exemplary and has ensured that the plans are based on a clear understanding of local land-use issues and context, and has achieved strong ownership of the plans at all levels. The project facilitated both direct community participation in plan development and the involvement of all relevant government agencies and land-use planning authorities. It also helped to facilitate co-ordination and collaboration between stakeholder groups, and in so doing supported integrated planning and conflict resolution. As outlined in section 3.2 of this TE report the TRG was a key mechanism for coordination and discussion as it incorporated all key stakeholder groups. Another key element of plan development was the review of existing data and the collection of new environmental, social and economic data on the plan area and subsequent GIS mapping, to ensure that the plans were based on factual data and analysis. Overall this participatory, integrated and informed process of plan development is key to the likely effectiveness of the LUPs as a planning tool for the village settlement areas.
- 390.At project end an Integrated Land Use Plan (ILUP) has been developed. This focuses on land use planning for the five villages of Mokubilo, Mmea, Makgaba, Mosu, Mmatshumo and land

immediately adjacent to them<sup>65</sup> integrated within the broader context of the Southern Sua Pan area. The ILUP is a 25-year plan, running from 2017 to 2023.

391. The five villages are located within tribal land under the administrative jurisdiction of the Ngwato Land Board through Letlhakane Sub Land Board. The LUPs aim to provide 'a development guide and a series of policies on which decisions regarding spatial growth of the village and provision of infrastructure and services will be based.' It covers the following key areas:

i) Proper Land Utilization by way of:

a. Identifying suitable areas for settlement growth

b. Zoning of residential, agriculture, open spaces, commercial, civic & community and industrial land uses

c. Retention of fertile agricultural land

- d. Development of land for social and economic development
- e. Setting control mechanisms for monitoring the development of land

ii) Environmental Protection through:

a. Conservation of environmentally sensitive environs

b. Examination of the environment with a view to zoning various land uses on suitable environments

c. Protection of underground water resources

iii) Infrastructure Provision through:

a. Development of an efficient road network that provides access within the village and link the village with the rest of Botswana.

b. The construction of adequate sewerage reticulation and solid waste disposal systems which are environmentally friendly.

c. Facilitation of the provision of postal, telecommunication, power and water supply.

iv) Sustainable provision of housing by means of:

a. Providing various residential plot types to meet expected range of needs.

b. Making available adequate commercial and industrial land commensurate with the requirements of the village and associated operations.

v) Participation through:

a. Consultation with stakeholders

b. Involvement of the community and ensuring that the views of the community are incorporated into the plan

392. The ILUP highlights the importance of integrated planning and provides an overview of the institutional framework for plan implementation, it assesses the functions and co-ordination mechanisms amongst development planning institutions relevant to the Plan Area, highlighting that the purpose of this analysis 'is to appreciate the existing operational frameworks and identify the various roles, as well as unnecessary duplication of efforts in an effort to enhance efficiency in the delivery of services. Institutional frameworks are critical in determining the effectiveness within which development proposals/activities can be translated into programmes and projects for implementation.'

<sup>&</sup>lt;sup>65</sup> Land Use Plan Document p4 section 1.2

- 393. The plan is a substantial and professionally written document which presents itself as a 'land utilization guide and framework'. Its core focus is on providing detailed planning guidance for the zoning and phasing of development for the five villages; this includes the zoning of civic, community, commercial, residential, industrial and open space areas, as well as facilitating the provision of infrastructure for power, water supply, sewerage, drainage and waste management. The plan places these village land use plans (LUP) within the broader context of the Southern Sua Pan area thus establishing an integrated structure, however it does not provide detailed land-use planning guidance for decision making on land use management across the SSP area to the extent envisaged in design.
- 394. The ILUP provides a good overview of the SSP area describing the physical environment (climatic conditions, hydrology, topography, geography, vegetation, fauna, soils and archaeology); and socio-economic data (including information on the population size and composition, economy, employment, housing; infrastructure); and key land-use including agricultural (arable and pastoral), veld products and tourism. The plan describes the built environment, land tenure and land use in each of the 5 villages and subsequently assesses emerging planning issues and planning considerations for each. It puts forward a series of 'development proposals' based on assessment of the issues, challenges and opportunities identified during plan development. It outlines strategies to address planning issues for the five villages and proposes land use zones. It specifies that 'development of all the settlements should be guided by detailed layout plans' and 'settlement growth should be directed away from fertile land, rivers and fragile environment'. The ILUP seeks to discourage haphazard growth /establishment of settlements in the area and puts forward a number of settlement growth options and recommendations. For the overall SSP area a brief summary description is provided of each land use type alongside maps, these mostly draw on data from the existing Management Plan for Southern Sua Pan and the Makgadikgadi Framework Management Plan. The broader SSP zones are: Agricultural, sub divided in to arable and pastoral; tourism reflecting the areas identified in the SSP Management Plan the and a protected area zone, the purpose of which is highlighted as to 'preserve and manage areas which are unsuitable for other uses, due to topographic constraints including areas of scenic beauty and historic significance; this area includes mostly the pans and water springs.'

Management Objective	Severity	Severity with Mitigation	Mitigation Measure	Implementin g Agency	Monitori ng Agency	Stage
AIR QUALITY			I			
To reduce Vehicle Tail pipe emissions	Medium	Low	Use of vehicles which are in good condition	DRTS / DEA	DRTS	Entire Plan Period (EPP)
			Use of unleaded fuel	DRTS	DWMPC	EPP
To reduce Household fuel	Medium	Low	Use of alternative / renewable energy sources	DEWR / CDC	DWMPC	EPP
use of firewood			Public Education	DEWR/ CDC	DWMPC	EPP
To reduce Fugitive Dusts (Dusty roads/ wind erosion)	Medium	Low	Tarring of internal roads	CDC	DWMPC	EPP
To reduce Biomass Burning (Veldt fires /Crop Residual burning)	Medium	Low	Minimise burning	MoA / CDC	DWMPC	EPP
To reduce Air pollution during construction	Medium	Low	Dust suppression	Contractor	DWMPC	Constructi on
To reduce pollution caused by methane / sulphites resulting from waste.	Medium	Low	Regular collection of waste to Landfills/ incinerators	DEWR / DEA / MoH	DWMPC	EPP
To reduce pollution caused	Medium	Low	Farmers education	Farmers	MoA	EPP

Image 9 : ILUP Environmental Mitigation Plan example

- 395. The ILUP also highlights environmental issues relevant to the plan area briefly outlining a series of 'environmental considerations' for development planning including: Air Quality, Biodiversity, Archaeology, Cultural Heritage and Natural Resources, Groundwater Resources, Soils and patterns of Land-Use. An outline environmental mitigation table is included within the plan which incorporates a brief list of mechanisms to mitigate against the impacts of the issues raised. The table identifies the agency responsible for implementing and monitoring these actions. This section of the ILUP also stresses the importance of strategic environmental assessment (SEA) for effective implementation of the plan highlighting that this is required under the Environmental Assessment Act, Cap 65:07 and recommending 'that SEA be prepared before this plan can be implemented'.
- 396. The plan implementation programme and phasing is outlined and the ILUP also includes a very brief final section titled 'monitoring and review of the plan'. The monitoring section comprises two paragraphs stating that: for every phase in the implementation process, the local authorities will have to review the plan and see to it that the plan is executed accordingly. Coordination and monitoring of the plan will be entirely vested on the local authorities being Letlhakane Sub Land board and Boteti Sub District Council. Various tools will be used being the Urban Developments Standards (1992) and Development Control Code (2013)...Plan review will be made at intervals of six (6) years as a result of changes that takes place from social, economic and environmental factors.' The monitoring section of the ILUP does not establish the comprehensive monitoring and evaluation framework necessary to support effective implementation of the ILUP if it is to support SLM. The TE strongly recommends that monitoring should not just involve the Letlhakane Sub Land board and Boteti Sub District Council, but all key land-use management agencies including DCP, DAP, DFRR, DWNP and should also involve communities themselves. The Strategic Environmental Assessment (SEA) developed under this project provides good guidance for monitoring and a more detailed monitoring framework for whole ILUP area. The TE strongly recommends that the monitoring framework and information established within the SEA is used as the basis for monitoring of the ILUP.



Image 10: ILUP map showing Natural Resources across the five villages

#### Image 11: ILUP map showing Mosu Village phased Plan



Image 12: ILUP map showing Mokubilo Village phased Plan



397. The ILUP has been approved by the District Physical Planning Committee (PPC) and Central District Council. However, to be officially adopted as a statutory planning tool it needs to be approved by the Ministry of Land and Housing who subsequently submit it to the Attorney General for endorsement.

- 398. The project has achieved a remarkable amount during the short three year timeframe and with limited resources. However, the original intention within the Project Document was to develop the ILUP during the first half of project implementation and, following its endorsement, to then support implementation of the plan during the second half of the project. It is clear at project end that this was not realistic within the three year project timeframe. The project has not achieved the intended EOP impact, however this is not because it has been ineffective or inefficient in delivery of support, it is to do with a) unrealistic expectations within design and b) a wide range of challenges and externalities which affected development of the ILUP over the course of the project. Important lessons need to be learnt from this to guide future initiatives.
- 399. The following section of the TE report examines some of the issues and challenges that the project faced in developing the land-use plans and gives a brief overview of the plan development process. The project has, correctly, prioritised the use of a participatory approach for development of the ILUP and this takes time, particularly where there are land-use conflicts and land-use zoning is involved. It is remarkable, given the number of challenges the project encountered, that it was able to develop the ILUP before the end of the project, and the fact that it was able to do so can be seen to be closely linked to the partnership-based implementation approach, strong stakeholder engagement and adaptive project management.

#### Plan Development Process

- 400.Work started on development of the land-use plans immediately following project inception. The Project Manager presented proposed project support for integrated land-use planning at the Sub-District Land Use Planning Unit (DLUPU) meeting in March 2015. Sub-DLUPU comprises all relevant sub-District level public sector agencies and the meeting provided a valuable forum for agreeing the overall approach. The meeting concluded that the project should focus initially on village-level land-use planning for the four villages, and could start work immediately with the Physical Planning Unit to revise base maps for the villages.
- 401. The project facilitated consultation with all communities for development of the base maps and this process raised a number of issues, including conflicts over historical boundaries of communal grazing areas, and the implications of this for land use management. Negotiation on land-use boundaries between the two villages of Mosu and Mmatshumo in particular took considerable time, with project reports recording a four-month delay during which the Local Council, District and Sub-District authorities had to be called in to try to resolve boundary issues. The project worked with relevant land-use management authorities to try to expediate resolution of the issues and to request additional support from central government. Due to the project time restrictions, and the need to move ahead with plan development, the project decided to focus on detailed land-use planning for the more clearly defined village settlement areas, and to leave the conflictual issue of land-use planning in communal rangelands. PIR reporting by the Project Manager notes that 'It took a while for communities to understand a rational behind land use plans and village boundary descriptions' and that 'In the end an agreement was reached to continue with the plans without any reference to boundaries.'
- 402. There were also delays in the first year of project implementation linked to movement of staff within key public sector agencies, in particular within the Letlhakane Sub-Land Board and Sub-Council Physical Planning Unit. These are two key players in land-use planning and their input was required throughout the LUP development process. The staff change over and requirement for new staff to come up to speed with the project approach and LUP process led to delays, however the project was proactive in briefing new staff and pushing for prioritisation of LUP within agency work plans.
- 403. Further delays were encountered due to the need for clear alignment of the local land use plans with national processes and procedures and there were suggestions in the first year of project implementation that development of the LUPs might have to be put on hold while the government revised regional planning processes. Letlhakane Sub-Land Board advised that it was important to seek clarity from the Ministry of Land and Housing through the Department

of Town and Country Planning (DTCP) to ensure that project funds were invested in a process that would be recognised nationally and would align with revised regional policies and systems. DTCP were pro-active in pursing this and provided ongoing strategic support throughout project implementation, to ensure that the LUPs were aligned with broader regional/national planning process. In the second year of implementation, project reports highlight that 'DTCP gave Letlhakane Sub-land board the green light to continue to develop the local level LIMPs'.

- 404. Development of the Terms of Reference (TOR) for development of the LUPs also took time, requiring consultation with all key stakeholders including sub-DLUPU, communities, the TRG and PSC; both of the latter approved the final draft in 2016. Once the TORs had been agreed, the project subsequently put out an advert for consultancy services to support development of the LUP, however the lowest bidder quoted three times the amount allocated in the Project Document. The project therefore had to look at alternative options.
- 405.Another significant challenge faced by the project was that Strategic Environmental Assessment (SEA) is required in Botswana as a core part of any land use planning process, under the Environmental Assessment Act and under the Development Control Code. It is also good SLM practice, providing core environmental assessment and guidance on which to ensure that land-use planning addresses key environmental issues and works to achieve sustainable land use management. SEA had not been included in project design as part of the land use planning support under Output 1.1 and there was no budget for it. The project therefore had to identify a way forward, including how to access funds to support SEA.
- 406.At the time of the SLM project mid-term review, the core work to develop the Land Use Plans had not yet started and the MTR report made some key recommendations on the need to expedite the process if results were to be achieved by project end, including:
  - Prioritise development of the LUP and get the process started by August 2016 at the latest
  - The successful start of the LUP is contingent upon a SEA. Noting DEA's strategic positioning in project implementation, particularly the interlink with the actualisation of the MFMP, it is of upmost importance that DEA and relevant Government Departments provide guidance, finance and leadership in the development of the SEA. This will enhance DEA's legitimacy in project implementation and demonstrate good leadership to project stakeholders.
  - The LUP is the single most significant project deliverable. The PSC should provide guidance on the development of the plan and effective monitoring of progress.
- 407. Recognising the urgent need to move ahead with the land use plans, the TRG advised that it would be far more cost efficient and effective to develop the LUPs 'in house' and this was approved by the PSC following the MTR. The TOR were redrawn and a workplan established. DTCP were officially given the role to lead development of the Land Use Plans in November 2016 with the focus clearly on land-use planning for the four villages of Mmatshumo, Mosu, Mokubilo and Mmea. The final PSC meeting report for 2016 records that DTCP is to lead a team in preparing land use plans for these four villages 'to shape and guide the spatial growth and development of settlements in the Southern Sua Pan in order to achieve objectives behind principles of Sustainable Land Management.'
- 408.DTCP drafted an inception report outlining the methodology for development of the land use plans. A Task Team was to be responsible for gathering key information through review of existing reports and data and consultation with communities through the use of questionnaires and at Kgotla meetings. Physical site reconnaissance (historical sites, natural sites, cattle posts, fields and other places of interests), would build on this information to support mapping of key areas and land-use. The proposed land-use maps would then be discussed with all stakeholder groups.

- 409. There was only one year left of project implementation and the entry in the final PSC meeting report for 2016<sup>66</sup> highlights the challenge presented by the rapidly approaching end of project deadline, it reports that: 'DTCP was officially handed to lead the development of the plan on 21 November 2016 and currently is at the stage of data collection for the Report of Survey. The Report of Survey for four villages is expected to be completed by March 2017. It has to be approved by Sub -DLUPU (Boteti) before preparation of Draft Plan. There was an indication of the need to hasten the preparation of the Strategic Environmental Assessment as per Environmental Assessment Act of 2011. This was then assigned the PMU to facilitate. It was highlighted that the date stated by the DTCP for completion for the final plan is not conducive as the SLM project as its end December 2017, and hence the DTCP was advised to work round the clock to complete the entire plan by June 2017. The PSC advised UNDP and the PMU to provide all necessary support to the team, including logistical support where necessary to hasten the process.'
- 410. In 2017, the DTCP specialist land-use planner led the Land Use Plan design process for the four villages, working with the Task Team and in close partnership with all key local land-use planning and management agencies. The SLM project continued to facilitate the participatory process at all levels, with a strong focus on ensuring community engagement. The TRG played a key role in guiding the process, providing advice and input for development of the draft LUPs. It involved all key stakeholders and was a key forum through which the land use management planning process and the draft LUPs themselves, including all documents relating to them, were reviewed and discussed. A draft LUP for each of the villages was developed in the first half of 2017 and submitted to the TRG for review prior to consultation with the communities and other stakeholder groups including sub-DLUPU and DLUPU. The June 2017 PSC meeting report notes that 'the Draft of Land Use plans for Southern Sua villages is complete and consultations of the communities were also done. The plan was presented to the following structures in the Sub district; Sub DLUPU, Sub Council and Sub DDC. The plan will be presented to main DLUPU, Ngwato Land Board and finally the Physical Planning Committee which is responsible for approving plans.'
- 411. However, a further complexity arose in the land-use planning process for the area; one of the areas highlighted as arable lands on the land use maps (Makgaba, about 15km west of Mokubilo Village), which had previously been a small settlement, was officially declared to be a village. There were no longer four villages, but five, and the fifth village had to be included and a LUP developed for it. This led to the need for further consultation and amendment of the work already undertaken. In November 2017 a revised draft of the LUP was prepared, with further local consultations, and was re-submitted to all relevant government authorities before being approved by the District level Physical Planning Committee (PPC).

Strategic Environmental Assessment (SEA)

412.A major priority for the project in its final year of implementation was to identify a way forward for undertaking a strategic environmental assessment (SEA) for the ILUP. As outlined above this was an additional activity and product that had not been included in project design. A strategic environmental assessment would normally be undertaken as part of the design of a land use plan, and would provide the key environmental information and assessment on which the plan(s) would then be based. However, due to the fact that SEA had not been included in design, there were no provisions for it and the project was faced with the challenge of facilitating and funding this key piece of work in time for it to support the ILUP process, before project end. The fact that there was less than one year to go until project end meant that the project could not put drafting of the ILUP on hold until a SEA had been undertaken, to do so would have meant that the ILUP would not be drafted by EOP. However, without a SEA the

<sup>&</sup>lt;sup>66</sup> Held on 5<sup>th</sup> December 2016 in LetIhakane

ILUP would not meet national regulatory requirements and is not viable as a document that could support sustainable land management.

- 413. The project demonstrated remarkable adaptive management in identifying a way forward and the fact that this was possible was greatly facilitated by BirdLife Botswana's flexibility as an independent NGO, through their international connections within the Birdlife International network. The estimated cost for commissioning a SEA was approximately US\$23,000 (BWP250,000). In mid-2016 the decision was made at the PSC meeting that DEA should find money to part fund this with BirdLife Botswana. However unfortunately DEA were not able to do so and in June 2017, six months prior to project end, the PSC report notes that BirdLife Botswana (BLB) as the Executing Agency were instructed to find a way forward. BLB contacted their partners in Birdlife International to see if support could be provided through the international network and they were able to access an international SEA expert within the UK Royal Society for the Protection of Birds (RSPB) who subsequently undertook the work in 2017. The consultant worked in consultation with local stakeholders and undertook a full review of existing data, studies, relevant strategies and plans. In October 2017 a draft 'Strategic Environmental Assessment of the draft Mokbubilo, Mmea, Mosu and Mmatshumo Integrated Land Use Plan' was provided to BirdLife Botswana for review with the TRG and PSC.
- 414. The SEA is a comprehensive document focussed on the whole of the Southern Sua Pan (SSP) area. The document outlines the environmental characteristics and land use pressures in the SSP and the role of SEA within the context of the land-use plan, providing a description of the SEA process and objectives. Ten SEA objectives are established to 'address the priority environmental issues for the LUP / SSP area':

1: Provide a universal water supply without exceeding the sustainable yield of the groundwater resource.

2. Maintain and enhance groundwater quality, primarily through the provision of safely managed sanitation services.

3. Reduce the risk of flooding to properties through appropriate land use zoning and the provision of sustainable drainage systems

4. Provide clean, low carbon energy, reduce dependency on woodfuel and improve energy efficiency.

5. Secure the environmentally sound management of waste, including waste reduction, reuse and recycling.

6. Protect soils and improve the condition, productivity and resilience of soils on arable land.

7. Secure the sustainable harvesting of veld products.

8. Halt and reverse land degradation.

9. Halt and reverse declines in biodiversity.

- 10. Protect and safeguard cultural heritage.
- 415.Development of the SEA objectives was framed by: the Sustainable Development Goals (SDGs); the environmental objectives, issues and / or recommendations highlighted in the ILUP, SLM Project Document Southern Sua Pan Management Plan (SSPMP) and Makgadikgadi Framework Management Plan (MFMP); and on consultation with key stakeholders including BirdLife Botswana, Government partners and communities.
- 416. The SEA document outlines the environmental characteristics of the area and provides an overview of the legal, policy and institutional context for sustainable land use management. Chapter 5 titled 'Land Use Pressures and Environmental Issues' provides a sound analysis of the key SLM issues across the SSP area. These are divided in to the following categories:
  - Overarching Issues: Population increase; Expansion of villages; Climate change

- Issues Directly Associated with the Increasing population and Village expansion: Water supply and demand; Water quality; Flooding / drainage; Wood fuel, renewable energy and other energy-related issues; Waste management
- Wider Land Use Pressures and Environmental Issues: Arable and pastoral farming; Natural resources (veld products); Rangeland fires; Land degradation; Biodiversity; Cultural Heritage; Tourism
- 417. At the end of each section of analysis, the SEA provides a series of recommendations to address and/or manage the issues. The recommendations include a number of specific suggestions for revisions and amendments to the ILUP. The analysis of options to address land-use sustainability issues, provides valuable information for land-use management partners in the area. Chapters 7 and 8 of the SEA then put forward the 'mitigation' actions and monitoring required to support sustainable land management in the SSP. The mitigation actions in Chapter 7 are summarised within a table, against a series of objectives.<sup>67</sup> Chapter 8 presents monitoring requirements within a table which outlines: the sustainability objective; issues; proposed monitoring and key indicators; recommended frequency for monitoring; recommended LUP vision statement to support monitoring; and relevant SDG Goal and Target. The SEA stresses that to achieve SLM it will be vital for partners to establish a comprehensive monitoring system involving all agencies and local communities. It highlights that 'monitoring needs to be carried out on an ongoing basis in order to identify trends in the environmental status of LUP / Southern Sua Pan (SSP) area, and progress against the targets proposed in the SEA report.' It stresses that 'the most urgent priority is to establish essential environmental baseline and threshold data', providing a summary of the priority data required.
- 418. The final chapter in the SEA report summarises conclusions and recommendations, pulling together the key issues raised throughout the report to present 'an over-arching set of high priority recommendations.' The SEA report raises the concern that the core focus of the ILUP is on the five villages which 'cover only a tiny proportion of the total LUP / SSP area (0.05% at present and 0.27% by 2036).' It stresses that 'many of the key environmental issues being faced in the SSP area, such as land degradation resulting from overgrazing, relate primarily to the 99.7% of the SSP area that lies outside of the village footprint'. Many of the key recommendations within the SEA relate to the need to scale up the ILUP to address broader sustainable land management issues across the SEA and it provides guidance to support this.
- 419. Overall the SEA contains vital analysis to support sustainable land management within the Southern Sua Pan area. It provides a number of recommendations to strengthen and scale up the potential impact of the ILUP beyond its core focus on the five villages of Mosu, Mmatshumo, Mokubilo, Mmea and Makgaba. In particular the information, analysis and recommendations provided in SEA Chapter 5 'Land Use Pressures and Environmental Issues', Chapter 7 'Mitigation Measures', and Chapter 8 'Monitoring' provides valuable guidance to support sustainable land management across the SSP. There has been consultation on the SEA with all key partners including communities, the TRG and PSC, however at the time of the TE, it had not yet been officially approved by DEA and amendments had not been made to the ILUP to reflect the findings of the SEA. Information from BLB that has been shared with the TE following the TE consultation mission in Botswana indicates that there has been a procedural delay in approval of the SEA due to the fact that BLB submitted the SEA to DEA for approval when it should have been the Land Board. At EOP the submission documents are being revised, however there appears to be a strong likelihood that DEA will approve the SEA. The TE recommends that DEA provide the lead in a) officially reviewing and approving the SEA and b) advising if and how the ILUP can be amended to reflect the recommendations within the SEA.

<sup>&</sup>lt;sup>67</sup> Table 15 'Mitigation of Environmental Impacts' SEA page 107

# Image 13 : SEA Mitigation Table example page

SEA Objective	Issue	Proposed Mitigation	Mitigation Already in the
			Land Use Plan? (Y/N)
Provide a	Water demand	Develop a Water Resource Plan that sets out how the demand for water within the Southern	N
universal water	exceeding the	Sua Pan area will be kept within sustainable yield limits over the next 20 years.	
exceeding the the groundwater		Install systems to collect and re-use rainwater and storm water run-off.	N
sustainable yield	resources.	Recycling of wastewater and 'harvesting' of rainwater.	N
of the groundwater		Educate communities on how to reduce the demand for water.	N
resource.		Educate communities on reducing vandalism of water supply infrastructure.	N
		Install metering of communal and household water supply connections.	N
		Provide 'dry' sanitation.	N
Maintain and	Risk of faecal	Provide 'safely managed sanitation services', in particular, a sewerage reticulation system for	Y
enhance	contamination from	all new development phases and, retrospectively, in existing developments.	
groundwater quality, primarily	sanitation.	Set a target for the number and % of properties to be connected to the proposed sewerage	N
through the provision of		reticulation system. This target should exceed the forecast increase in population / households.	
safely managed		Specify where sewage will be collected / disposed / treated and the environmental	N
sanitation		protection measures that will be put in place at those locations / facilities to avoid adverse	
services.		environmental effects.	
		Prioritise the provision of a sewerage reticulation system at Mosu due to the close proximity of water supply boreholes.	N
		Establish (source protection paper) around water supply bereholds, within which	N
		inappropriate development (including the expansion of the villages, sceptic tanks, pit	IN .
		latrines, etc) will not be permitted.	

## Image 14: SEA Monitoring Table

#### Table 16. Proposed monitoring.

SEA Objective	Issue	Proposed Monitoring (key indicators are in BOLD font))	Frequency of Monitoring	Proposed LUP Vision statement (By 2036)	Relevant Sustainable (SDG) Goal / Target /
Provide a universal water supply without exceeding the sustainable yield of the groundwater resource.	Access to safely managed drinking water services <sup>40</sup> .	Number and % of population / properties that have drinking water piped to the property by the Water Utilities Corporation.	Every five years.	All properties will be have drinking water piped to the property by the Water Utilities Corporation.	SDG 6: Ensure availab management of wate all. Target 6.1: By 2030, a equitable access to sa drinking water for all. Indicator 6.1.1: propo using safely managed services.
	Water demand exceeding the sustainable yield of the groundwater resources.	Sustainable yield of the groundwater resource. Actual quantity of groundwater abstracted. Actual quantity of groundwater abstracted as a percentage of the sustainable yield. The number of properties and / or schemes that enable wastewater recycling and rainwater and storm water harvesting.	Every five years. Annually. Every five years. Every five years.	The demand for water will be managed effectively to ensure that it does not exceed the sustainable yield of the groundwater resource.	SDG 6: Ensure availab management of wate all. Indicator 6.4.2: Level freshwater withdrawa available freshwater r
Maintain and enhance groundwater	Inadequate sanitation.	Number and % of properties connected to an environmentally sound, sewerage reticulation system.	Every five years.	All residents will have access to safely managed sanitation	SDG 6: Ensure availab management of wate all.

Summary analysis of Results Achieved under Output 1.1 compared with those Intended in the Project Document

- 420.In assessing the results achieved it is important to compare what was intended within the Project Document, with the process and impact achieved through project implementation, whilst taking into consideration the range of issues which the project faced. The TE has provided a fairly detailed analysis of the plan development process; this is important as it demonstrates the wide range of issues that can affect land use planning processes and provides valuable lessons and learning to guide future SLM initiatives.
- 421. The EOP Target in the project Results Framework is 'Four produced for southern Sua Pan villages, one for each of the villages of Mosu, Mmatshumo, Mokubilo and Mmea; and an overarching summary document covering all of Southern Sua Pan. Plans approved and with ongoing implementation by End of Project.'
- 422. The description in the Project Document outlines that under Output 1.1 the project was to develop a land use plan for the whole of the Southern Sua Pan (SSP) area, to support more sustainable patterns of land-use and address land-use conflicts. It was to be focussed on land use zoning for the key settlements in the area but also provide the basis for broader decision making on sustainable land use management across the SSP. The Project Document describes the end of project situation as one in which: 'The land use plan 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 soil erosion and invasive species. Through the range assessment....sustainable stocking rates for cattle will be determined for the area and mechanisms for adhering to this will be pursued through a participatory, multi-stakeholder approach which takes into account the indigenous knowledge of the local communities.'
- 423.Both the EOP Target and the project strategy description state that the project aimed to support implementation of the ILUP<sup>68</sup>. The Project Document outlines that the LUP would be the basis on which the land authority would base its land allocations in the SSP area and that 'implementation and management of stocking rates will be pursued in the communal area by employing innovative range management strategies which are based on a combination of technical solutions, movement of livestock, and other appropriate indigenous pastoral management systems as well as improvements in marketing to reduce overstocking.'
- 424.At project end 5 LUPs have been produced for each of the villages, and these have been combined within an Integrated Land Use Plan (ILUP) covering the broader SSP area. The ILUP is a substantial and professionally written document. The LUPs for each village area provided the basis for well-informed settlement planning, they also provide the means to address one of the issues identified in project design: that subsistence arable farming takes place around villages mainly on poor quality soils with low productivity. The LUP has identified the more fertile areas and provided for zoning based on the land quality, prioritising agricultural development in the most fertile areas and residential development in the least suitable areas for agriculture. The ILUP highlights the importance of sustainable rangeland use across the entire SSP area, however, it does not include guidance on the mechanisms necessary to support sustainable rangeland management across the SSP to the level intended in project design. The ILUP will not 'guide decisions on livestock management (including sales) and the sustainable utilization of other range resources.' Establishment of a planning and management system for livestock grazing remains a priority issue at project end. The ILUP also does not incorporate a monitoring framework that would be necessary to achieve SLM within the SSP. The reason why this was not achieved is clear: there simply

<sup>&</sup>lt;sup>68</sup> Within the overall project strategy other areas of project intervention, including under Outputs 1.2,1.3 and 2.3 draw are to be guided by the provisions in the ILUP.

wasn't the time or resources to do so, particularly given the number of challenges and externalities encountered during project implementation.

- 425. The fixed timeframe that projects entail can present real challenges for the facilitation of complex multi-stakeholder land-use planning processes. There can be an inherent conflict between a fixed project timeframe and the optimal process for development of the plan, particularly with a medium sized project such as this SLM project with only a 3-year lifespan, and particularly where unforeseen 'externalities' impact on the land use planning process.
- 426.Projects offer both opportunities in terms of resources and technical support and challenges in terms of the fixed timeframe. If the timeframe is inadequate then the project is faced with the difficult decision to either address key issues through an effective participatory, integrated land-use planning process, but risk failing to produce the agreed 'product' i.e. the ILUP by project end; or it has to adopt a sub-optimal process to 'fast-track' the approach in order to produce the required product by project end, but this then risks developing a sub-optimal product and the ILUP is unlikely to have strong stakeholder buy-in and support.
- 427. The SLM project has achieved a remarkable amount within the three-year project timeframe and demonstrated strong adaptive management to address a range of challenges. It adopted an exemplary process of consultative, participatory and partnership-based planning which in itself has resulted in strong ownership of the plans at the local level, partnership between stakeholder groups at all levels, alignment of the ILUP with national strategies and has greatly increased understanding of, and support for, sustainable land use management at all levels. The TE found evidence of broad support for the land use zoning proposed in the ILUP, both among farmers in the communities, Kgosi as leaders of those communities and within public sector agencies. During consultations with farmers at project sites they highlighted to the TE how land has in the past been allocated by the land-board for farming in the least fertile areas, and residential areas have been built in the more fertile areas. They applauded the work done through the project which has identified the most suitable lands for different uses and they looked forward to the fact that future land-use planning would be based on this knowledge, as agreed with them in the land use plans.
- 428. In addition to the intended results under Output 1.1, the project facilitated development of an additional product: the Strategic Environmental Assessment (SEA). The SEA is a key document for sustainable land management in the SSP area; it identifies core sustainability issues and opportunities to address them and has developed a monitoring framework that will be critical for effective implementation of the ILUP if it is to support SLM. However at the time of the terminal evaluation the SEA has still to be approved by DEA<sup>69</sup>, the findings have not been incorporated in to the ILUP and there is a lack of clarity as to how it will be used to influence land use planning. It is important that this is addressed so that either the SEA is endorsed as a core planning document alongside the ILUP, or the ILUP is amended to incorporate the key recommendations of the SEA and the monitoring plan. The latter is the recommended course of action.

#### Lessons Learnt and Recommendations for Future Initiatives

429.In evaluating the results achieved under Output 1.1 a number of important lessons can be learnt to guide the design and implementation of future projects:

**1:** Effective, participatory, integrated planning takes time. Participatory planning processes, such as those used in this project, are vital for development of sustainable land-use plans, but to be effective require strong facilitation of stakeholder engagement, which in turn requires

<sup>&</sup>lt;sup>69</sup> Following the TE consultations and submission of the draft TE report BLB clarified that the SEA submission documents have been prepared by BLB for approval by DEA however it became evident that for DEA to approve the SEA it needed to be submitted to them by the Land Board and not BLB. BLB are therefore working with the Land Board to support the correct submission process. BLB confirmed that 'verbal agreement between DEA and the Land Board was made to continue with implementation as all steps were taken while correcting the applicant name.'

time. Consultation on land-use zoning often reveals conflicts which also take considerable time to resolve. The exemplary approach followed by the SLM Makgadikgadi project should be used as a template for future initiatives, however in any future initiative it will be vital to allow an adequate timeframe and to incorporate time and resource 'buffers' for a range of 'externalities' which may impact on plan development. Projects that try to short circuit effective consultative process risk producing land use plans that are not based on an in-depth understanding of the area and land-use issues, and therefore don't provide an effective planning framework for SLM. Without effective stakeholder engagement, plans are also less likely to be accepted and supported by local stakeholders and are therefore less likely to be effectively implemented. It is important for funding agencies, UNDP and National Government Agencies to realise that production of a document by EOP does not necessarily equal production of a sustainable and effective land use planning result.

**2**: Strategic Environmental Assessment (SEA) is essential for sustainable land-use planning and management, and is a regulatory requirement in Botswana. SEA must be incorporated as a core activity, with associated budget, in all future land-use planning and management support initiatives. The SEA produced under this project is a comprehensive document which provides a useful template.

**3:** 'In-house' development of land-use plans is an effective approach as it directly engages key players, builds knowledge and understanding on the planning area and land-use management issues by land-use planning agencies, supports coordination and partnership between key stakeholder groups and establishes 'ownership' of the plans at all levels. External expert input can also be valuable to support plan development and for the development of specialised documents such as SEA, rangeland assessments and monitoring and evaluation frameworks. To be most effective external support should also incorporate training and capacity building. Future initiatives should take lessons from the approach adopted by this project and consider how external experts can be most strategically incorporated to support a locally let ILUP process.

**4:** Development and implementation of a comprehensive, integrated monitoring and evaluation framework is key for effective implementation of land use plans if they are to support sustainable land use management. Monitoring should involve all key land-use management agencies and communities and support assessment of carrying capacities and the condition of rangeland ecosystems and impacts on livelihoods over time.

**5**: Projects often do not allow adequate time to support implementation of ILUP, an effective approach can be a phased approach wherein phase 1 supports development of the ILUP and once this has been approved, phase 2 supports its implementation.

#### Recommendations for effective implementation of the ILUP to support SLM within the SSP

- 430. For the ILUP to become a core planning document guiding land allocation within the five villages, it needs to be officially adopted as a statutory planning tool, approved by the Ministry of Land and Housing who subsequently submit it to the Attorney General for endorsement. There are strong indications at EOP that the Land Board intend to use the ILUP as the key planning document for land allocation within five settlement areas and that the Ministry intend to approve the ILUP<sup>70</sup>.
- 431. There is a need for DEA to review / approve the SEA.

<sup>&</sup>lt;sup>70</sup> The Land Board stated that they fully intend to use the ILUP for land allocation within settlement areas and have frozen all land allocation until the ILUP is approved by the Ministry and Attorney General. Although at EOP there is no clear evidence that the plan has been approved by the Ministry of Lands and Housing and the Attorney General, during a parliamentary debate on 16<sup>th</sup> June 2018 the ILUP was mentioned as an important planning tool by the Assistant Minister of Land Management, Water and Sanitation Services, Mr Itumeleng Moipisi, which would indicate that the Ministry intend to approve the plan once the full plan assessment process has been completed.

- 432. To achieve a broader SLM outcome across the SSP, the ILUP should be used in close conjunction with the SEA. The ILUP would be greatly strengthened if it is revised to address the core issues and recommendations outlined in the SEA. SEA Chapter 9 'Conclusions and Recommendations' provides clear recommendations as to how the ILUP could be updated to more effectively support SLM and Table 14 'Assessment of SEA objectives against alternative options' provides a useful tabular summary (SEA Option 4: Revised LUP + SEA + SLM).
- 433. The ILUP proposes that coordination and monitoring of the plan is solely 'the responsibility of the sub-Land Board and Boteti sub-District Council' and that the tools to be used for monitoring should be the 'Urban Developments Standards (1992) and Development Control Code (2013)'. These standards are appropriate to development within the village settlement area, but not as monitoring tools for sustainable land-use management across the SSP rangelands. If the ILUP is to support sustainable land-use management across a broader area than the boundaries of the five village settlements then a comprehensive, multi-agency, integrated monitoring framework needs to be developed which engages all key partners (including planning agencies, DFRR, DWNP, DCP, DAP, DEA and community groups). The SEA Chapter 8 provide useful guidance, including a table suggesting core sustainability objectives and relevant indicators.



Image 15: Agricultural areas within the SSP highlighting Arable Land

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

434. Under Output 1.2 the project aimed to support farmers to establish more sustainable livelihood systems, building on the assessments and priorities identified in the land-use plans. The Project Document specifies that '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.' Under Output 1.2 the project aimed to support the four communities in the Southern Sua Pan pilot area to 'develop a multiple livelihood production system, involving improved cattle-post pastoral systems, sustainable veld products harvesting, and conservation agriculture.' The Department of Agricultural Production (DAP) was identified as the lead partner to provide

support for 'improvements to the cattle post pastoral system'. The Department of Crop Production (DCP) would lead on support for trialling of Conservation Agriculture (CA). The Department of Forestry and Range Resources (DFRR) would provide the lead in supporting sustainable harvesting of veld products, working with community trusts.

- 435. The initial concept in project design was for the livelihood support under Output 1.2 to implement key elements of the land-use plans developed under Output 1.1. As outlined in the analysis of results achieved under Output 1.1. the land-use planning process took far longer than had been anticipated in design, due to a number of complex issues affecting the land-use planning process. The land use plans were not finalised until the final year of project implementation.
- 436.Project partners realised in the first year of project implementation that they could not wait for completion of the land-use plans before initiating livelihood support under Output 1.2. The decision was made by the TRG and PSC to move ahead with the core areas of support identified in design, which also reflected the priorities in the SSP Management Plan.
- 437.Consultations were initiated with each of the villages in the first year of implementation, to present the project and mobilise support for community engagement in training and pilot initiatives under Output 1.2. The first quarterly progress report notes that 'mobilization is critical to assume adequate community support for the project.' It reports that 'as the farmers associations are not yet fully functional, meetings at Mosu, Mmatshumo, Mokubilo and Mmea were held between TAC, the PMU and the village elders (chief, VDC, Trust and Farmers Committee) to discuss SLM deliverables and how the project plans to engage them at a local level with respect to improved and effective herd management.' Meetings were also held to discuss Conservation Agriculture and its potential benefits. The project compiled a database of all farmers in the pilot villages and basic socio-economic data was collected as the project baseline against which results would be monitored.
- 438.A number of targets and indicators pertaining to this Output are specified in the project's Results Framework. The TE reports back on the extent to which targets were met, and how the project achieved the strategic results described within the project strategy.

#### **Conservation Agriculture**

439	9.Within	the	project's	Results	Framework,	there	are	two	targets	relating	to	anticipated	results
	from p	rojec	ct support	for Cons	servation Ag	ricultur	e (CA	۹).					
1													

Indicators	Baseline	Target
No. of farmers practicing conservation agriculture	Zero	At least 40 every year (10 in each of the villages: Mosu, Mmatshumo, Mokubilo and Mmea), trained and given extension support i.e. 120 at EOP
Increased arable production as a consequence of adopting conservation agriculture	0.33 tonnes/ha	0.66 tonnes/ha (i.e. project will double the yield for those farmers that adopt conservation agriculture)

440.Arable crop production is core to the livelihoods of communities in the Southern Sua Pan (SSP), mostly for subsistence use, although surplus is sold at local markets within the villages. The most common crops cultivated in area include millet, sorghum, beans, groundnuts, watermelons, and maize. Planting seasons are short and dependent on annual rainfall and soils in the SSP area have low fertility, being mostly sandy and saline.


- 441.Conservation Agriculture (CA) techniques help to conserve soil moisture and increase soil fertility. The improved yields possible from CA mean that farmers can meet their subsistence needs from smaller areas of land, which in turn makes the fields easier to protect from damage by wildlife and reduces time and costs required for ploughing and sowing. The Department of Crop Production (DCP) in Botswana are trialling CA farming methods across the country and was the lead project partner supporting piloting of CA with SSP communities.
- 442.At project start a database was established of all active arable farmers in the SSP area. From this database, and through consultation with farmers across the area, forty individuals were identified from each village (Mosu, Mmatshumo, Mokubilo and Mmea) to participate in trialling of CA, through pilot initiatives on one hectare of their land. Remaining land was to be farmed by farmers through conventional methods, to enable comparison of the effectiveness of conventional vs conservation agriculture. Training and awareness-raising on CA was initiated in the first year of project implementation. The project purchased basic equipment necessary to support CA pilots including four animal-drawn rippers, two tractor-drawn rippers, one boom sprayer and forty hand planters. It also provided desktop computers for use by extension officers in compiling data on agricultural production; the computers were installed in each village at the kgotlas.
- 443. Requests were made to the PMU by DCP for additional agricultural equipment. There was no allowance for this expenditure in the original project budget and use of the budget for equipment would have drawn resources away from other areas of support. The PSC correctly advised that high cost equipment such as tractors should not be purchased through the project due to the fact that the budget was not available; these were not expenses allowed for in design and other opportunities were available to local partners to access such machinery through the Ministry of Agricultural Development and Food Security (MOA) Integrated Support Programme for Arable Agriculture Development (ISPAAD). The PSC provided useful strategic guidance throughout project implementation to support cost effectiveness.
- 444.In the second quarter of 2016 the project provided training to farmers to initiate the ripping process in pilot fields with subsequent support for planting and harvesting. DCP provided co-financing support, covering the cost of use by farmers of commercial tractor operators for

ripping and ploughing. DCP extension officers provided support to farmers throughout the ploughing and harvesting seasons and farmers were monitored on a weekly basis. As part of learning and awareness raising within the SSP, field days were organised in Mokubilo, and Mmatshumo villages, bringing arable farmers together from across the SSP area to learn from each other and discuss challenges and opportunities.

- 445.In 2016 an exchange visit was organised by the project for farmers and DCP extension workers to Samochima village in the north west of Botswana, where farmers have been trialling CA. SSP farmers and DCP extension officers were able to hear first hand the experiences and lessons learnt by the farmers in Samochima, and to apply this to their own pilot initiatives. The project also supported a selection of SSP farmers to participate in the annual Commercial Agricultural Show in Pandamatenga, where conservation agriculture was one of the key concepts promoted.
- 446.Use of organic fertilisers and safe / reduced use of pesticides is important within CA, but organic products are not widely used or available to farmers in Botswana. In the final year of project implementation, the project supported farmers and DCP extension staff to attended an awareness raising event organised by Organic Fertilizer Manufacturing Botswana in Gaborone. The project subsequently facilitated access by farmers to organic fertilisers. Soil samples from the ploughing fields were taken and results used to assist in issuing appropriate fertilizers and farmers were provided with a schedule of activities to be undertaken throughout the ploughing season. The project also produced posters to raise awareness on the safe handling of agro-chemicals, posting these within each village, providing training through DCP and protective clothing for use by farmers during spraying.



**Image 17:** Posters in DCP outlining key stages in Conservation Agriculture production

- 447. The PMU provided important logistical support throughout project implementation, this included use of the project vehicle to take farmers to training and to transport DCP staff to field sites. DCP reported that they often had difficulty accessing vehicles and without active support by the Project Manager, training and piloting of CA would have been much less efficient and effective.
- 448. The project also experienced challenges due to frequent turn-over of extension officers within DCP, causing a lack of continuity in support to farmers. This was made more problematic due to the resignation of two key officers within DCP who had been spearheading CA support. This caused delays as new officers had to be trained by DCP and the project subsequently had to re-brief the new officers on the project strategy and objectives.

- 449. Overall between 2015 and 2017, two hundred and forty-two farmers from Boteti Sub-District (40 in 2015, 69 in 2016 and 133 in 2017) have been trained in CA, with extension support provided by the DCP. Out of these one hundred and fifty-seven farmers were from the Southern Sua Pan. The target established within the Results Framework was for training and extension support to 120 farmers; the project has therefore met this target. The target however does not respond directly to the indicator which calls for a measure of the number of farmers practicing CA; the number trained does not necessarily equate to the number that have taken up the training. This is demonstrated through the project, in that at EOP 61 farmers, out of the 157 trained within the SSP, are reported to be actively practicing CA.
- 450. The second target / indicator within the Results Framework is the demonstration of increased yield through use of CA techniques; the target calls for a doubling of the yield for those farmers that adopt conservation agriculture from 0.33 ton/ha to 0.66 ton/ha. Over the 2016/2017 season, productivity on the farms piloting CA is reported to have yielded an average of 1.23 tonnes/ha whereas conventional methods of farming over the same time period only yielded an average of 0.51 tonnes/ha. This data indicates that in the year that it was piloted CA was two and a half times more productive than non-CA methods. The project achieved the target established in the Results Framework of 0.66 ton/ha from CA.
- 451.In the end of project report the Project Manager comments that although only 61 farmers within the SSP are reported to be actively practicing CA, many farmers were slow in the uptake of CA techniques but are interested in continuing with trials. He observes that 'having had promising results from those who did practice CA over a period of 2016/17 ploughing season, more are expected to do CA.' He notes that it is very unfortunate that the project is ending in December 2017, mid-way through the 2017/2018 ploughing season (which runs from October to July), as this is likely to lead to a reduction in the level of support for CA.

Image 18: Farmer piloting Conservation Agriculture demonstrating improved yield



452. The project met a number of challenges in collecting data for monitoring of yield. Lessons learnt through the project include the need for more effective monitoring of production methods and harvests by DCP, and on the potential for DCP to increase its use of telephonebased data collection, which was trialled through the project. The project has also developed recording sheets for use by farmers to enable them to monitor the effectiveness and efficiency of production themselves and to measure inputs against outputs.

- 453.DCP have confirmed that they are committed to continuing support for CA in the SSP, although they have limited resources. They hope to be able to access additional support through the Botswana Climate-Smart Agriculture Program 2015-2030<sup>71</sup>. Conservation Agriculture is a climate smart method of farming and fits well with two of the core strategic objectives of the CSAP programme focussed on improved agricultural productivity and climate change resilience. Conservation Agriculture is also incorporated in the governments new Climate Change Policy.
- 454. The Strategic Environmental Assessment (SEA) supported under project Output 1.1 provides useful analysis and recommendations to support improved sustainability within arable production. It recommends that DCP should:
  - Set a threshold for land productivity (i.e. yield) above which the land could be deemed as not being degraded, from an agricultural perspective
  - Set a target for 100% of arable farming to implement Conservation Agriculture (CA) and support the delivery of this target.
  - Monitor progress against the CA target, including (i) the area of land under Conservation Agriculture; (ii) the proportion of land used for arable farming that implements Conservation Agriculture; (iii) the proportion of land used for arable farming that has productivity levels above a set threshold (e.g. 0.66 tonnes/ha).
  - Install cluster fencing at appropriate locations to reduce encroachment by livestock and wildlife.
- 455. The SEA also recommends that the ILUP should provide a vision statement that '(By 2036), (i) there will have been no loss of arable farmland; and (ii) Conservation Agriculture will be implemented on all arable farmland'.
- 456. Consultation with farmers during the TE indicated that those directly engaged in piloting CA under the project were keen to continue with the technique and that there was interest from other farmers in trialling CA. However, farmers expressed their concern as to whether they would be able to access the support needed once the SLM project had ended. Key issues they raised included the need for: further training on how to deal with pests and diseases; whether they would be able to access organic fertilisers and sprays; the need for further training on the use of organic products and farming methods, and whether DCP would continue to provide core equipment and relevant training. Farmers highlighted that they constantly face challenges in accessing equipment and support from DCP and stressed the need for farmers to have a greater degree of autonomy, so that they can schedule work more effectively and work around local weather conditions. Their recommendation was that it would be more effective and efficient for farmers associations/ community trusts to own and manage the core equipment required for CA. The associations would then be responsible for, and would have a vested interest in, maintaining the equipment and in ensuring it was available to members when needed.
- 457. The TE recommends that DCP should work with community trusts and associations following EOP, to review the results and lessons learnt through the SLM project and the recommendations provided by the SEA, in order to identify priority areas of support.

#### Pastoral / Livestock and Farmers Associations

458. The Project aimed to increase the sustainability of pastoral farming systems in the SSP through a number of measures: strengthening farmers associations; direct support and

<sup>&</sup>lt;sup>71</sup> CSAP is a national program implemented under the Ministry of Agricultural Development and Food Security and Ministry of Environment Wildlife and Tourism with technical and financial support from the Southern African Development Community (SADC), Common Market for East and Southern Africa (COMESA) and CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).

training to livestock farmers to enable them to practice more sustainable and effective herd management and correspondingly increasing the cattle off-take rate for the SSP area.

Indicators	Baseline	Target
No. of functional farmer's associations	Zero	2 by the end of the project, covering all of Boteti-sub-district and all of the Southern Sua Pan planning area
No. of farmers practicing improved and effective herd management	Zero	100 farmers enrolled for participation in the project, through the farmers associations
No. of farmers practicing improved and effective herd management <sup>72</sup>	Zero	120 farmers enrolled for participation in the project from each village (10 from each village initially and 10 more added per each of the four villages by project end)
Off-take rate for cattle	Tbd during range assessments. Baseline assumes calving rate (the proportion of cows bearing a live calf (% per yr), estimated at 92%. <sup>73</sup>	Tbd after range assessments. However, using estimate from Abel (1997), used for the baseline, project will endeavour to increase this target by 3% to almost 95%

459. Within the project's Results Framework there are four relevant targets/indicators

Image 19: Land Suitable for Pastoral Development within the Makgadikgadi Region



<sup>&</sup>lt;sup>72</sup> the Results Framework has the indicator twice, under each Outcome; one target focuses on participation of farmers through associations, the second relates to direct participation by farmers within villages. The indicator for both is 'No. of farmers practicing improved and effective herd management'. <sup>73</sup> based on average rainfall of 450 mm/yr, and using formulae in table 2 of Abel, 1997, Ecological Economics 23: 113-133

460.Pastoral agriculture is the main livelihood and economic activity amongst communities in the SSP area, comprising both cattle farming and small-stock. The cattle farming system revolves around the cattle post system, whereby a group of farmers share a central borehole or watering point for their livestock and during the dry season / periods of drought, water for livestock is restricted to boreholes. This results in high cattle densities at these locations, and subsequently greater levels of overgrazing and land degradation around boreholes. The Southern Sua Pan Management Plan (SSPMP) and Makgadikgadi Framework Management Plan (MFMP) highlight overgrazing as one of the priority issues that need to be addressed to support sustainable rangeland management. The SSPMP identified that, overall, the carrying capacity of the rangelands in the SSP area is approximately 16-16.5ha/LSU. This equates to a maximum carrying capacity for the grassland and woodland areas of the SSP of approximately 15,000 Livestock Units (LSU).

## Farmers Associations

- 461. The project aimed to support the establishment of two 'functional' farmers associations within Boteti sub-district, covering all of the SSP area. At project start, discussions with the Department of Agricultural Production (DAP) indicated that there were already two livestock associations legally registered in the sub-District, one for small stock and one for cattle, but neither were operating effectively. Following meetings with DAP, the chairmen of both associations, and consultation with livestock farmers in the SSP area, the decision was made by the TRG to focus project support on strengthening the two existing associations.
- 462. The need was identified to define what was implied by the descriptive term 'functional', so as to clarify the nature of project support. Following discussions amongst the TRG, 'functional' was taken to mean an association which held 'successful regular meetings; execution of their work plan; as well as the ability to adhere to their constitution.' This definition was later refined to more clearly reflect the SLM focus of the project, functional was taken to imply: 'the extent to which the associations can engage with farmers in the pilot area in order to serve the needs of the famers, sustain rangelands working within the framework or regulations of the Botswana Agricultural Union (being the mother body of all Agricultural Associations in Botswana).'
- 463. Support for the Farmers Associations was initiated early on in the first year of project implementation, through discussions between the PMU, DAP and the small group chairing both associations.
- 464. Tikologo Small Stock Farmer's Association represents farmers from the areas of Letlhakane, Mmatshumo, Mosu, Mokubilo Mmea and Khwee. The overall objective of the Association is to promote a profitable small stock industry in Boteti East; it was started in 2011 but over recent years had been largely been dysfunctional with weak membership and few meetings.
- 465. The Boteti Beef Farmers Association covers 16 villages extending beyond the SSP across Boteti District (Mmatshumo, Mosu, Letlhakane, Khwee, Mokoboxane, Mopipi, Xhumo, Kedia, Rakops, Mmadikola, Xere, Toromoja, Khumaga, Moreomaoto, Motopi and Makalamabedi). It was legally registered as a farmers' Association in 2012 'to represent, promote, and protect the interest of all beef farmers in both cattle posts and ranches in Boteti Sub District.' The Association aims to connect beef farmers with the Botswana National Beef Farmers Union, relevant public sector agencies and other organisations with similar interests, to promote and encourage animal husbandry through effective livestock breeding practices and to advocate for regulation and use of safe agro-chemicals. Although legally registered, the association had never actually become operational; it did not have active members, had not held meetings and did not have an agreed constitution.
- 466. The project was effective in providing support to the Small Stock Association which had clear membership, amongst whom there was overall agreement on the association's objectives and priorities. The project supported the association to develop a five-year strategic plan (2015 2019) and a detailed annual plan for 2016 and 2017. In developing the annual and five year plans, existing members were directly involved and the executive committee was trained so

that they will be able to lead plan development in the future. Training was also provided to increase the awareness of members of the issues of overgrazing and rangeland degradation, and of ways to achieve more sustainable livestock management. A Small Stock Management Manual was developed through a partnership between the DAP and the project, in consultation with small stock farmers across the SSP. Membership of the Association increased over the life of the project and at EOP the Association has 80 active members and representation on the National Small Stock Federation. This has contributed to its bargaining power in negotiating with government and the Association has successfully negotiated to increase the minimum goat purchase price from P700.00 to P1000.00 per female goat, demonstrating to its members the benefits association membership can bring. The project also supported the Association to hold a Small Stock Meat festival in September 2016, helping to facilitate the involvement of high-level government officials and the private sector. Project reporting highlights that the event 'drew key people from the Ministry of Agricultural Development and Food Security and cooperates from the area, where Debswana later donated P10,000.00 to the Association. As a gesture of support, the area Member of Parliament provided his farm to host the event for free.' Again, this has helped to increase the visibility of the Association as a body that can support farmers and effect positive change.

- 467. Establishment of a 'functional' Boteti Beef Farmers Association has been a bigger challenge. The project facilitated several meetings between DAP and the leaders of the association in the first year of project operation. However, by the final year of the project in 2017, the association had still not been able to agree on its role and constitution, and had significant difficulty in engaging members. Project reporting describes the following process: 'After many fruitless trials to bring the dysfunctional committee together, each village in the Boteti Sub-District was asked in writing through the chiefs to have two willing and active representatives from each of the villages in Boteti district to form the main committee of the Association in March 2017. A session was called for all these on the 1st April 2017 in to collectively address barriers to the effective functioning of the Association. Unfortunately, the meeting didn't bear any fruit as more disagreements emerged on the way forward.' Further meetings were called but failed to achieve results due to non-attendance of members and disagreement over the role of the association. The final project report observes that although it was important to include as many villages as possible within the scope of the Association and to combine famers who own ranches and communal farmers, 'it proved a daunting task to manage, in that many of the meetings that were called never materialized due to members not meeting a guorum or the interest of ranch owners differing from those in communal areas.'
- 468.At EOP the Boteti Beef Farmers Association is reported to have 24 registered members. Towards the end of the final year of project implementation, in September 2017, the project supported a training session on herd management and strategic planning for registered Association members. The final project report states that 'at least 69% of the Executive Committee participated and drew a plan of action until December 2017'. In October the project also supported 17 members of the committee to participate in a four-day trip to visit the Ghanzi Farmers Association, including visits to a number of commercial farms.
- 469. The association is however far from being 'functional' and will require considerable further support if it is to become a body that can support farmers to achieve more sustainable and effective herd management practices. Recognising the need for ongoing support following EOP, the project sought to identify potential avenues for private sector financial support to the Boteti Beef Farmers Association. It supported the Association to develop proposals for funding to mining companies in the area. This included a small project proposal requesting funding from Boteti mine focussed on 'improving the Beef Value Chain in Boteti for livelihood improvement and employment creation, a proposal to Karowe mine and a proposal to Lucara Mine. The final project report states that 'Karowe Mine has shown keen interest to further take over support to the Boteti Beef Farmers Association from January 2018 for at least two years.' The proposal for funding from Lucara Mine is also substantial, Boteti Beef Farmers

Association have requested of BWP 2,800,000 (approx. US\$266,850) for an initiative to establish a beef management centre for all beef producers in Boteti, alongside capacity building for cattle management systems to support more sustainable use of communal range lands. If the Association is able to access further support following EOP, and if DAP ensure that this support is focussed on achieving more sustainable rangeland management practices, the Beef Farmers Association has the potential to become a body which can support more effective herd management, and to facilitate the establishment of financial incentives for more effective and sustainable herd management. Given the apparent level of disagreement between cattle farmers across Boteti District and given the levels of overstocking and consequent degradation of rangelands, this will however be a challenge requiring support and guidance for the Association across a range of areas.

- 470.At EOP it is clear that the project has helped to revive two key livestock associations: Tikologo Small Stock Association and Boteti Beef Farmers Association. The Small Stock Association is better established with 80 registered members and a five-year strategic plan (2015-2017), while the Beef Farmers Association only has 24 active members and is still in the fledgling stages of establishment. The Tikologo Small Stock Farmer's Association has a strong likelihood of ongoing sustainability post project and is actively supporting its members to improve livestock production, including more sustainable practices. With the Boteti Beef Farmers Association there are more risks to its sustainability. At EOP the association is not yet established as a fully 'functional' organisation and has not had any clear impact in increasing cattle farmer use of more sustainable rangeland management practices. Using the project definition of functional as 'the extent to which the associations can engage with farmers in the pilot area in order to serve the needs of the famers, sustain rangelands working within the framework or regulations of the Botswana Agricultural Union (being the mother body of all Agricultural Associations in Botswana)', Tikologo Small Stock Farmer's Association is clearly functional, Boteti Beef Farmers Association not yet.
- 471.During consultations with the TE, both associations acknowledged that training and information provided through the project has helped to increase their awareness of the issues of overstocking, land degradation in the SSP rangelands, and of opportunities for achieving more sustainable patterns of production. The project has also provided guidance on herd management techniques and has supported the associations in strategic planning. Both Associations however strongly expressed the need for ongoing support following project end.



Image 20: Small Stock grazing the SSP Rangelands

# Image 21: Cattle grazing the SSP Rangelands



Number of Farmers practicing improved and effective Herd Management

- 472. The project aimed to deliver support for improved herd management at two levels, both through the farmers associations and to farmers individually within SSP communities. The indicators in the Results Framework are the number of farmers practicing improved and effective herd management, with a target of 100 farmers within the Associations and 120 from the SSP villages (10 from each village initially and 10 more added per each of the four villages by project end).
- 473. The Project Document does not clearly define the anticipated end of project result in terms of the changes in herd management practices which would demonstrate that they are 'improved and effective.' Given the SLM focus of the project, however, 'effective' should imply some measure of increased sustainability of rangeland use, whereby herding practices reduce problems of overgrazing. The Project Document does highlight<sup>74</sup> the type of training to be delivered through the project as follows: 'training for commercial ranchers (through the Farmer's Association) will revolve around effective use of enclosures, paddocking, rotational grazing, supplementary feeding and controlled off-take and marketing. Training of farmers on communal lands (again through the Farmer's Association, and for many others through the village trusts, kgotla meetings and farmers committees) will revolve around the improvement of pastoral system based on a combination of herding, kraaling and livestock movement and marketing.'
- 474. The Project Document also underlines the importance of gender equality, to ensure that implementation of livelihood support involves both men and women and considers the specific needs of women farmers. Although the project did not develop a gender strategy or any criteria, the project did actively support participation of women. Of the 104 farmers 30% are female while 70% are male.
- 475.At project start it was important for partners to define the descriptive terms used in the indicator: 'improved' and 'effective', so as to clarify what the project aimed to achieve. The decision was made to use DAP District Office in Letlhakane's criteria for 'improvements': Improved herd management was defined as farmers who have 1) a livestock management calendar/schedule (including managing stock rate, selling/culling, preferred grazing habits,

<sup>&</sup>lt;sup>74</sup> in the notes to the project budget

water provision and related), 2) vaccination calendar, 3) effective sheltering or kraaling system 4) reliable skilled livestock herder/manager and 5) alternative livestock feed. The project did not however establish a clear definition of what 'effective' herd management implies.

476.Project support involved training and awareness raising both directly within communities and through the two Associations. At the village level, due to the limited time and funds available the TRG decided that the project should focus training and support in the village of Mosu, where there is large concentration of livestock especially small stock. Farmers from other communities attended central training workshops in Mosu. This was both effective and more efficient than trying to deliver separate training to each village, and also enabled farmers from the different communities to come together to share ideas and experience. Training was provided by DAP focused on the five 'improvement' criteria, and the project also engaged the Department of Veterinary Services (DVS) to provide training to livestock farmers on herd management practices that can reduce spread of disease and infection. At least 40 farmers were trained (10 from each of the villages). The project also produced vaccination and management calendars for both cattle and small-stock.



Image 22: Livestock Posters

- 477.Mosu also has a small stock farm. This was initiated under a previous project, but at project start was found to not be operating effectively. The project facilitated support through the Department of Animal Production (DAP) for development of a business plan for the farm and training for farm members in livestock production.
- 478.A survey was undertaken by the project in the final year of implementation to assess the impact of the training and to compare the capacity of farmers within and external to the livestock associations. The survey aimed to 'ascertain the extent to which working through associations has influenced improved herd management.' 77 famers participated in the survey (43 female and 34 male). Both members and non-members were asked the same questions on general herd management, kraal management and livestock herding. The results indicated that those engaged in the associations used a greater range of improved herd management practices:

- Vaccination: 68% of association members indicated timely vaccination as opposed to 33% for those who are not members.
- Use of communal rangelands for grazing: Although all farmers used communal rangeland areas for grazing livestock, 76% of association members use supplementary feeding especially during the dry season, against 45% of non-members.

Image 23: Mosu Small Stock Farm



Image 24: Mosu Small Stock Farm growing feed for small stock



479.A specific assessment was undertaken to assess the capacities of members and nonmembers of the Small Stock Association. The final project report indicates that: '40 Small Stock Association members were taken through the same assessment as non-members. 67 % of members of the Association indicated they have separate kraals as a strategy to enhance herd management while for non-members only 37.5% indicated understanding the practice of separate kraals. 62.5 % of members indicated vaccinating against 32.5% of nonmembers. 67.5% of members indicated that they provide supplements against 45% for nonmembers.'

- 480.At EOP it is clear that the project has delivered useful training and awareness raising alongside support to strengthen the two livestock associations, and that this has had a positive impact in improve herd management practices across a range of parameters. Support through the small stock farmers association appears to have been most effective. This is in part due to the role of the association in bringing farmers together to regularly discuss issues and reinforce the knowledge gained through training, within the context of a strategic approach for achieving more effective herd management. The livestock associations also provide opportunities for farmers to access support more effectively through DAP. However, considerable further training and support is required to achieve 'effective herd management', where effective is taken to imply more 'sustainable'. At EOP there is little evidence of changes in herding practices at levels which would have a significant impact in reducing grazing pressure on rangelands. This is perhaps an unrealistic expectation from a three-year MSP, however, it is important for all partners to note that considerable further work is required to support 'effective' herd management practices that will address the key issues outlined in the Project Document, and in the SSP Management Plan and MFMP.
- 481. The Strategic Environmental Assessment (SEA) undertaken through this project under Output 1.1 provides some useful recommendations. It stresses that 'the main environmental issue relating to land degradation is overgrazing by livestock' and recommends that there is a need to 'put in place appropriate land management measures to help halt and reverse land degradation and to ensure that livestock numbers are kept within the carrying capacity of the rangelands.' The SEA recommends that 'the Department of Forestry and Range Resources will need to work closely with the Department of Animal Production to put measures in place to ensure that stocking densities of livestock are reduced to – and kept below – the carrying capacity of the rangelands on which the livestock (and the local communities) depend.' The SEA puts forward a series of examples of actions that can be taken including:
  - reducing the number of livestock or excluding livestock in areas affected by land degradation, particularly around water points and the pans;
  - bush removal / de-bushing in areas suffering from bush encroachment especially around features of interest, such as Mokubilo and Mmea Pans
  - increasing the distance between boreholes / water points and, where existing boreholes / water points are too closely spaced, considering closing these.
- 482. The TE recommends that partners consider the recommendations and analysis put forward in the SEA when identifying priority areas of support for achieving more effective and sustainable herd management practices within the SSP, that can help to decrease, and ideally reverse, land degradation.

## Cattle Off Take Rate

- 483. This indicator is highly relevant to achievement of the intended Output and Outcome level results. 'Off-take rate' refers to the number of cattle being taken 'off' the rangelands, normally for marketing on either the formal or informal markets. Within the SSP area, cattle off-take involves selling cattle to various market places such as BMC, feedlots, butcheries, etc. Cattle off-take rate is of direct relevance to sustainable rangeland management due to the fact that increased cattle off-take can help to reduce the number of cattle on the rangeland and therefore reduce overgrazing.
- 484.In the project Results Framework however, the Target given against the cattle off-take indicator is a measure of the 'calving rate' (the proportion of cows bearing a live calf as a % per yr). The baseline figure is an estimated calving rate of 92%, the target is to increase this by 3%. The target and baseline established in the Results Framework are not an appropriate means to measure the cattle off-take rate, and this has, understandably, caused some level of confusion in project reporting.

- 485. The project reports that the 3 % target in increased calving rate over the life of the project has been met. However, in the final project report, the Project Manager picks up on the problem with the use of calving rate as a measure of increased sustainability of livestock production when he writes 'Over the past two years, the region has been recording good rains resulting in good pastures and hence increase in calves with a recorded cattle increase of 17% from 2015 to 2017. Although cattle increase may be good for an individual farmer, there could be a cause for concern for the effects of overstocking in rangelands, more so that the available land (505,000 ha) is not increasing and most communal farmers do not supplement feed.'
- 486.In order to give a measure of cattle off-take over the life of the project, DAP monitoring data was used to provide an assessment at EOP. DAP undertakes quarterly monitoring against a series of different parameters. DAP figures indicate that in the SSP area the cattle off-take rate for 2014/15 was 7.8%, for 2015/16 it was 9.69% and for 2016/17 it was 14.40%. There has therefore been a steady increase in cattle off-take over the three-year life of the project.
- 487. However, due to increased calving rates and an influx of farmers from other areas<sup>75</sup> there has been an overall increase in stock on the SSP rangelands, despite the increase in cattle off-take rate. The project reports that there has been an 'overstocking rate of animals in the SSP area from 40% and 51% over the project period' with records for 65,639 cattle in 2014/15 and 79,430 in 2016/17.'
- 488. Currently the numbers of livestock on the SSP rangelands are at an unsustainable level. The carrying capacity of the SSP rangelands estimated in the SSP Management Plan is approximately 15,000 Livestock Units (LSU). 2016 data provided by the Department of Animal Production indicates that there were 45,305 livestock (including 30,936 cattle) in the SSP area. This equates to approximately 35,000 Livestock Units (LSU). The 2016 DAP figures indicate that the number of livestock on the SSP rangelands is therefore more than double the estimated carrying capacity of the SSP rangeland area. Project reporting indicates that over 2016/2017 this number has increased to 79,430.



Image 25: Bull being taken off the rangelands

<sup>&</sup>lt;sup>75</sup> Project reporting indicates that a significant challenge is the policy governing cattle posts, where cattle posts are not allocated nor governed and so the area has been experiencing an increase and influx of farmers and cattle from other areas to Southern Sua Pan especially the area of Mmea and Mmatshumo

489.In terms of overstocking of rangelands, the situation at project end is then worse than at project start. There are many complex issues resulting in over stocking of rangeland areas in the SSP, and it would be unrealistic to think that a three-year medium sized project such as this could address them all effectively, especially considering the number of other areas of project intervention which required time and resources. The project has helped to increase awareness amongst farmers on the importance of achieving sustainable stocking of rangelands and of the benefits of having smaller healthier herds, it has delivered relevant training and has strengthened the Small Stock and Beef Farmers Associations. It has also helped to identify relevant issues which need to be addressed including the current policy governing cattle posts whereby cattle posts are not allocated or managed in any clear way. However, the project has not had any significant impact in reducing stocking rates and overgrazing of rangelands; this remains a priority area which needs to be addressed through multiple parameters. The Strategic Environmental Assessment (SEA) undertaken under project Output 1.1 provides useful analysis and recommendations. It underlines the importance of this area of work, stating 'that land degradation resulting from overgrazing is probably the single most important environmental issue in the area (alongside issues of water supply).'

## Veldt Products/ non-timber forest products

Indicator	Baseline	Target
Revenue from non-timber forest products, including soils and salt	\$444/household/annum	End of Project targets is to increase revenue by 33% to \$591/household/annum within the project site

- 490.Veldt products are natural products harvested from uncultivated areas and are an important livelihood resource in Botswana. The MFMP estimates that over 40% of households across the Makgadikgadi region harvest veldt products and that the combined value of veldt products to households is higher than the value of crops. The SSP area is rich in veldt resources and it is estimated that over a quarter of households harvest for sale. Products include fruits, grasses, medicinal plants and mophane worms all of which are harvested for subsistence use, barter and sale. Salt and sand are exploited to the west of Mmatshumo and coloured clays on the south-eastern edge of Sua Pan. The following map shows the distribution of veldt products throughout the SSP area.
- 491. The main SLM issue is overharvesting, including increasingly due to people coming from outside the SSP area to harvest commercially. There is currently no effective resource management system for veldt products in the SSP area. The SLM project aimed to address this by piloting 'a community based sustainable veldt products management, harvesting and marketing project in Southern Sua Pan' in order to improve household income in the SSP villages and to protect the long-term viability of the veldt product resource.
- 492.It also aimed to support the 'identification and mapping of the main veldt products in southern Sua Pan...with community participation and based on local knowledge'. The SLM Project Document stated that this 'will represent a major output through which to obtain official recognition of veldt product use in sustainable development.' As shown in the above map, veldt products had already been mapped in the SSPMP, the project however aimed to add further detail to this as part of a community-based management initiative.

#### Image 26: Location of Veldt Products map from Southern Sua Pan Management Plan 2012



- 493. Within the project's Results Framework, there is one indicator and target relating to harvesting of non-timber veldt products. These, however, focus solely on increasing revenues from non-timber products rather than any measure of the sustainability of harvests, or on establishment of a management system to support sustainable use. As discussed in the analysis of project design in section 3.1 of this TE report, the OVI and Target do not effectively capture the intended results described in the project strategy.
- 494. The support provided through the project was somewhat different to that described in the Project Document; there was no direct support for sustainable harvesting and communitybased management, and the project has not specifically worked to achieve an increase in income earned from veldt products. In 2016 the project supported production of a book on 'non-timber veldt products in Botswana'. The book describes all known veldt products, highlighting the resource, habitat in which it is found, its uses, any management and regulation pertaining to it and sustainable harvesting issues. It also outlines the permits required for harvesters, dealers and exporters of veldt products and how harvesters can obtain such permits. The book will be a useful resource for community trusts, individuals, commercial veldt product dealers, as well as for organisations aiming to support sustainable harvesting, including DFRR.
- 495.In 2017, the project also undertook a survey of the types and levels of use of veldt products in the SSP area. Through interviews with 192 households the survey found that, while a significant portion of veldt products are harvested for subsistence use and barter, 'total accumulation of cash obtained over the period 2015 to 2017 stands at P 652,230.00 (US\$65,223) with 'average annual revenue accrued' P3397.00 which is equivalent to US\$ 339.70. The survey showed that there had been an increase in the number of youth harvesting between 2014 to 2017, rising from 16% to 21% respectively while female harvesters decreased from 83% to 77%. The survey results also indicated a link between patterns of rainfall and veldt product harvesting, with decreased harvesting during years with good rainfall when communities placed a greater emphasis on arable farming. The survey identified the main veldt products harvested in the SSP and the areas where they are located.

496. Recognising the shortfall in anticipated results/support and the likelihood that the project would not be able to achieve the intended results by EOP, the PMU looked at ways to leverage additional support towards achieving these result following EOP. In 2016 the project supported the Gumakutshaa Conservation Trust to develop a proposal for funding from the National Environment Fund (NEF)<sup>76</sup> and from the Poverty Initiative within the President's Office. The application to NEF was successful and the Gumakutshaa Conservation Trust is now implementing a two-year project, facilitated and supported by BirdLife Botswana, funded by NEF. The project is titled: Integrating livelihoods and conservation: Improving the community livelihoods and conserving the environment of the Southern Sua Pan.' It has three components (i) to reduce the unsustainable harvesting of natural resources; (ii) to curb human wildlife conflict and (iii) to reduce rangeland degradation. The grant amount is (BWP 860,000 / approx. US\$ 82,000)

**Image 27:** Book produced through the project on non-timber veldt products



- 497.At EOP the project has not achieved the results intended in the Project Document in terms of supporting community-based management of veldt resources for more sustainable harvesting, nor has it directly achieved the target, in terms of increased income from veldt harvesting. As with other areas where the project has underperformed, this appears to be largely due to the time and resources required to address the challenges and additional work involved in development of the land-use plans under Output 1.1. The effort and resources which the project had to put in to the land-use plans drew time and resources away from other areas of project intervention. The PMU's decision to try to leverage additional resources to support intended project results following EOP was a strategic one, and demonstrates the long-term focus of the PMU on achieving results, and the positive benefits of having an organisation such as BirdLife Botswana as the Executing Agency, particularly given its ongoing engagement in the SSP area. The fact that BirdLife Botswana will support the Gumakutshaa Conservation Trust in implementing the NEF funded initiative helps to ensure continuity with the SLM project and increases the likelihood of positive outcomes from the NEF initiative following EOP.
- 498. The strategic environmental assessment (SEA) produced under Output 1.1 to support development of the land-use plans should again be mentioned here as it included a review of sustainability issues linked to use of veldt products in the SSP and provides a number of

<sup>&</sup>lt;sup>76</sup> The National Environmental Fund (NEF) was established by the Ministry of Environment, Natural Resources and Tourism (MENT) through Statutory Instrument No. 70 of 2010 to promote and provide financial support for projects that are geared towards the protection and conservation of the environment

important recommendations to support sustainable management. The SEA recommends that relevant stakeholders (including DFRR, DEA, DWNP and community trusts) should:

- Put systems in place for the sustainable management of veldt products, including the regulation, collection, distribution and marketing of veldt products.
- Identify and set a target for the maximum level of veldt product exploitation that can be achieved without depleting the veldt product resource, taking into account other competing land uses.
- Provide guidance on appropriate land management options within the veldt product areas (e.g. set limits on livestock grazing, woodfuel collection and encroachment by villages and arable farming).
- Ensure that the LUCIS mapping of veldt products uses up-to-date veldt product data, rather than just presenting the same spatial data that was presented in the Southern Sua Pan Management Plan (SSPMP) in 2012.
- Monitor progress against targets and objectives for the sustainable management of veldt products.

The SEA advises that the SSP Land Use Plan should:

- Provide a vision statement that '(By 2036) the exploitation of veldt products will be regulated and managed sustainably, such that the harvesting of these products does not result in their depletion or cause land degradation'.
- Set objectives for the sustainable management of veldt products.
- Promote appropriate land management options within the veldt product areas.
- Provide an up-to-date map showing the location of the veldt product resource, differentiating between different types of veldt products.
- Reconsider the location of the proposed village expansions if these overlap with veldt product locations.
- Promote the monitoring of progress against targets and objectives for the sustainable management of veldt products.
- 499. The TE suggests that these are valuable recommendations and that partners should work together to identify ways to strengthen veldt product management in line with both the intended results outlined in the Project Document and the specific recommendations of the SEA which support this.

Overall income-based calculation of livelihoods results achieved through project support, including both Conservation Agriculture and improved herd management

500.Within the project's Results Framework, there is one target /OVI which measures income earned through farming over the life of the project. The target is for an increase of 50% in farm generated income from livestock and conservation agriculture. Although the indicator refers to 'improved livelihoods', the only measure of this improvement cited in the baseline and target is income earned; there is no broader measure of the sustainability of livelihoods. The project therefore amended the indicator following mid-term to more clearly reflect the target.

Indicators	Baseline	Target
No of farmers with improved livelihoods (Farmers to be disaggregated according to gender, age group and small stock keeping)	Tbd during range assessments which will cover farmer livelihoods as well but national average is around US\$850	Increase by 50% farm generated income of farmers involved in improved herd management and CA to at least \$1,275 by project end

The above indicator was amended by the project following PMU to clarify that the target and baseline referred solely to income levels as follows		
Farmer income levels	US\$850	Increase farm generated income of farmers involved in improved herd management and CA to at least \$1,275 by project end

- 501. Income levels were calculated at project end by a senior agronomist at DCP using data collected over the final year of project implementation (the 2016/2017) ploughing season. It should be noted here that the ploughing and harvesting season in the SSP area is over a few months, during and following the rainy season (between December and April). Most crops are used for subsistence use rather than sale and the agronomist therefore used a formula of P 150.00 per bag of field produce for cereals (e.g Sorghum and maize). P 150.00 is used as a standard charge per bag of cereal from BAMB (2017). Yield from CA was computed and compared to that from non-CA and both of them averaged to a hectare for comparison. In the final project report, the project manager notes however that measurement of harvest levels by farmers and the DCP extension officers did not capture the full harvest, but solely the 'tail end of the harvest season'. The project manager notes that 'This poses a major shortfall for those unrecorded but important harvest. Lack of a proper recording sheet of course was a significant oversight which should have been rectified from the start of the project. However, this is being corrected to capture correct data even though results will be available beyond the project period.' A lesson for future initiatives is then the need to ensure that data is collected and monitored throughout project implementation; at project start initiatives should agree on the data collection framework and reporting system.
- 502. The project Results Framework specified that measurement of income levels should be 'disaggregated according to gender, age group and small stock keeping', although this was only noted in a footnote and no gender or age-related baseline data was provided. Unfortunately, the project has not disaggregated data by age or gender and this is a weakness in project monitoring. This is again an important lesson for future project and the data collection framework/sheet should enable disaggregation by gender, age and vulnerable groups (for example single parent households, or disabled).
- 503.Based on the assessment undertaken by the agronomist, the project reports that 62% of the intended target of USD 1,275.00 was achieved. The figures provided are: USD 312.00 from CA and USD 41300 from herd management, totalling USD 785.00. However as highlighted by the Project Manager the figure for CA does not effectively capture the value of the total CA crop.

504. The results are reported in the final project report are as follows:

- Conservation Agriculture: 'Of the total of 430 active arable farmers in Southern Sua Pan (over the period of 2015 to 2017), 157 were trained on CA, 61 practised CA but only 20 managed to follow all steps and principles of CA to completion. Of the 20, they ploughed 35.18 ha, harvested 19.07 tons of cereal and got P 71, 780.00 from sales of the harvest. On average farmers recorded 1.23 tonnes/ha as yield from CA as opposed to 0.51tonnes/ha for all those who didn't practice CA.'
- Income assessment for ploughing season (2016/2017) shows that 80% of famers who practised CA are from Mokubilo and Mmatshumo and CA has so far generated P 3,120.87/ha (US\$ 312/ha) for each farmer on average from sale of green mealies and threshed maize over the harvest season.

 Small Stock: Records from DAP over the project period showed: 'the sale of small stock is P213,000.00 (USD 21,300.00) for 15 farmers who on average each one of them got P4,733.00 (USD 413.30) per year.'

#### Overall Summary of the contribution of Output 1.2 results to Outcome level results

At EOP it is clear that the project has helped to raise awareness of SLM issues and the importance of more sustainable production methods to support livelihoods linked to arable farming, livestock production and harvesting of veldt products.

The project has helped to demonstrate the effectiveness of conservation agriculture as a more efficient method of arable farming, and has provided training, basic equipment and support to farmers across the SSP. This has been effective in establishing a core of support for CA amongst community trusts, DCP and farmers who have piloted the techniques. Farmers across the four SSP communities are aware of the results achieved through the project and have expressed interest to DCP in engaging in CA. DCP is committed to providing ongoing support for CA and this will be essential if it is to become established as a core method of farming across the SSP. Support for sustainable, community-based management of veldt product harvesting has been weaker, but the project has leveraged support to enable BLB to continue to pursue this intended result with local partners following EOP.

Within the core issue of livestock production and herd management, the project has helped to establish a functioning small stock association and to initiate support for the establishment of a beef farmers association. It has also helped to raise awareness of the issues associated with overstocking and provided training to farmers across a range of livestock production techniques to increase the efficiency of production. The Small Stock Association is functional and is actively supporting its farmers to increase the efficiency and sustainability of production methods. The Beef Farmers Association is not yet fully functional and major issues and challenges remain in achieving more sustainable patterns and levels of cattle farming in the SSP region.

As outlined in the SEA 'the main environmental issue relating to land degradation in the SSP is overgrazing by livestock' and there is an urgent need for partners to 'put in place appropriate land management measures to help halt and reverse land degradation and to ensure that livestock numbers are kept within the carrying capacity of the rangelands.' The sustainability of livestock production is key to sustainability of livelihoods. The SEA has provided a number of specific recommendations on ways to increase the sustainability of livestock production in the SSP, and this in itself is an important result supporting intended results under Output 1.2. The ILUP also emphasises the importance of sustainable livestock production for the ecosystems within the SSP area and for the livelihoods of communities who live there. It includes assessment of relevant issues and provides an outline of management measures within the ILUP could be strengthened.

Partners in the SSP area are strongly advised to review the recommendations put forward in the SEA and the lessons learnt through the SLM project, in order to build on the momentum established under Output 1.2, to secure landscape level results across the SSP area, through more 'effective range management, to improve range condition and flow of ecosystem services to support livelihoods of communities in the SSP region.' The project has strengthened institutions, helped to raise awareness and skills at all levels, produced a series of important products. In so doing it has supported the intended Output whereby 'improved range management and mixed livelihoods systems are piloted in linked with the land-use plans', however considerable work remains to be done if the support provided through the project, and initiatives piloted are to support achievement of the intended Outcome result.

**OUTPUT 1.3:** Fire Management Strategy is Developed and Implemented in Southern Sua Pan in line with the provisions of the Land Use Plans

505.Under this Output the project aimed to '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 was to be piloted in the Southern Sua Pan and the project aimed to work with DFRR to establish a community-based Fire Management Committee and develop a Fire Management Strategy for the SSP. The relevant Targets and OVIs in the SFR are:

Indicators	Baseline	Target
Extent of uncontrolled Fires	An estimated 16,392 ha affected by uncontrolled fire every year.	Fire-affected area reduced by 50% in year two and three (ie at worst only 8,196ha burnt)
Incidence of Fires	32 fires for the period 2001–2010, an average 3 fires/year	Fire incidences cut by 50% to less than 1.6 fires/yr at end of project

- 506. The project worked in direct partnership with DFRR and with the four SSP communities to build awareness of fire prevention and control, and capacity for improved fire-fighting and management. In the first year of project implementation fire management teams were established and training was delivered by DFRR on fire prevention and control. This included training in fighting rangeland fires. Basic fire-fighting equipment was purchased through the project for these teams and DFRR trained the teams in its use.
- 507.Under the lead of DFRR the project also helped to facilitate the establishment of the SSP Fire Management Committee comprising eight people, two from each village. In the second year of project implementation DFRR worked with the fire management committee and fire-fighting teams to develop the SSP Fire Management Strategy, on which there was subsequently broader consultation with community members and the TRG. At EOP the Fire Management Strategy has been approved.
- 508. The objective of the SSP Fire Management Strategy is 'to provide guidance to communities in the Southern Sua Pan on how to prevent and manage veldt fires.' The Strategy is focused on three key issues: Restore and Maintain Rangelands; establish Fire Adapted Communities; and Improved Response to Fire. It is a substantial document, the production of which was led by DFRR and BirdLife Botswana, with valuable inputs from the SSP Fire Management Committee. The document outlines the legislative and policy context for fire management. It establishes links to the Southern Sua Pan Management Plan, which cites development of a fire management strategy as a priority for the area, and the Makgadikgadi Framework Management Plan (MFMP) more broadly. The SSP Fire Management Strategy describes the geography, climate and demographics of the area and their relevance to fire management. and outlines the main causes of veldt fires in the Southern Sua Pan. The key components of strategy itself are: analysis, prevention, preparedness, response and restoration. The Strategy outlines key areas of intervention for fire prevention including law enforcement, information campaigns, control of high- risk activities such as camp-fires and burning, fire danger mapping, patrolling and pre-suppression measures. It subsequently establishes the fire response strategy outlining the roles and responsibilities of the key partners, including procedures and techniques for reporting and handling fire outbreaks, responsibilities and resourcing of fire fighters, capacity building and monitoring of veldt fires. The Strategy includes a workplan for the Fire Management Committee as well as appendices outlining emergency fire response procedures, veldt fire monitoring tool and information on fire-fighting equipment and its use. Overall it is a useful strategic document to guide DFRR and the SSP Fire Management Committee in their work.

**Image 28**: Fire beaters purchased under the project showing the two types, in the foreground of the picture the standard beaters purchased through a commercial outlet, in the back of the picture, the beaters constructed locally which can be easily repaired and replaced at low cost



- 509. The project equipped the community fire-fighting teams with basic equipment. Resources were limited under this MSP and the project helped to maximise efficient use of project resources available and to leverage additional support. The project liaised with the mining companies BotAsh and Debswana and the former donated 100 additional fire beaters while Debswana donated materials for making fire beaters. The project supported the construction of additional fire beaters provided to DFRR LetIhakane for distribution to the Fire Management Committee. The project also linked in to a national scheme which provides skills training to prisoners. The project used this scheme to procure additional fire beaters for the SSP Fire Management Committee at a low cost. The provision of locally made fire beaters also has the added benefit of being made out of materials that could be easily repaired or replaced locally.
- 510. In addition to leveraging additional fire-fighting equipment, the project also worked with DFRR to source protective clothing for the fire-fighting crews. This was not budgeted for in the Project Document but was a priority identified by both the SSP Fire Management Committee and DFRR, as important for the health and safety of fire-fighters. The project worked with DFRR to identify an opportunity to access this equipment through an Australian funded initiative, which has provided the clothing to DFRR, for use by fire-fighting teams.
- 511.An important part of fire management is prevention, and the project worked to raise awareness of the dangers of uncontrolled burning amongst all communities. Fires occur primarily in the dry season (August to October) and are thought to be primarily caused by the uncoordinated use of fire as a land management tool. This includes clearance of scrub for planting, burning of scrub to encouraging grass growth and from uncontrolled campfires. Rangeland fires tend to be of high intensity, spreading rapidly due to the hot, dry and windy conditions. Awareness raising was undertaken by the project through village consultations, tied in to the land-use planning process and through the fire management committee. The project also employed an artist to paint a series of murals in the villages, with clear messages about fire prevention and management. Community members consulted during the TE suggested that this was an effective and high impact way to raise people's awareness.

**Image 29:** Murals painted on village walls to raise awareness about the dangers of fires and importance of fire management



- 512. The project's support for fire management has worked to increase awareness and build capacity for fire prevention, management and control. In establishing the structure of the SSP Fire Management Committee and associated fire-fighting teams, the project has helped to both strengthen partnership between communities and DFRR, and to establish operational units within all four communities. The project has helped to provide basic equipment to these teams, including leveraging considerable additional equipment. The Fire Management Strategy provides the long-term objectives and overall strategic framework to guide DFRR and the Committee in strengthening fire management across the area. The members of the Fire Management Committee consulted during the TE confirmed that the support provided through the project had been extremely helpful and had greatly increased both community awareness and capacity for fire prevention, management and control. They were confident that they would continue to work in partnership with DFRR in fire management.
- 513.Consultation during the TE highlighted a number of priority areas for future support for improved fire management in the Southern Sua Pan
- 514.Both the SSP Fire Management Committee and DFRR emphasised the challenge they face in accessing transport to get fire-fighting crews to fires and the limited resources available for fire management. To try to help address the transport issue, the project has helped to facilitate communication between the fire-management committee / DFRR and the mining company Debswana who have indicated a willingness to provide transport for emergencies. Here again, we see a good example of the project working as a facilitator to establish partnerships and leverage additional support from the private sector, so as to increase the likelihood of sustainable impact from project interventions.

515. The Fire Management Committee identified a number of priority areas for future support:

 the need for training on first-aid, to enable communities to deal with burns and the health effects of fire, particularly for fire-fighters. DFRR confirmed to the TE that they will provide this training.

- machine clearance by DFRR of fire-breaks at strategic locations across the SSP area to stop the downwind spread of fire. The committee suggested that once DFRR had cleared these areas mechanically, communities would then maintain them. The establishment of a network of fire-breaks across the area is also a priority highlighted in the SSP Management Plan.
- The Fire Management Committee confirmed that they will continue to raise awareness on fire
  prevention and identified a priority area as being the need for increased awareness raising at
  cattle posts to reduce the instances of fires caused by campfires and use of fire for bush
  clearance.
- 516.DFRR confirmed that they agreed with prioritising all of the above areas of work and also highlighted the need for improvements in data collection, in particular working with communities through the management-oriented monitoring system (MOMS) to collect data on fires and their impact. DFRR are currently in the process of strengthening departmental databases which would enable use of this data for improved monitoring of fire outbreaks, management and impact. Currently any MOMS data remains on paper forms and is not used effectively. Each year DFRR produce a report produced on the number of fires in the area and the action taken, and will continue to work with the SSP Fire Management Committee to collect relevant data.
- 517.Overall the project has provided cost-efficient and effective support for improved fire management in the Southern Sua Pan, with DFRR providing good support and leadership. Consultation with the SSP Fire Management Committee demonstrates their understanding and commitment to improved fire prevention and management, and the project has clearly helped to raise capacity and awareness at the community level. Both DFRR and the Fire Management Committee have established a working partnership and intend to continue to work together, guided by the SSP Fire Management Strategy, to address fires across the region. The project has helped to facilitate external private sector and donor support to increase the resources available for more effective fire management.
- 518.End of project reporting demonstrates that all of the project targets have been met. Baseline data was provided in the Project Document and additional data was available within DFRR systems. To assess fire extent and frequency at project end, an assessment was undertaken in September 2017 by an expert from the University of Botswana<sup>77</sup> who used remote sensing to evaluate fire extent and frequency from 2014 to August 2017.

**Table 3:** Data Provided in the end of project report on area and frequency of burning prior to and during the project implementation period is as follows:

Pre-SLM Period 2001-2013	Intervention	PreandIntervention2001-2017	During SLM Period	During SL Period 2014-2017	M Intervention
Frequency	Area Burnt (Sq.km.)	Frequency	Area Burnt (Sq.km.)	Frequency	Area Burnt (Sq.km.)
1	447	1	489	1	42
2	211	2	211	2	0

A summary below shows frequency and area burnt for the time frames indicated;

519. The 'Remote Sensing and Range Quality Report' produced concludes that: 'Areal extent and frequency of fires in the project area are presented depicting the three periods, namely during the pre-SLM intervention (historical: 2001-2013), up to the end of intervention period (2001-

<sup>&</sup>lt;sup>77</sup> Professor Berhanu F Alemaw, Professor of Civil Engineering Hydrology, Hydraulics & Water Infrastructures) with special interest in 'Modelling & Systems Thinking in Climate Resilient Water Development

2017), and during the SLM intervention period (2014-2017). The frequency and areal extent of fires during the SLM intervention period (2014-2017) were found to be limited which highlights the SLM intervention on fire management to have been successful in reducing the frequency and areal extent of fires compared to the periods prior to the SLM project intervention'. Maps are provided within the report to show relevant data and analysis

520.Within the project's Results Framework the key targets to be achieved by EOP are: Fireaffected area reduced by 50% in year two and three (ie at worst only 8,196ha burnt) and Fire incidences cut by 50% to less than 1.6 fires/yr at end of project. The results reported against these targets at the end of the project demonstrate that both have been met, alongside the other two key deliverables being the establishment of the SSP Fire Management Committee and Fire Management Strategy.

Deliverable	Target	EOP Status
1.3.1: Formation of Fire Management Committee	Establishment of a Fire Management Committee of the four villages in Southern Sua Pan	A Fire Management Committee (FMC) is established with membership from all the four villages of Southern Sua Pan (Mmatshumo, Mosu, Mokubilo and Mmea)
1.3.2: Development of Fire Management Strategy	Fire Management Strategy Available for use by the Fire Management Committee	Fire Management Strategy available
1.3.3 Reduce extent of fires	Fire-affected area reduced by 50% in year two and three (i.e. at worst only 8,196 ha burnt)	Extent of fire burnt reduced by 91% (from 44,700ha to 4,200ha). ( <i>Evidence: Remote Sensing and Rangeland Quality Report</i> )
1.3.4: Reduce frequency of fires	Fire incidences cut by 50% to less than 1.6 fires/yr at end of project	0 fires were recorded in 2015, 0 in 2016 and 1 in 2017; <i>(Evidence: Remote Sensing</i> <i>and Rangeland Quality Report)</i>

- 521.Output 1.3 aimed to support development and implementation of a Fire Management Strategy in the Southern Sua Pan in line with the provisions of the Land Use Plans
- 522.It is important then to refer here to the support provided under Output 1.1 for development of the Integrated Land Use Plan (ILUP) and the Strategic Environmental Assessment (SEA) developed alongside it. The ILUP includes a brief summary of the impact of fires on rangelands, and reference to the SSP Fire Management Strategy. It does not however provide a summary of the strategy or information on its use in addressing the threats posed by rangeland fires to the SSP. The ILUP would be strengthened by clearer reference to the SSP Fire Management Strategy and role of the SSP Fire Management Committee in partnership with DFRR.
- 523. The Strategic Environmental Assessment (SEA) produced under the project provides an assessment of the impact of fire on SSP rangelands, describing fire as an 'integral part of semi-arid ecosystems' but one which can have 'a significant detrimental impact on both livelihoods and wildlife within the Land Use Plan (LUP) / Southern Sua Pan'. It stresses the risks associated with uncontrolled use of fire for 'slash-and-burn agriculture'.
- 524. The two key mitigation measures recommended in the SEA to address fire risks are: to develop a 'Fire Zone Map, including the proposed firebreak network and areas most at risk of fire incidents'; and to 'implement the SSP Fire Management Strategy, including measure to minimise burning of vegetation'

- 525. The SEA also recommends that the ILUP should include a stronger and clearer reference to fire prevention and management stating that: 'The LUP should:
  - Provide a Vision statement that '(By 2036) the number and extent of uncontrolled rangeland fires will have been minimised'.
  - Provide a Fire Zone Map, including the (proposed) firebreak network and areas most at risk of fire incidents.
  - Promote appropriate fire management policies, based on the Fire Management Strategy.
  - Clarify the measures that will be taken to minimise burning.
- 526. The TE suggests that these are useful recommendations by the SEA. If the ILUP is to be used as a document that can help to guide SLM over rangeland areas beyond the village boundaries then it should include clearer reference to fire prevention and management as a strategic objective and should include a summary of the core policies and approach put forward in the SSP Fire Management Strategy.
- 527. The support provided by the project under Output 2.2 for development of the Land Use Conflict Information System (LUCIS) is also relevant. The LUCIS developed under the project does not currently incorporate assessment of fire prone areas or the potential conflicts inherent in land-use types that could threaten biodiversity, rangeland ecosystems or increase risks to communities, their livelihoods, heritage areas or tourism. However, the LUCIS could easily incorporate this information and it provides a tool which could support fire management and monitoring across the Southern Sua Pan area.

**Image 30:** Fire Occurrence and Frequency 2014 – 2017 (during SLM Projet) from Remote Sensing report



**Output 1.4:** 'Water conservation, water harvesting and water re-cycling by BotAsh and farmers in southern Sua'.

528.No activities were implemented under Output 1.4 and this Output was removed from the project following the mid-term review, following approval from the PSC, UNDP and GEF. As discussed in the analysis of project design, no indicators or targets relating to Output 1.4 were

included in the Project Results Framework, it was only included within the project strategy description and within the budget. At the time of the project's mid-term evaluation no activities had been implemented under Output 1.4. BotAsh clarified that they did not have the funding available to support the intended areas of support due to the fact that their charitable budget was allocated on other community initiatives. The mid-term review recommended that UNDP CO should write to GEF to ask for Output 1.4 to be officially removed from the project. UNDP CO have confirmed to the TE that they did so in 2017 and approval was received from GEF. The TE can confirm that the removal of Output 1.4 has not had any major impact on the achievement of intended results under Outcome 1.

**OUTCOME 2:** Effective Resource Governance Frameworks for SLM and Equitable Resource Access

- 529. Under Outcome 2 the Project Document states that the project aimed to '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.' The Project Document outlines that Outcome 2 would support SLM at a larger spatial scale over the whole Makgadikgadi Framework Planning area<sup>78</sup> and Boteti sub-district<sup>79</sup>. It was to build on and support the results to be achieved within the SSP pilot area under Outcome 1 and aimed to 'empower local institutions to improve resource governance and stakeholder participation in regional dialogues on the importance of mainstreaming SLM into rangeland management for local development.
- 530.As outlined in the analysis of project design, the Outcome 2 statement itself is vague and the overall strategy description does not clarify how 'effective' resource governance frameworks for SLM and 'equitable resource access' is defined as an end of project result, nor how the key issues that were identified in the situational analysis will be addressed through Outcome 2. The second barrier identified in project design is that: 'Policy and market distortions have provided disincentives for adopting SLM and sustainable range management principles in the livestock production sector.' Under Outcome 2, there is not however a clear focus within any of the Outputs on actions to directly address 'policy and market distortions' in the livestock production sector, and there is no clear strategy to remove market related disincentives.
- 531. The following section will assess the results achieved under each of the project outputs under Outcome 2, against the relevant OVIs and Targets established in the project's Results Framework and based on the strategy description within the core of the Project Document. The conclusions section of the TE report will look in more detail at the extent to which support provided through each of the Outputs, and the results achieved, has worked to achieve Outcome and Objective level impact, to address the key barriers identified in design.

**OUTPUT 2.1:** A Regional Multi-Stakeholder Forum for Facilitating Dialogue on SLM and Mainstreaming SLM into Regional and National Policy Programs and Processes is Created and Empowered.

532. The relevant Baseline, Target and OVI provided in the project's Results Framework are:

- Baseline: Existing multi-sectoral institution is limited to multiple government sectors only
- Indicator: Multi-stakeholder forum for mainstreaming SLM issues in national and regional policies, plans and strategies
- **Target**: Active participation from government, NGOs, water and land user groups, community trusts, community leaders, private sector by project end

<sup>&</sup>lt;sup>78</sup> The MFMP covers a total area of 36,452km<sup>2</sup> (3,645,200 hectares) as specified in the MFMP volume 1 p23

<sup>&</sup>lt;sup>79</sup> The Boteti sub-District covers an area of 34, 943 km<sup>2</sup> (3,494,300 hectares) Data taken from Govt website: https://boteti.cdc.gov.bw/index.php/about/background)

- 533.Under Output 2.1 the project aimed to 'support the formation of a regional multi-stakeholder SLM forum, at the Makgadikgadi sub-region level, to lead dialogue on mainstreaming SLM considerations in planning and implementation of critical national and regional policies, plans and strategies' The Project Document outlines that this forum would enable stakeholders to influence relevant policies on livestock production and marketing, and agricultural land use, it lists as examples the Tribal Grazing Land Policy and National Policy on Agricultural Development.' The project strategy description however gives very little indication as to how this forum will actually influence policy reform, or what concrete results are anticipated to address 'policy and market distortions'.
- 534.At project start, the TRG identified the already existing Makgadikgadi Wetlands Management Committee (MWMC) as the most appropriate regional multi-stakeholder forum for facilitating dialogue on SLM. The MWC was established in 2010 as one of the committees for implementation of the Makgadikgadi Framework Management Plan. It includes relevant public-sector agencies, private-sector organisations, NGOs and community representatives from all of the 32 communities within the Makgadikgadi region, with DEA as the secretary, responsible for calling and coordinating the meetings. The project aimed to strengthen the MWMC and increase representation from organisations such as farmers associations (FA), CBOs and village development committees (VDC). The MWMC provides a forum for communities to discuss issues and problems they are facing and to share experiences and ideas for finding solutions. Relevant government departments and NGOs, including BirdLife Botswana, provide advice and guidance at the meetings, and also learn from the community dialogue, so that these agencies get a clearer understanding of issues 'on the ground' and can take guidance from communities on potential solutions.
- 535. The project supported the participation of communities from across the Makgadikgadi region in MWMC meetings between 2015 and 2017 and facilitated discussion on sustainable-land use management issues and solutions. The MWMC meetings were a forum for sharing achievements and lessons from the project's pilot initiatives in the Southern Sua Pan area with communities across the Makgadikgadi region and also provided the opportunity for other communities to input their ideas and experience to guide project initiatives.
- 536.An ongoing challenge for the MWMC is funding participation of community members from across the Makgadikgadi region and prior to project start the MWMC had faced challenges of decreasing participation in meetings. As well as providing direct support from the project budget, the project worked to facilitate private sector support for community participation in the meetings from the mining companies BotAsh and Debswana which provided accommodation and meals as well as a meeting venue. It is hoped that these companies will continue to provide funding assistance following project end, as a means of increasing the likely financial sustainability of the MWMC.
- 537.MWMC has a rolling three-year membership period and in July 2017 the committee was due for renewal. The project supported a review process to identify ways to strengthen the committee during its new term and one key area identified was the need for guidelines.
- 538.MWMC guidelines were developed with project support in 2017 through a consultative process. They are intended to guide the incoming MWMC members for their three-year term between 2017 to 2020. The guidelines outline the purpose and objectives of the committee as well as its composition and structure. The purpose and objectives were agreed as follows: Purpose:
  - To provide a platform for all stakeholders of the Makgadikgadi Wetlands to dialogue on
  - issues of sustainable land management and advice on solutions to common problems.
  - To be a multi-stakeholder committee that will provide guidance on the management and conservation of the Makgadikgadi Wetlands Biodiversity

Objectives:

- Facilitate integrated planning and management of wetland resources
- To guide on preferred developments within MFMP area
- To engage on relevant conservation agendas or initiatives within the MFMP area
- To act as a conduit on livelihood improvement initiatives to local communities
- 539. The guidelines also identify the core membership which is divided in to 11 clusters. Each cluster nominates a chair who represents the interests of their group on the committee and is responsible for sharing decisions and information from the meetings. Chairs are selected for a period of three years after which the committee is renewed.

Clusters 1 to 5 includes all of the communities in the Makgadikgadi region, clustered in to geographical areas

Cluster 6 is the Technical Advisory Committee in Boteti (TAC – BOTETI)

Cluster 7 is the Technical Advisory Committee in Tutume

Cluster 8 is the mining companies Debswana, BotAsh, Karowe and Mophane

Cluster 9 is research organisations and NGOs, including BLB, Elephants for Africa, ORI, KCS and FCB

Cluster 10 is for Tourism organisations and businesses including Meno a Kwena, Leroo La Tau and Unchartered Africa

## CLUSTER 11 is the retailers

- 540. The project supported the process for election of a new committee started (from 17<sup>th</sup> August to the 10<sup>th</sup> September 2017) and helped to brief new members. The project also supported an SLM dialogue in Maun in November 2017 which brought a range of stakeholders together from across the Boteti and Ngamiland regions.
- 541.Project reporting describes an increase in the participation of relevant non-governmental sectors in MWMC meetings. Capacity assessment was not undertaken at project start and it is therefore not possible at project end to measure any change in levels of SLM understanding/ ability of the 2015-2017 MWMC members. However, a capacity assessment was undertaken for the new committee members at its inception in August and at project end three months later. This 'showed 42% and 52% overall capacity on ability to execute natural resource monitoring management and reporting'. The assessment scores three key areas, Aspiration and Strategy, Organisational Skills, and Human Resources. At project end the change in capacity level between two meetings of the MWMC over such a short time period is of less interest than the introduction of the capacity assessment tool itself, which can be used by a range of groups to monitor progress in the future.
- 542.MWMC was a forum through which project learning and experience could be shared and this can be seen to have inspired and contributed to other initiatives across the Makgadikgadi region including for the development of a fire strategy at Nata Sanctuary and initiatives to address human-wildlife conflict at Rakops; Karatatea and BAMB. Also relevant to the project's broader support to CBOs across the Makgadikgadi region, for the development of more sustainable land use practices, is the support provided by the project to CBOs for the development of proposals to access funding for a number of relevant initiatives, including to:
  - the Moreomaoto Conservation trust to get a grant (BWP 385, 220) from the GEF SGP for environmental education projects for Moreomaoto, livelihood improvement and the establishment of a campsite near the Makgakgadi National Park;
  - Lenao Laga Kwalabe Conservation Trust to get a grant from GEF SGP (BWP 500,000) for establishment of a campsite by lake xau, and for the development of a strategy to strengthen management of bird and fish resources;

- Under Output 1.2 the project also provided relevant support to Boteti Beef Famers Association, to develop a proposal for funding of BWP 2,800,000 from Lucara Mine, for an initiative to establish a beef management centre for all beef producers in Boteti, capacity building for livestock management and more effective use of communal range lands. At project end this has not yet been agreed to by the mine, but the project manager is hopeful that it will be covered as part of the mine's community support initiatives next year.
- 543.Overall under Output 2.1 the project has helped to revitalise the MWMC and to develop guidelines to support its operation. By facilitating private-sector support for community participation in meetings the project may have helped to establish a mechanism for increasing the financial sustainability of the MWMC following EOP. The MWMC offers an important forum for discussion of SLM issues at the Makgadikgadi regional level. At project end it is not possible to confirm that it has had any influence on policy reform as intended in design. However, the project has supported awareness raising on SLM amongst members of both the 2015-2017 and the new 2017-2020 committees, including sharing the lessons and achievements of the SSP pilot initiatives under Outcome 1. In the future it is hoped that this committee will be a body to support upscaling of initiatives to other areas across the region.

**OUTPUT 2.2:** Decision-Making Support Tool for Lethlakane sub-Land Board and Physical Planning Unit (Boteti sub-District Council)

- 544.Under Output 2.2 the project aimed to improve the sustainable land-use planning capacity of the Letlhakane Sub-Land Board and the Physical Planning Unit. Project support was to include both the production of a rangeland management and monitoring manual for planners and a GIS-based decision-support tool.
- 545.Under this Output the project strategy also included training and support to strengthen the capacity of 'key land use decision making and extension support institutions'; the Project Document mentions the Department of Forestry and Range Resources and the sub-District Land Use Planning Unit (DLUPU). Capacity was to be measured using a capacity score card and the target was to increase the score from the 50% baseline figure, established in the project's Results Framework, to 75%.

546. The relevant Targets, Baselines, and OVIs provided in the project's Results Framework are:

Target 1

- Target: Raise to 75% and improving by the end of the project
- Baseline: 50%
- Indicator: Capacity of key land management institutions for SLM

## Target 2

- **Target:** An integrated plan covering all of the Boteti sub-district planning area developed and approved with involvement of all stakeholders
- Baseline: Zero
- Indicator: No of integrated district-wide plans with spatially-explicit (GIS-based) maps of where particular sectors (tourism, settlements, agriculture) could best be allocated land parcels in a manner that minimizes conflicts amongst these sectors
- 547. The execution of support under Output 2.2 was influenced by changes in national planning processes between the time of design and project start. In 2015 the Department of Town and Country Planning (DTCP) suspended development of all sub and district-wide plans until completion of the National Spatial Plan (NSP). Therefore, although the relevant Target for this Output was for development and approval of 'an integrated plan covering all of the Boteti sub-district planning area', the TRG and PSC decided that the project should instead focus its support on development of a decision-making support tool for land-use planning. This was an appropriate decision and the support provided aligns well with the approach described in the project strategy which focuses on development of tools to support land-use planning.

- 548. In the first year of implementation, the project provided training on GIS to technical officers from Physical Planning Unit and the Tutume, Boteti and Palapye Land Boards, this included a learning visit to see a Land Use Conflict Information System (LUCIS) in operation in Seronga district. However little further support appears to have been provided under this Output in the second year of project implementation. The MTR undertaken in mid-2016 merely reports 'not-done' against Output 2.2 and recommends that the project should 'work with sub-DLUPU to clarify the needs that the decision support tool will meet.'
- 549.Development of a LUCIS system for the sub-Boteti District was initiated in the final year of project implementation. A consultant was engaged in mid-2017 to develop a Land-Use Conflict Information System (LUCIS) for Boteti sub-District. The system was developed through a process of consultation with all key stakeholders, data collection and analysis and visits to relevant sites. At project end the LUCIS has been installed within the sub-Boteti Land Board and an analytical report has been produced based on the analysis undertaken. Relevant officers in the Land-Board and PPU have been trained in use of the system.
- 550. The consultative process used for development of the system enabled the consultant to get an understanding of land-use issues and potential conflicts and to work with affected groups in defining the LUCIS criteria and land use preferences. Criteria for land allocation drew strongly on community defined preferences. The project's TRG was an important forum for interstakeholder discussion, to support development of the LUCIS tool. The project also directly involved the Land Board Chairman and Secretary in development of the system so that these higher-level decision makers fully understood, supported and provided input to system design. This has helped to ensure that the LUCIS tool will be internalized in land use planning within the Land Board and PPU following EOP.



Image 31: LUCIS Generated Map showing areas of Land-Use Conflict in the SSP



Image 32: LUCIS Generated Map showing areas of high Biodiversity Importance in the SSP

Image 33: LUCIS Generated Map showing areas most suitable for Agriculture in the SSP





Image 34: LUCIS Generated Map showing areas most suitable based on soil fertility

- 551.Development of the LUCIS relied on the collection and analysis of data, so that GIS mapping within the system represents current and spatially accurate information on key land-use characteristics in Boteti sub-District. Data collected included on soil fertility, topography, slope, elevation, roads networks, waterbodies, bore hole distribution, biodiversity, archaeological site and existing land uses. Data was spatially analysed through ArcGIS to support development of land suitability maps. These were then overlaid to define existing or potential land use conflicts in the area. The maps highlight where particular sectors (tourism, settlements, agriculture) could best be allocated land to minimize the potential for land use conflict.
- 552. The consultant produced a substantial report which outlines the process used for development of the LUCIS, analysis of land use across the area and, using the GIS maps, highlights suitability for different types of land use within the sub-Boteti area, with conclusions and recommendations to support land use planning. The LUCIS assessment for the sub-Boteti District shows that the areas most suitable for biodiversity conservation and tourism are the pans themselves, with agricultural use best suited to the southern, eastern and northern boundaries. Land-use conflict analysis highlights that the areas of highest conflict occur around the edge of the pans with conflicts between biodiversity conservation objectives and agriculture, in particular use for livestock grazing. These areas represent about 14% of the total surface area in the SSP.
- 553. The project also undertook a capacity assessment with the sub-Boteti Land Board, PPU and DFRR at project start and end. The assessment used a capacity score card which measured five key strategic areas of support;
  - (1) Capacity to conceptualize and formulate policies, legislations, strategies and programs
  - (2) Capacity to implement policies, legislation, strategies and programs
  - (3) Capacity to engage and build consensus among all stakeholders
  - (4) Capacity to mobilize information and knowledge
  - (5) Capacity to monitor, evaluate, report and learn.

554. Training was provided to relevant planning and land-management agencies in project implementation. Engagement of agencies in the land-use planning process under the project was in itself a learning process. Project reports show an overall capacity percentage figure of 49.79% at project start compared to 78.5% in the final year of project implementation. The project has therefore demonstrated that it has met the target specified in the Results Framework of raising the capacity score to 75% by EOP.

Summary of results achieved through support under Output 2.2 and TE Recommendations

- 555. Development of the Land Use Conflict Information System (LUCIS) provides opportunities for more informed, integrated and adaptive management of the area. It is a powerful planning tool that provides data visually in the form of maps and enables layering of maps and data for area specific analysis and planning. Consultation with the Land Board and PPU indicates that the system will be actively used to support land-use planning in the village areas, for which they are responsible, in the sub-District.
- 556. To support sustainable rangeland planning and management more broadly it will be important for a) for the data in the system to be regularly updated through monitoring. In relation to this, the SEA report also raises the concern that some of the data used in the LUCIS is historic, dating from the 2012 Southern Sua Pan Management Plan (SSPMP). b) all relevant land-use management agencies, in particular DFRR, to have direct access to LUCIS / the information in the system.
- <sup>557</sup>. The Land Board is responsible for the administration, allocation and management of customary land in and around villages, including the allocation of arable land, residential plots, receiving applications for boreholes and commercial ventures. However, this is a relatively limited land area within the SSP<sup>80</sup> and the Land Board does not have responsibility for rangeland management, that is the responsibility of DFRR. The Department of Livestock Production can also have a significant impact on the sustainability of rangeland use, in the strategy it adopts and support it provides for livestock production and management.
- 558. The information within LUCIS is relevant to all agencies whose work could be strengthened by a clearer understanding of land character/ suitability, patterns of land use, and potential landuse conflicts across the area. It will be important for all relevant agencies including DFRR, DCP, DAP, DWNP, DEA, and DoT/BTO to be fully aware of the potential of the LUCIS tool to support decision making for SLM and to have access to it. The Land Board, as the secretariat to DLUPU, can provide information from LUCIS to relevant agencies. However, in the current situation this will require agencies to request information from the Land Board / PPU, who will then need to undertake analysis (layering of GIS information to produce maps/data) for relevant agencies. To ensure that the LUCIS tool is actively used to support SLM on rangeland areas, beyond village areas, an additional option which the sub-District may wish to consider, would be to make the LUCIS tool available to all relevant land-use management agencies to use as part of their internal planning and monitoring systems. If all relevant agencies have direct access the LUCIS tool/ data in it, there is a greater likelihood that it will become a planning and monitoring tool that can support more integrated and informed SLM processes for rangelands. This would help to address a key issue identified in project design: The Project Document describes a situation in which management efforts are carried out in isolation by different sectors, leading to disjointed management. It states that 'natural resource management agencies admitted that there is limited or inadequate communication and participation by other sectors in their work. This has led to resource management and

<sup>&</sup>lt;sup>80</sup> The SEA highlights that in relation to the Southern Sua Pan area: 'the villages themselves cover only a tiny proportion of the total LUP / SSP area (0.05% at present and 0.27% by 2036). Many of the key environmental issues being faced in the SSP area, such as land degradation resulting from overgrazing, relate primarily to the 99.7% of the SSP area that lies outside of the village 'footprint'

monitoring gaps, duplication of effort as well as clashing policies.' LUCIS can provide a useful tool to support more coordinated and informed management across sectors.'

- 559.It is also extremely important with LUCIS, as with any land-use planning and management tool, to ensure that the information within it remains accurate and current. Although the LUCIS developed through the project provides very useful information on current land-use patterns, it will be important for partners to establish an integrated monitoring framework / system to ensure that the data in this land-use planning tool is regularly updated. New data and maps may also need to be added if new priority issues emerge, for example the spread of invasive species or disease. Effective monitoring will require input from a range of sectoral agencies as well as NGOs and communities across the SSP area.
- 560.It is unfortunate that the project did not have a longer timeframe, as this could have enabled it to facilitate broader access to /use of the LUCIS, and to support the establishment of a monitoring system which could link in to LUCIS. This would have aligned well with the intended project Objective and results anticipated under Outputs 2.2, 2.3 and 1.1.

**OUTPUT 2.3:** System for Monitoring of Range Condition and Productivity is in Place

561. Under Output 2.3 the project strategy describes two core areas of support:

i) the establishment of community level, management orientated monitoring system (MOMS) to include both status reports on population trends of 'common birds' and a range of attributes relevant to community livelihoods (livestock productivity, local rainfall, levels of crop damage)

(ii) strengthened capacity of public-sector agencies for conventional rangeland assessments

- 562.At the community level, the project aimed to establish a 'decision-support tool for farmers, to help them in planning and implementing SLM strategies.' The system was to be developed through a participatory process, to ensure that monitoring would provide information of direct relevance to communities, to support them in 'planning and implementing SLM strategies, as well as re-evaluating these strategies based on results and impacts.' In outlining the approach, the Project Document states that DFRR and MOMs experts would work with communities to develop the system and that: '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; veldt 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 population trends of 'common birds' and their habitats, which index, analysed per species and per communities ... will serve as proxy for a biodiversity intactness tracking score).'
- 563. The project also aimed to support public-sector partners to undertake conventional rangeland assessments. Examples given in the Project Document include measurement of total system carbon, rangeland biodiversity, grass composition and cover as well as tree composition and density, invasive plants and land cover measured by Normalised Difference Vegetation Index. The project strategy description under Output 2.3 underlines the importance of ensuring consistency with UNCCD impact indicators to support national reporting to the Convention. Little information or detail is provided in the project strategy description, however, as to how the project would support partners to undertake the conventional rangeland assessments, how it would build on existing monitoring systems and capacity, or how rangeland assessment data would be incorporated within an integrated 'system for monitoring of range condition and productivity'. The project correspondingly provided very little support in these key areas.
- 564.As discussed in the analysis of project design in Section 3.1 of this TE report, there are a number of weaknesses in the project strategy description under Output 2.3. The Project Document specifies the need for a multi-level rangeland monitoring system but the project strategy does not clearly outline how the project will establish/support this system, how the

project will build on existing capacity, or how capacity building for monitoring under Output 2.3 will support implementation of the integrated land-use plan to be developed under Output 1.1 and 'decision making support tool' to be developed under Output 2.2. This is a key weakness in project design, as effective and integrated rangeland monitoring systems are essential for sustainable land-use planning and management.

565. The relevant Baselines, Targets and OVI provided in the project's Results Framework are:

Target 1

- **Target** Three annual status reports on the condition of rangelands, largely based on MOMS dataset and used for tracking yearly
- Baseline: Zero
- Indicator: No. of annual status reports with needed information on the condition of rangelands in the Boteti sub-district

Target 2

- **Target:** Three annual status reports on population trends of 'common birds' and the habitats on which they depend, largely based on MOMS dataset
- Baseline: Zero
- **Indicator**: No. of annual status reports on the status of 'common birds' in rangelands of the Boteti sub-district, as a proxy for the Biodiversity Intactness Index
- 566.Project reports indicate that discussions were held at project start between BirdLife Botswana, DFRR and DWNP to agree on the approach to be used under the project to develop capacity for the use of bird monitoring as a means for assessing rangeland condition. BLB were already engaged in the region in bi-annual data collection for the national Bird Population Monitoring Programme.
- 567.At project inception BLB outlined the intended project results to be obtained from establishment of management oriented monitoring systems (MOMs) with SSP communities, stating that: 'although primarily applied within the Southern Sua Pan region, this tool should enable the development of a robust M&E system for the condition of rangelands in the Boteti sub-district, which assessment would be championed by the Farmers Associations, working in close partnership with the relevant government officials, with technical backstopping from the Project Management Unit and external consultants as required.'
- 568. In the first year of implementation project progress reports confirm that 40 community members (ten from each village of Mosu, Mmatshumo, Mmea and Mokubilo) were trained in MOMs. By project mid-term however no monitoring reports had been produced and the project's mid-term review (MTR) records that the project had not made sufficient progress towards achieving intended results under Output 2.3. It observed that 'roll out of Management Oriented Monitoring System (MOMS) and bird monitoring is long overdue' and recommended that the project should 'review Output 2.3 and the entire M&E elements of the project and come up with SMART monitoring protocols that meets expectations of Outcome 2 and the entire project.'
- 569. The first project progress report in 2017 clarifies that out of the 6 steps required for establishment of MOMs (training of monitoring teams, setting up of teams, purchase of monitoring equipment, identification of monitoring plots, collection of data and compilation of the report) only the first three steps had been completed. At the start of the final year of implementation identification of the monitoring plots, collection of data and compilation of monitoring reports had not yet been undertaken.
- 570.In September 2017, the project supported further work to identify monitoring plots and initiate data collection. The technique involved monitoring of common birds along 2-km transects to record all birds seen or heard, using 10 Point Counts spaced by 100m. Through partnership between DFRR, DWNP and BLB, the project worked with communities to develop protocols and analytical systems so that the monitoring data collected through MOMS, could be used as

indicators of rangeland condition in the SSP pilot area. Further training was conducted for the monitoring teams and at project end BLB and DFRR have confirmed that they will continue to work with the monitoring teams to support them in collecting the monitoring data and analysing it to produce monitoring reports.

571.During the three-year life of the project BLB also worked with local partners in the SSP area to undertake bi-annual monitoring for the national Bird Population Monitoring Programme (BPMP). This Programme is run by BLB in partnership with the Department of Wildlife and National Parks (DWNP), the Department of Environmental Affairs (DEA) and Department of National Museum and Monuments (DNMM). Monitoring is undertaken in February and November, across Botswana, including in the SSP given its importance for bird conservation. BLB collates the data and is developing a national Wild Bird Index. Monitoring of bird population trends over time can be used as an indicator of broader ecosystem health across different habitats, and this can in turn be used to set conservation and land-management priorities. National reports were produced for 2015, 2016 and 2017 including data from the Makgadikgadi region. This is not specifically an SLM project result, however support through the SLM project links in to support this broader initiative.

Image 35: Mural in Mosu village raising awareness of importance of birds as indicators



572. The Targets established within the project's Results Framework called for three annual status reports on the 'condition of rangelands largely based on MOMs dataset'. Compilation of a status report was not however undertaken until the last few months of project implementation and this was not based on MOMs data. There was not adequate data from monitoring by the community-based teams to enable any level of analysis of the condition of rangelands across the SSP, and the project therefore commissioned a remote sensing assessment of the area by the Botswana based company Continental Consultants Ltd. The 'remote sensing and range quality report' uses GIS/remote sensing data to measure and compare a series of parameters, and can be used to assess data retrospectively over the lifetime of the project. The assessment uses the Normalized Difference Vegetation Index (NDVI) and its derivate, the Vegetation Condition Index (VCI), to show changes in density of vegetation cover in the SSP area between 2015 and 2017 and assesses how this vegetation cover compares with the
long-term average. The analysis examines vegetation cover vs bare ground in the area; woody vegetation vs non-woody vegetation cover, specific analysis of woody vs non-woody vegetation around boreholes and analysis of all data to assess any significant differences in bush encroachment. From this a series of Vegetation Condition Index (VCI)<sup>81</sup> maps have been produced. The conclusion of the Remote Sensing and Range Quality Report is that 'The range degradation presented in terms of the satellite-based Vegetation Condition Index (VCI) for 2016/2017 map revealed less degraded and better grassland and range resources compared to the seasons 2014/2015 and 2015/2016. This could be explained in terms of the previous years



#### Image 36 : Vegetation Condition Index (VCI) map 2015

<sup>&</sup>lt;sup>81</sup> VCI is a vegetation monitoring spectral indicator developed for drought monitoring

### Image 37: Vegetation Condition Index (VCI) map 2016



Image 38 : Vegetation Condition Index (VCI) map 2017



- 573. The Strategic Environmental Assessment (SEA) developed under Output 1.1 of the project has some useful observations and recommendations on the remote sensing report. It recommends that remote sensing data should be analysed alongside 'on-the-ground' field based rangeland monitoring data and raises the concern that the remote sensing report 'provides little analysis on the correlation between the mapped remote sensing data (i.e. the vegetation cover / condition) and the actual extent of land degradation on the ground or the implications for future land use management. It points out that 'without this detailed analysis, the only conclusion that can clearly be drawn from the data is that vegetation cover / condition is better after periods of rainfall than it is after periods of drought, which is self-evident.'
- 574. The SEA recommends that if remote sensing data is to be used for rangeland assessment in the future it must combine the desk based VCI mapping analysis with field-based assessments in particular to 'compile, analyse and assess a combination of remote sensing data and field data to clearly show the extent and severity of land degradation in the SSP area. This should include distinguishing between:
  - woody vegetation cover and non-woody vegetation cover (e.g. grassland);
  - palatable, indigenous, perennial grass species and less palatable, invasive, annual grass species;
  - bush encroachment and other woody vegetation cover;
  - vegetation cover and bare ground.'

### Summary of results achieved under Output 2.3 and TE Recommendations

- 575. The intended result under Output 2.3 was to establish a 'system for monitoring of range condition and productivity'; this is key for the achievement of the project's sustainable rangeland management objective. In the description of the 'alternative situation to be put in place by the project' the Project Document states that the project would 'carryout integrated rangeland studies to improve planning capacity of regional institutions and support the development of the local participatory integrated land use plans as well as development of multi-scale rangeland monitoring tools. These should cover economic, environmental, and social aspects of rangeland and result in both technical range monitoring tools as well as a community tool based on MOMS which is implemented in neighbouring communities<sup>82</sup>.
- 576. The project has achieved fairly weak results under Output 2.3 and at EOP it is certainly not possible to say that a 'system for monitoring of range condition and productivity is in place'. The project provided very little support for the development or strengthening of technical range monitoring tools; there was no support provided across the areas mentioned in the project strategy description for Output 2.3: 'measurement of total system carbon, rangeland biodiversity, grass composition and cover as well as tree composition and density, invasive plants and land cover measured by Normalised Difference Vegetation Index'. Although the project provided support for MOMS training, this data was not actually used during the lifetime of the project to support improved rangeland monitoring and management at any level. At EOP community MOMs teams have been established in the 4 SSP villages, they have been trained, equipment has been purchased and data collected, the project has also helped to establish a working partnership between DFRR, DWNP, BLB and these community-based MOMs teams. However, it is not possible to confirm how or if MOMS will be used in the future to support more sustainable rangeland management.
- 577. The Targets within the project's Results Framework required the production of three annual reports. The project produced one remote sensing report covering the three years of project implementation and annual reports for the national Bird Population Monitoring Programme (BPMP), although the latter is not specifically a project output. However, neither of these

<sup>&</sup>lt;sup>82</sup> Page 17 Project Document analysis of alternative situation to be put in place by the project

reports can be seen to represent the establishment of a system for monitoring of range condition and productivity.

- 578. The weak results achieved under Output 2.3 can in part be attributed to weaknesses in project design. Also due to the fact that the project faced a number of challenges and externalities which took time and resources to resolve; the project had to prioritise its efforts and priority was given to development of the land-use plans under Output 1.1, which drew time and resources away from other areas of project support. The TE also suggests that establishment of a comprehensive multi-scale system for monitoring of range condition and productivity is perhaps unrealistic within a three-year medium sized project such as this. It is a key area of work and one which the TE strongly recommends should be prioritised in future initiatives in this area, and within national workplans for all relevant agencies.
- 579. The establishment of a 'multi-scale' integrated system for 'monitoring range condition and productivity' is vital to support SLM and is a priority area of work for the SSP and broader Makgadikgadi region. The TE recommends that partners consider development of an initiative / project proposal to strengthen capacity for integrated monitoring. The design of such an initiative should assess existing systems<sup>83</sup>, capacity and key gaps, in order to identify areas of support and the most effective strategy to establish a system which will actively guide SLM. A multi-scale, integrated system should combine technical data/analysis from relevant government agencies (including DCP, DAP, DVC, DFRR, DWNP, DEA, DTCP, DoT/BTO), NGOs such as BirdLife Botswana (eg Bird Population Monitoring Programme) and community-based MOMS assessments.
- 580. The Strategic Environmental Assessment (SEA) supported under Output 1.1 provides a number of useful recommendations for rangeland monitoring, emphasising the importance of 'establishing a comprehensive programme of data collation, monitoring, by all implementing agencies.' It raises concerns over the lack of baseline data and monitoring currently available to support sustainable rangeland management, in particular emphasising the need to establish the carrying capacity of the rangelands. Chapter 8 of the SEA highlights the most urgent baseline and threshold data required to support SLM in the Southern Sua Pan and provides an outline monitoring framework. The TE strongly recommends that partners review the information provided in the SEA, in particular in chapter 8, and use this to develop a comprehensive data collection and monitoring system for the SSP, building on the work that has been initiated under Output 2.3.
- 581. The project has supported the production of useful analytical reports to guide the development of a rangeland monitoring system for the SSP (the remote sensing report, bird population monitoring report and SEA.) It has also initiated training and established MOMs teams within four SSP communities, however, considerable further work is required to establish a system for monitoring of range condition and productivity and this should be a priority area of work.

<sup>&</sup>lt;sup>83</sup> For example, the TE understands that a previous GEF 'Indigenous Vegetation Project' supported DFRR to develop rangeland monitoring protocols and toolkits/manuals in the Makgadikgadi Pans (pilot sites at Mopipi). If the tools developed under this previous GEF project were positive / useful, it is important for any future SLM project to build on these results....or if not to build on the lessons learnt.

#### PART 3.4: CONCLUSIONS

## Results Achieved and the extent to which these have supported Outcome and Objective level Development Results

582.Part 3 of this evaluation report has examined all elements of the Makgadikgadi SLM project from design, through implementation to an examination of the results achieved, under each Output, against the indicators and targets in the Results Framework. This section now concludes that analysis in evaluation of the extent to which the project has achieved its intended Outcomes and Objective. A rating of project relevance, effectiveness and efficiency is provided, as required by GEF.

Project Objective:	Baseline	EoP Targets	Indicators
To mainstream SLM in rangeland areas of the Makgadikgadi for improved livelihoods	Zero	1,900,000 hectares by project end. (In addition, it is expected that project lessons can be replicated to an additional 1,440,000 hectares post- project, notably in the Tutume sub- district planning area)	Hectares of rangeland that are under improved management

583. In concluding the evaluation, it is important to place the assessment of results achieved within the context of the key SLM issues and barriers which the project aimed to address. The main premise of the Makgadikgadi SLM project was that 'prevalent land and livestock management processes in Botswana's Makgadikgadi ecosystem are likely to compromise the continued flow of ecosystem goods and services from the savannah ecosystem that are necessary to sustain the national economy, livelihoods and the rich fauna and flora diversity.' The project aimed to strengthen land and livestock management and governance in the Makgadikgadi region, with a core focus on the Southern Sua Pan (SSP) area, in order to address the main causes of land degradation. In the baseline situation the Project Document identifies two key barriers preventing sustainable land management (SLM) in the Makgadikgadi region:

**Barrier 1**: 'Inadequate knowledge and skills for adoption of SLM in livestock management and livelihood support systems'

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

584. The project aimed to address these barriers through two components. These are outlined in the Project Document as follows:

**'Component 1** will put in place systems and capacities for applying improved range management principles over 1,900,000 hectares of rangelands. Activities will be targeted at the entire Makgadikgadi Framework Management Planning (MFMP) area, but with other more detailed support for land use planning focusing on the Boteti Sub-District.

**Component 2** will facilitate the conditions necessary for development and successful implementation of local integrated land use plans in pilot villages. This will empower local institutions to improve resource governance and stakeholder participation in regional dialogues on the importance of mainstreaming SLM into rangeland management for local development.'

585.By implementing support under these two components the project intended to achieve two overall Outcomes by project end:

**Outcome 1**: 'Effective range management to improve range condition and flow of ecosystem services to support livelihoods of local communities in Southern Sua Pan'<sup>84</sup>

**Outcome 2**: 'Effective resource governance frameworks for SLM and equitable resource access'

These Outcomes in turn aimed to achieve the overall project **Objective** 'To mainstream SLM in rangeland areas of the Makgadikgadi for improved livelihoods.'

- 586.As discussed in Section 3.1 of this TE report, although the situational analysis in the Project Document is comprehensive and the rationale for project support is clear, there are a number of weaknesses in project design whereby: the combined results from project Outputs do not add up to achieve intended Outcomes; Outcomes are poorly defined and over ambitious for a 3-year medium-sized project; and the majority of indicators and targets in the project's Results Framework do not provide an effective means of measuring the intended results described in the project strategy.
- 587. There is also a lack of consistency within the Project Document with regards Outcome numbering, and as to the geographic area over which Outcome 1 intended to achieve an impact. The Project 'component' and 'alternative scenario' descriptions refer to an intended impact under Outcome 1 over the whole of the 1,900,000 hectare MFMP area, whereas the Outcome statement wording within the Results Framework refers to an intended impact over solely the 545,000 hectares of the Southern Sua Pan. In evaluating the results achieved, the TE has used the Outcome statement cited in the Results Framework, due to the fact that this most clearly reflects the project strategy description under each of the Outputs within Outcome 1, and reflects the geographic representation provided within the map in the Project Document.



Image 39: Intended areas of project influence as outlined in the Project Document

<sup>&</sup>lt;sup>84</sup> This Outcome is also worded in the Project Document as 'Sustainable Land and Livestock Management in over 1,900,000 hectares improves range condition and flow of ecosystem services to support livelihoods of local communities in Southern Sua Pan Region.

- 588. The inconsistencies in design affect the evaluation of overall project results achieved at EOP: it makes a big difference under Outcome 1 whether the intended result of achieving 'Effective range management to improve range condition and flow of ecosystem services to support livelihoods of local communities' is intended solely within the 545,000 hectares area of the Southern Sua Pan, affecting the five communities who live there, or the 32 communities and entire 1,900,000 hectare area of the Makgadikgadi region. Under Outcome 2 there is a need to clearly understand what is implied by achieving 'effective resource governance frameworks for SLM and equitable resource access' and again the intended area over which 'effective resource governance' will be established. In evaluating project effectiveness, it is also important to take in to consideration that where the project Outputs and overall strategy don't add up to achieve Outcomes, or don't directly address key causal factors identified in the baseline, then the design of the project strategy itself limits the extent to which it is likely or possible that Outcomes will be achieved at EOP. The evaluation of results should also take into consideration any externalities which affected project implementation and any changes in the development context over the life of the project.
- 589. Given the weaknesses in design, it is important then to examine the overall results achieved through the project, alongside an assessment of the extent to which it has helped to address the key issues and barriers identified in the Project Document.
- 590. The Project Document identifies the following issues as the key causal factors of land degradation in the Makgadikgadi region which project actions sought to address:
  - Grazing regimes: Most palatable grasses near water points are becoming over grazed, less palatable species further from water points over rested, both resulting in lower grass vigour.
  - Fire and impact of burning on rangeland areas, in particular linked to the increased frequency of uncontrolled fires.
  - Arable farming and unsustainable harvest of veldt products placing additional pressure on rangeland ecosystems.
  - Lack of Integrated Management, whereby management efforts are carried out in isolation by different sectors, leading to disjointed management.
  - The need for local communities to 'participate meaningfully in mainstreaming SLM principles into rangeland management and governance'.
- 591.It is clear from the analysis of results achieved by the project under each of its component Outputs, in section 3.3 of this TE report, that relevant support has been provided across all of the above areas, although the extent to which issues have been addressed varies.
- 592. Under Outcome 1 the project has supported the development of land-use plans for each of the five village areas within the Southern Sua Pan (SSP), which have been combined within an overall 'integrated plan' (ILUP) for the SSP. Linked to the land-use planning process, the project facilitated the development of a Strategic Environmental Assessment (SEA) which includes analysis of the land-use and management issues impacting on ecosystems and livelihoods within the SSP and provides important analysis and recommendations for revision and implementation of the ILUP, with clear guidance for all partners on mechanisms to achieve more sustainable land management (SLM) in the SSP. The SEA is a key product that was not anticipated in project design and is an example of the way in which the project was able to adapt and leverage additional resources for the achievement of results. The project also provided important awareness raising, training and capacity building support for farming communities, introducing and trialling conservation agriculture as a more effective and sustainable method of farming, strengthening livestock farmers associations and providing technical and strategic support for improved livestock production and management. It built capacity amongst SSP communities for fire prevention and management, facilitating the establishment of a Fire Management Committee, providing training and equipment to the fire-

fighting teams and the development of an SSP Fire Management Strategy to guide the Committee.

- 593.Core to the results achieved by the project under Outcome 1 was its consultative and partnership-based implementation approach. The project effectively engaged all key stakeholder groups, generating strong ownership of results and improved understanding and collaboration at all levels. The Executing Agency was pro-active and committed and was highly praised by all stakeholders during terminal evaluation consultations. At EOP there is clearly an interest and commitment amongst all partners to implement the plans and strategies that have been developed, and to continue to work together towards establishing more effective land-use practices.
- 594. However, the extent to which the project has achieved the Outcome level result of establishing 'effective range management to improve range condition and flow of ecosystem services to support livelihoods of local communities in Southern Sua Pan' is limited. Significant challenges still remain to establishing 'effective range management' across the SSP and this will require further resources and time. The project's anticipated Outcome level result of achieving ecosystem level impacts on the scale necessary to demonstrate improvements to the condition of rangelands with improved 'flow of ecosystem services to support livelihoods of local communities in Southern Sua Pan' is unrealistic within a three-year MSP. It is even more unrealistic to anticipate that the project would be able to achieve and demonstrate this result over the whole of the Makgadikgadi region, as is outlined in some Outcome references within the Project Document.
- 595.At EOP under Outcome 1 the project has clearly increased awareness and understanding amongst the four communities within the SSP and within Government Departments and planning agencies in Boteti sub-District. It has provided training and supported the development of plans, tools and guidelines. This has built the capacity of all stakeholders for both improved land-use planning and for achieving more effective and sustainable agricultural and livestock production practices. It has also strengthened/ established organisations, in particular the livestock farmers associations, community trusts and the SSP Fire Management Committee and has strengthened partnerships between these groups and relevant Government Departments. Across all of these areas the project has then helped to strengthen the basis on which stakeholders in the SSP area can achieve more sustainable and effective land use practices. However, to actually effect changes in land-use and management across the SSP area on a scale that can have a long-term impact in addressing the causal factors of rangeland degradation will require substantial further support. The project has helped partners to identify some potential avenues for ongoing support, through funding for community-based initiatives by private sector organisations and the National Environment Fund and the project Executing Agency BirdLife Botswana will remain active in the region. Relevant local government departments that have been engaged in the project also confirmed that they will continue to support SLM work in the area. The achievement of landscape level SLM results will require strong partnership between all of these groups, to effect changes to overall landuse management and governance systems, strengthen incentives for sustainable use practices, and this may require further external financial and technical support.
- 596.Under Outcome 2, the project aimed to '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' and in so doing achieve 'effective resource governance frameworks for SLM and equitable resource access. As outlined in the strategy description and shown in the map within the Project Document the area of influence over which Outcome 2 aimed to achieve an impact was the broader Makgadikgadi Framework Management Plan (MFMP) rangeland area.

- 597. The support provided through the project under Outcome 2 has resulted in the strengthening of a key Makgadikgadi regional SLM forum, and the development of tools for land-use planning and management within the Boteti sub-District.
- 598. The Makgadikgadi Wetlands Management Committee (MWMC) combines all 32 villages within the Makgadikgagi region, alongside relevant government departments, private sector organisations and NGOs. It was established under the Makgadikgadi Framework Management Plan as a body to support implementation of the plan. Under Output 2.1 the project provided support to revitalise the MWMC and has developed guidelines for it. The Committee offers an important forum for discussion of SLM issues at the Makgadikgadi regional level and can facilitate up-scaling of initiatives and lessons across the region. As a multi-stakeholder forum, it can also help to influence broader regional and national governance and policy processes. The project has supported awareness raising on SLM amongst members of both the 2015-2017 and the new 2017-2020 committees, including sharing the lessons and achievements of the SSP pilot initiatives under Outcome 1. The project also supported CBO members of the MWMC to access GEF SGP and NEF funding for relevant initiatives in the wider Makgadikgadi area, and in the future it is hoped that this committee will be a body that will continue to support up-scaling of SLM initiatives and knowledge to other areas across the Makgadikgadi region. However, for the Committee to have an impact in achieving more 'effective resource governance frameworks for SLM and equitable resource access', it will require ongoing financial and technical support, in particular from DEA.
- 599 Under Outcome 2 the project also supported the development of a land-use planning tool for Boteti sub-District. The Land Use Conflict Information System (LUCIS) provides opportunities for more informed, integrated and adaptive management of the area. The Land Use Conflict Information System is installed in the Land Board and capacity building support was provided by the project to key land-use planning officers to enable them to effectively use the system. The Land Board and Boteti sub-District Physical Planning Unit (PPU) are responsible for the administration, allocation and management of customary land in and around villages, including the allocation of arable land, residential plots, receiving applications for boreholes and commercial ventures. However, this is a relatively limited land area within the SSP<sup>85</sup> and the Land Board does not have responsibility for rangeland management outside village areas. that is the responsibility of DFRR. The Land Board, as the secretariat to DLUPU, can provide information from LUCIS to relevant agencies. However, in the current situation this will require agencies to request information from the Land Board / PPU who would then need to undertake analysis (layering of GIS information to produce maps and data) for them. To ensure that the LUCIS tool is used to support SLM of rangeland areas, beyond villages, an additional option may be for the sub-District to consider installing the LUCIS tool in DFRR and other relevant land-use management agencies and provide associated training, so that all relevant agencies can use this tool as part of their internal rangeland management and monitoring systems.
- 600.It is extremely important with LUCIS, as with any land-use planning and management tool, to ensure that the information within it remains accurate and current. Although the LUCIS developed through the project provides very useful information on current land-use patterns, it will be important for partners to establish an integrated monitoring framework / system to ensure that the data in this land-use planning tool is regularly updated. New data and maps may also need to be added if new priority issues emerge, for example the spread of invasive species or disease. Effective monitoring will require input from a range of sectoral agencies as well as NGOs and communities across the SSP area.

<sup>&</sup>lt;sup>85</sup> The SEA points out that in relation to the Southern Sua Pan area: 'the villages themselves cover only a tiny proportion of the total LUP / SSP area (0.05% at present and 0.27% by 2036). Many of the key environmental issues being faced in the SSP area, such as land degradation resulting from overgrazing, relate primarily to the 99.7% of the SSP area that lies outside of the village 'footprint'.

- 601.A key issue identified in project design was that 'management efforts are carried out in isolation by different sectors, leading to disjointed management, gaps in management and monitoring gaps, and duplication of effort'. In order to achieve 'effective resource governance and equitable resource access' there is a need to establish more integrated land-use planning and management systems in the sub District, and indeed more broadly across the District. At EOP the key result is that the project has helped to develop a powerful land-management and monitoring tool, however its impact in supporting more effective land-use management is not yet clear. To support sustainable rangeland planning and management more broadly it will be important for a) all relevant land-use management agencies, in particular DFRR, to actively use LUCIS / the information in the system and b) for the data in the system to be regularly updated through monitoring.
- 602. The project provided some limited support to strengthen rangeland monitoring systems under Output 2.3, however results are relatively weak. The intended EOP result was to establish a 'system for monitoring of range condition and productivity'. In describing the alternative situation to be put in place by the project the Project Document states that it would develop 'multi-scale rangeland monitoring tools' which would 'cover economic, environmental, and social aspects of rangeland and result in both technical range monitoring tools as well as a community tool based on MOMS which is implemented in neighbouring communities<sup>86</sup>.
- 603. Effective monitoring is key for achievement of the project's sustainable rangeland management objective; without effective, integrated monitoring systems, land-use management partners cannot get a clear understanding of the condition of habitats / ecosystems, the impact of land-use pressures on those ecosystems, and consequently the management measures needed to achieve SLM.
- 604. The project established community-based Management Oriented Monitoring Systems (MOMS) teams in each of the 4 SSP villages and provided training and awareness raising support in partnership with DFRR and DWNP. However, at project end, MOMS data/systems have not yet been actively used to support improved rangeland monitoring and management at any level. The project Executing Agency also worked with community groups in the SSP area to collect data for the national Bird Population Monitoring Programme (BPMP). This has also helped to raise awareness of SLM issues and build capacity for common-bird monitoring, to support an existing national programme managed by BLB. In addition to the community level MOMS training, the project commissioned a remote-sensing report at project end which examines at a range of parameters to provide a basic assessment of range condition over the life of the project, using the satellite-based vegetation condition index (VCI), however no field-based assessments were undertaken.
- 605. The project provided very little support for the development / strengthening of technical range monitoring tools; there was no support provided across the areas identified in the project strategy, for: 'measurement of rangeland biodiversity, grass composition and cover as well as tree composition and density, total system carbon, invasive plants and land cover', and the project has not increased the capacity of Government partners in reporting against UNCCD impact indicators. At EOP an effective 'system for monitoring of range condition and productivity' in not place at either the level of the SSP, Boteti sub-District or Makgadikgadi region. The weak results achieved under Output 2.3 can in part be attributed to weaknesses in project design. Also, to the fact that the project faced a number of challenges and externalities which took time and resources to resolve; the project had to prioritise its efforts and priority was given to development of the land-use plans under Output 1.1, which drew time and resources away from other areas of project support.
- 606. The establishment of a multi-scale, integrated system for monitoring range condition and productivity remains an urgent priority at project end, and is vital to support SLM. Monitoring

<sup>&</sup>lt;sup>86</sup> Page 17 Project Document analysis of alternative situation to be put in place by the project

should combine technical data/analysis from relevant government agencies (including DCP, DAP, DVC, DFRR, DWNP, DEA, DTCP, DoT/BTO), NGOs such as BirdLife Botswana and community-based MOMS assessments. The Strategic Environmental Assessment (SEA)<sup>87</sup>, provides a number of useful recommendations, emphasising the importance of 'establishing a comprehensive programme of data collation, monitoring, by all implementing agencies.' It raises concerns over the lack of baseline data and monitoring currently available to support sustainable rangeland management, in particular emphasising the need to establish the carrying capacity of the rangelands. Chapter 8 of the SEA highlights the most urgent baseline and threshold data required to support SLM in the Southern Sua Pan and provides an outline monitoring framework.

- 607. Overall under Outcome 2 the project has provided valuable support to strengthen the MWMC and to develop the LUCIS and MOMS management and monitoring tools which, if used effectively, may contribute to more 'effective resource governance frameworks for SLM and equitable resource access.' However, at EOP considerable further support is required to achieve this Outcome, and the project cannot be seen to have 'facilitated 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.' Considerable further work needs to be done to establish the integrated management systems, and in particular the monitoring framework and systems, necessary to support successful implementation of the SSPMP. It also remains to be seen whether project support to the MWMC will 'facilitate the conditions necessary to support replication of the pilot initiatives developed under Outcome 1' across the wider Makgadikgadi area; this will require substantial further support following EOP.
- 608. In the achievement of results under both Outcomes 1 and 2 the project faced a number of challenges and demonstrated good adaptive management in responding to those challenges. It has achieved cost efficiency and has leveraged considerable extra support. The ability of the project to adapt effectively and to leverage additional resources to support it to do so, is linked to the nature of the project Executing Agency as an independent, experienced NGO, with good international and local partnerships. BirdLife Botswana already had good working relationships with most partners in the project area, including community groups, is well respected at all levels, and through Birdlife International has an extensive international network on which it can draw to access external expert support and advice. It was therefore able to manoeuvre quickly and effectively to mobilise support.
- 609. The TRG and PSC were key fora for co-ordination, planning and monitoring; both groups provided valuable strategic advice and inputs over the life of the project and helped to guide results-based management. Reporting by the PMU was clear and consistent and formed the basis for well-informed decision-making. Lead public sector agencies, including DFRR, DCP, DAP, DVS, DEA and DTCP provided good leadership and support across relevant areas of project intervention; the Letlhakane Sub-Land Board and the Sub-Council Physical Planning Unit (PPU) also provided core input and support. Communities were directly engaged across all areas of project intervention, including through representation on the TRG, and the project worked hard to ensure that there was effective consultation and participation of key stakeholder groups, to ensure project support was well-targeted to address community livelihood needs and aspirations. The partnerships forged and support and understanding built through the project will increase the likelihood of ongoing engagement and support for the work it has initiated.
- 610. The UNDP RTA summarised the achievements of the project well in the final PIR report when she comments that: 'This project is an MSP (under \$795,000) but has achieved a significant amount within this budgetary constraint and this largely has to do with the approach the

<sup>&</sup>lt;sup>87</sup> developed under project Output 1.1

project has taken, which has been to focus on partnerships and deep engagement and consultative processes with all levels of land use management and planning at the site level.'

- 611.Overall, the project has met almost all the Targets established in the Results Framework. It achieved a remarkable amount within the confines of the time and resource constraints, particularly considering the weaknesses in project design and the externalities which impacted on implementation. At project end, however, considerable further work and support is required to achieve the project's intended Outcomes, and even more so to achieve the intended Objective. The project has not mainstreamed SLM in rangeland areas across the 1,900,000 hectares of the Makgadikgadi rangelands, as required by the Objective level indicator and target.
- 612. The project has however contributed valuable support across the key SLM issues identified in the situational analysis in the Project Document:
  - *Fire and impact of burning on rangeland areas*: the project has put in place a system, built capacity and partnerships, and raised awareness to help prevent and control fire in SSP rangeland areas
  - Arable farming and unsustainable harvest of veldt products: the project has piloted and demonstrated the potential for more sustainable arable farming techniques, through Conservation Agriculture. Although it has had little impact in establishing more sustainable harvesting of veldt products, it has supported the development of an initiative which may help to achieve this result post project.
  - 'Meaningful participation' by local communities to mainstream SLM principles into rangeland management and governance': the project supported communities to participate directly in all areas of project intervention, including for development of the land-use-plans, and has maintained a focus on mainstreaming SLM principles. It has also strengthened the capacity of farmers associations, community trusts and the MWMC to operate as organisations that can more meaningfully represent community interests.
  - Integrated Management: the project has supported a range of departments to work together in implementing SLM measures under the project; DFRR, DAP, DCP, DEA and DTCP all played a lead role across relevant areas of intervention. It has also strengthened the interaction between departments and communities, supporting integration at the community level. The need to establish more integrated management systems for SLM and in particular more effective and integrated monitoring of the condition of rangeland ecosystems, however, remains a key priority at project end. The strategic environmental assessment (SEA) provides a number of useful recommendations to support more integrated management and monitoring, emphasising the importance of 'establishing a comprehensive programme of data collation, monitoring, by all implementing agencies.'
  - Grazing Regimes / Overgrazing: the project has had a minimal impact in addressing this key issue, it has raised awareness of range degradation and the impact of overgrazing, and has strengthened farmers associations, however the establishment of more sustainable levels and patterns of grazing remains a key priority. The SEA underlines this when it concludes that 'the main environmental issue relating to land degradation in the SSP is overgrazing by livestock', to address this there is an urgent need to 'put in place appropriate land management measures to help halt and reverse land degradation and to ensure that livestock numbers are kept within the carrying capacity of the rangelands.' In developing the land use plans for the SSP, the project found that delineation of boundaries for communal grazing areas was a highly conflictual issue. Due to the project time restrictions, and the need to move ahead with plan development, the project decided to focus on detailed land-use planning for the more clearly defined village settlement areas, and to leave the conflictual issue of land-use planning in communal rangelands. The village settlement plans have broad support and have been combined within an 'overarching summary document' outlining land-use management issues in the SSP.

However, the ILUP does not establish planning or management measures for communal rangeland areas to the level required to have an impact in addressing the key SLM issue of livestock management and overgrazing. Overgrazing of rangeland by livestock remains a priority issue of at project end.

613.In providing support across the core SLM issues identified in design, the project has contributed significantly to addressing the first barrier identified in the Project Document. The project has not had any clear impact in addressing the second barrier whereby 'policy and market distortions provide disincentives for adopting SLM and sustainable range management principles in the livestock production sector'. The lack of project impact against this barrier can in large part be linked to the absence in project design of any clear strategy to address these issues.

## Project Contribution to GEF Land Degradation Focal Area Outcomes and relevant Sustainable Development Goal (SDG) Targets

- 614. The project was designed to contribute to Objective 3 of the GEF Land Degradation Focal Area (LDFA): 'Reduce pressures on natural resources from competing land uses in the wider landscape' and to all Outcomes and Outputs under this Objective. The project has, at a local level, and to the extent possible within this three-year MSP, contributed directly to GEF LDFA Outcomes 3.1, 3.2 and 3.3. It has brought key sectors together to work towards addressing SLM challenges; supported communities in the SSP to develop more sustainable land-use management practices; supported a number of CBOs (both within the SSP and across the broader Makgadikgadi region) to leverage additional resources for SLM related initiatives and has raised the awareness and capacity of a broad range of stakeholders. The project has also increased the awareness of government agencies and private sector companies and associations on the importance of investing in SLM. However, to achieve the project Objective of 'mainstreaming SLM in rangeland areas of the Makgadikgadi<sup>88</sup> for improved livelihoods', and to demonstrate SLM results that have a measurable impact in reducing land degradation in the Southern Sua Pan, and more broadly across the Makgadikgadi region, and thus contribute directly to relevant Sustainable Development Goal indicators, will require considerable further investment in time and resources.
- 615. The following analysis looks at the project's contribution to GEF Objective 3 Outcomes and to relevant Sustainable Development Goal (SDG) Targets and Indicators.

#### Project contribution to GEF LDFA Objective 3

<u>GEF Outcome 3.1</u>: Enhanced cross-sector enabling environment for integrated landscape management

Indicator 3.1 Policies support integration of agriculture, rangeland, forest, and other land uses

Output 3.1 Integrated land management plans developed and implemented

616. The project has contributed directly to GEF LDFA Output 3.1. It has supported the development of an integrated land management plan covering the Southern Sua Pan (SSP) area, called the Integrated Land Use Plan (ILUP). This plan complements the existing Southern Sua Pan Management Plan and the broader Makgadikgadi Framework Management Plan. The ILUP provides detailed information and guidance for sustainable land-use planning in and around the five village settlements within the SSP area. It also includes broad guidance on land degradation issues and SLM options across the whole of the 545,000 hectares of the Southern Sua Pan area. The ILUP was developed through a participatory process, has broad support at all levels, and the Letlhakane sub-Land Board has confirmed that the ILUP will be the core document on which they will base land allocation in village

<sup>&</sup>lt;sup>88</sup> 1,900,000 hectares by project end.

settlement areas. The potential use of, and impact of, the ILUP in supporting sustainable land management across SSP rangeland areas, beyond the immediate boundaries of the five villages, is, however, uncertain at EOP. Relevant to the achievement of a broader landscape level SLM result, is project support for development of a Strategic Environmental Assessment (SEA) for the ILUP. The SEA provides key analysis and recommendations on ways to strengthen the ILUP so that it can serve as a planning tool for SLM at a landscape level, across the SSP area. The active use of the SEA in combination with the ILUP by all relevant land-use management agencies, and / or the revision of the ILUP to address the key findings and recommendations of the SEA, will be important if project support is to have a measurable impact in addressing core land degradation issues. At the time of the project's terminal evaluation, the implementation of both the ILUP and SEA can't be confirmed, as final approval of both documents by relevant authorities<sup>89</sup> is pending and neither has therefore yet been 'implemented' as required in GEF Output 3.1.

617.Of relevance also to Outcome 3.1 is the way in which the project supported all sectors to work together and raised awareness on, and capacity for, more sustainable land management at a number of levels. Relevant support includes the development of a Land Use Conflict Information System (LUCIS) for the Letlhakane sub Land Board, and project support to strengthen the Makgadikgadi Wetlands Management Committee (MWMC) as a multi-stakeholder body that is core to enhancing the cross-sector enabling environment for integrated landscape management across the broader Makgadikgadi region. As discussed in the analysis of results, at EOP the potential impact of the LUCIS tool in supporting more integrated SLM across the SSP rangeland area, and the sustainability of the MWMC as a group that will influence SLM practices across the Makgadikgadi region, remains to be seen. To demonstrate a measurable SLM impact at a landscape level requires both further time and investment.

<u>GEF Outcome 3.2</u>: Integrated landscape management practices adopted by local communities

Indicator 3.2 Application of integrated natural resource management (INRM) practices in wider landscapes

#### Output 3.2 INRM tools and methodologies developed and tested

618.At the community level, the project provided significant support for the introduction and adoption of more integrated and sustainable landscape management practices amongst members of the five SSP villages. This includes demonstrating the benefits of, and building capacity for, conservation agriculture (CA), as well as raising awareness and building capacity for wildfire control. In partnership with DFRR, the project supported the development of Management Oriented Monitoring System (MOMS) tools and built capacity for their use amongst groups in the five SSP villages. The project also strengthened the two livestock associations in the region, both of which are groups which have the potential to facilitate more sustainable patterns of small-stock and cattle farming amongst their members. As outlined in the analysis of results, the support provided by the project at the community level contributed directly to GEF LDFA Output 3.2. Consultation with community stakeholders during the TE indicates, however, that they feel that further support and investment will be required if land-users in the Southern Sua Pan are to adopt these SLM practices more widely over the long-term, particular challenges exist in relation to the establishment of more sustainable land-use practices by beef and small stock farmers.

<u>GEF Outcome 3.3</u> Increased investments in integrated landscape management;

*Indicator 3.3 Increased resources flowing to INRM and other land uses from diverse sources Output 3.3 Appropriate actions to diversify the financial resource base* 

<sup>&</sup>lt;sup>89</sup> Ministry of Lands and Housing and Attorney General for the ILUP and Department of Environment for the SEA.

#### Output 3.4 Information on INRM technologies and good practice guidelines disseminated

619. The project contributed directly to Outcome 3.3, supporting a number of CBOs to leverage additional financial resources for relevant SLM initiatives from the National Environment Fund and the GEF SGP. The project also secured contributions from the private sector, and increased the awareness of both public and private sector agencies / companies on the need for increased investment in SLM. Relative to Output 3.4, the project provided information on INRM technologies to a range of stakeholders, and developed / disseminated good practice guidelines; examples of the latter include guidelines relevant to conservation agriculture, livestock herding and wildfire management.

#### Project contribution to relevant Sustainable Development Goal (SDG) Targets

The GEF Land Degradation Strategy underlines the importance of sustainable land management (SLM) as a means to deliver multiple environmental and socio-economic benefits at a global level. UNDP equally highlights the importance of SLM as an 'SDG Accelerator'. The Makgadikgadi SLM project can be seen to be directly relevant to two SDG Targets:

<u>SDG 15</u> Life on Land: 'Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss'

<u>Target 15.3:</u> By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world

Achievement of this target at the global scale is to be measured through indicator: 15.3.1 'Proportion of land that is degraded over total land area'

Also directly relevant to the Makgadikgadi SLM project is:

<u>SDG 2</u> Zero Hunger: 'End hunger, achieve food security and improved nutrition and promote sustainable agriculture. In particular Target 2.4.

<u>Target 2.4</u>: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality

Achievement of this target at the global scale is to be measured through indicator 2.4.1 'proportion of agricultural area under productive and sustainable agriculture'

#### Assessment of Project Contribution to GEF Outcomes SDG Targets / Indicators

- 620. The extent to which SLM impact can be demonstrated and measured as a direct contribution to SDG Targets and Indicators is at project end, understandably, limited. This was a medium sized project (MSP), with a three-year lifespan, which had to overcome a number of unforeseen challenges. The project has initiated some important work and built capacity and awareness for SLM amongst key stakeholders. It has also demonstrated the effectiveness of a participatory implementation approach that fosters multi-stakeholder partnership and ownership of results, and has highlighted the importance of adaptive management, generating interest in and enthusiasm for more sustainable land-use practices. However, across all of the GEF Outcomes and SDG Targets and Indicators, determination of SLM results and impact, in terms of actual change in land management practices and procedures, requires more time, and importantly, as will be highlighted in the Recommendations section of this TE report, further investment and support.
- 621.Further time and resources are required to determine: what impact the ILUP and SEA will have in supporting more sustainable land management across the SSP; how the LUCIS tool will be used and whether it will support more integrated land-use planning; whether monitoring systems will be established and capacity built to provide the core data and information required to support sustainable land-use planning and to measure levels of land degradation

and sustainability of agricultural practices; whether the Beef Farmers Association will have an influence in supporting a significant number of beef farmers to adopt more sustainable livestock herding practices; and whether the MWMC will be sustained as a group that will have a significant role in supporting SLM across the broader Makgadikgadi region.

- 622. To measure achievement of relevant SDG indicators requires measurement of parameters such as the 'proportion of land that is degraded' and 'proportion of agricultural area under productive and sustainable agriculture'. To generate these figures, comprehensive, integrated monitoring systems need to be established. Such monitoring systems are also vital to provide the data necessary to support more sustainable land management by public sector agencies and affected stakeholders. In the project area, the monitoring systems are not yet in place to enable measurement of such indicators. To demonstrate SLM impact requires effective monitoring across a broad range of relevant parameters, especially if ecosystem and landscape level changes are to be measured. One of the key recommendations of this TE report is on the need for project partners to establish a comprehensive and more integrated monitoring system, building on the recommendations of the SEA.
- 623. The project has created momentum and enthusiasm, developed tools and capacity, however to achieve long-term SLM results, and to demonstrate landscape-level impact, requires considerable further investment. To ensure that the support provided through this project contributes to the achievement of relevant GEF LDFA Outcomes and SDG Targets, it is essential that following EOP support is maintained across key areas of project intervention. The following section of the TE report provides a number of recommendations and analysis of lessons learnt, to support this.

Overall Rating of Project 'Relevance, Effectiveness and Efficiency'

- 624. The TE is required to rate the relevance, effectiveness and efficiency of project support whereby evaluation of a project's 'relevance' considers the extent to which the project addresses the key causal factors of land degradation, and whether it is consistent with local, national, global and donor priorities and policies. The evaluation of 'effectiveness' examines the extent to which the project has achieved intended results<sup>90</sup> and how it has achieved those results. Evaluation of 'efficiency' examines the extent to which results have been delivered with the least cost.
- 625. Based on the analysis presented throughout Part 3 of this Terminal Evaluation report, the following ratings are provided. The project is clearly highly relevant to context of SLM in the Makgadikgadi region and specifically to the Southern Sua Pan. The priorities identified in the situational analysis within project design remain highly relevant at project end. Rating of effectiveness is normally required to assess the extent to which Outcomes and Objective have been achieved. Although the project has not achieved either of its Outcomes or Objective, the TE considers this to be largely due to the fact that these were unrealistic intended EOP results within this MSP, and due to a number of weaknesses in the Project Document. The TE has rated the project's effectiveness as 'satisfactory' due to the fact that it adopted a highly effective implementation approach and, within the limits of the resources and time available to it, has achieved satisfactory results. The TE has rated project efficiency as 'highly satisfactory'. The project demonstrated adaptive management and a sound consultative and participatory approach, effectively overcoming a range of challenges, achieving efficient use of project resources, and leveraging considerable additional support for the achievement of results.

<sup>&</sup>lt;sup>90</sup> Evaluation of effectiveness is normally focussed on the level of achievement of Outcome and Objective level results, however in providing the rating for this project the TE has taken in to consideration the fact that the Outcomes and Objective established in the Project Document were unrealistic given the time and resources available.

## OVERALL RATING OF RELEVANCE EFFECTIVENESS AND EFFICIENCY

Relevance	Relevant
Effectiveness	Satisfactory
Efficiency	Highly satisfactory

#### PART 3.5: SUSTAINABILITY

Rating of the likelihood of Sustainable impacts

Environmental	Moderately Likely
Institutional and Governance	Moderately Likely
Financial	Moderately Likely
Socio-political	Moderately Likely

- 626. Evaluation of sustainability assesses whether results achieved under the project are likely to be sustained in the long-term after project end. This includes assessment of risks that are likely to affect the achievement of positive outcomes. Four aspects of sustainability are examined: environmental, institutional/governance, financial and socio-political. Each aspect of sustainability is rated according to whether it is: likely, moderately likely, moderately unlikely or unlikely. In this rating scale 'moderately likely' indicates that there is a moderate likelihood of achieving long term positive outcomes and sustainable impact following EOP. For GEF all the risk dimensions of sustainability are critical, therefore, the overall rating for sustainability cannot be higher than the lowest rated dimension.
- 627.As has been seen in the analysis of results achieved and the effectiveness and efficiency of project implementation, the Makgadikgadi SLM project achieved a remarkable amount within a three-year timeframe. To sustain the momentum and enthusiasm developed through the project and the results achieved will however require considerable further technical and financial support. All local partners consulted during the TE have expressed a strong interest in continuing with the work initiated under the project, but they also expressed significant concern as to whether the financial and technical support would be available to enable them to do so effectively. Community organisations currently have very limited resources and local Government Departments also expressed concerns as to whether the budget available to provide support on the scale necessary to sustain the initiatives started through the project, and whether they would have the support at the national level to prioritise these initiatives within annual workplans.
- 628. The project Executing Agency has worked hard to ensure that there will be continuity following project end and has identified a number of potential avenues of support. BLB worked with the community based Gumakutshaa Conservation Trust to secure funding from the National Environment Fund (NEF) and in so doing helped to build their capacity to apply for funds from NEF in the future. The project also helped to facilitate ongoing support from the Botswana Agricultural Marketing Board (BAMB) to farmers in Mokubilo village for Conservation Agriculture. This support has been secured.
- 629.BLB also supported the livestock farmers associations to apply to local diamond mining companies, to request funding for livestock production initiatives, this includes requests by the Boteti Beef Farmers Association to Debswana and to Karowe mine through the Lundin Foundation. At EOP it is not clear whether this support will be forthcoming, but this is considered likely by BLB. Facilitation by the project of support from local mining companies for MWMC meetings and of increased representation of the private sector within the MWMC, may also lead help to achieve some level of ongoing financial support for committee meetings.
- 630.BirdLife Botswana is active in the region, reflecting the importance of the SSP area for birdlife and will continue to support SLM in this area, reflecting the organisations strategic focus on habitats and ecosystems of importance for bird conservation. BLB has started working with the Department of Meteorological Services to explore possibilities of securing additional resources to address risks posed by climate change in the Makgadikgadi region.
- 631.In providing a 'moderately likely' rating across all sustainability criteria, the TE has taken in to consideration the fact that BirdLife Botswana have supported partners to identify a range of

potential avenues of ongoing support, as cited above, and that it will remain active in its support for SLM in the region. The rating also reflects the fact that local stakeholders are committed to continuing the work initiated through the project, have strong 'ownership' of the results achieved and that the project has strengthened partnerships between stakeholders at all levels. The existence of key planning frameworks which support SLM, including the Makgadikgadi Framework Management Plan (MFMP), Southern Sua Pan Management Plan (SSPMP) and the Integrated Land Use Plan (ILUP) which was developed through the project, also increase the likelihood of ongoing strategic support for SLM in the Makgadikgadi region.

632. It is important to emphasise, however, that the 'moderately likely' rating does not imply that sustainable results have been achieved; the findings of this Terminal Evaluation clearly underline the fact that substantial further support is required if the work initiated through the project is to be sustained, in order to support long-term positive outcomes to 'mainstream SLM in rangeland areas of the Makgadikgadi for improved livelihoods.' This support will need to come from a range of sources including from: national government agencies, prioritising the budgets and policies necessary to achieve more sustainable land-use and land management in the Makgadikgadi region; continued engagement by NGOs such as BirdLife Botswana; strengthened engagement by community groups and associations in SLM, in particular for more sustainable livestock production; increased investment and support from the private sector, and strong partnership between all stakeholders to achieve more integrated and wellinformed management. The TE would also recommend that the Botswanan government, UNDP and BirdLife Botswana investigate opportunities to secure further international support to continue with the work initiated under the Makgadikgadi SLM project, and to scale up the approach across the Makgadikgadi region, building on the lessons learnt through this project. GEF may wish to consider the benefits of investing further resources to achieve this.

#### PART FOUR: LESSONS LEARNT AND RECOMMENDATIONS

633. Terminal evaluation of the Makgadikgadi SLM project has highlighted a number of useful lessons to guide the design and implementation of future initiatives and to support strengthened SLM in the Makgadikgadi region. Part four of the TE explores the lessons learnt and subsequently distils recommendations to support project partners in sustaining results and in the design of future initiatives.

#### LESSONS LEARNT

## Participatory Land Use Planning Processes and the challenges of Fixed Project Timeframes

- 634. The TE has undertaken a detailed review of the support provided by the project for land-use planning, including the range of challenges that the project faced, and how these were addressed. The majority of lessons highlight the positive results achieved in fostering partnership and supporting direct stakeholder engagement in the land-use planning process. It also demonstrates the complex range of issues that can affect land-use planning, and that to resolve these issues requires adequate time and skilled facilitation.
- 635.Overall, the project has demonstrated the benefits of a participatory land-use planning approach in bringing stakeholder groups together to discuss land-use issues, find solutions and to establish 'ownership' of the plans. The project also demonstrates how land-use planning processes can be a platform for awareness raising on sustainability issues. Discussions on land-use management and zoning by their very nature involve assessment of the suitability and sustainability of land-uses across different areas, and how to ensure that these can support livelihood aspirations in the long term. The data analysis and mapping required as part of planning also provides valuable information to all stakeholders and increases understanding of the natural resource base which people rely on to support their livelihoods.
- 636. Experience through this project also demonstrates that the resolution of issues surrounding land-use planning and management through a consultative process, takes considerable time and effective facilitation. The design of future projects should build on the experience under this project and consider the time and resources that may be required to support data collection and analysis, effective conflict resolution and the facilitation of multi-stakeholder negotiation on issues such as zoning or boundaries. Land Use Planning can be an emotive issue, often discussions unearth conflicts, or uncertainty over land ownership and user rights; it is vital for initiatives to allow adequate time to assess and review these issues. The land-use planning process itself can become a means for conflict resolution and it is vital that plans are based on overall consensus and understanding.
- 637.Buffers should also be incorporated within project timeframes to cater for a range of 'externalities' which can affect land-use planning processes, for example in this project there were amendments to national policies, changes of staff in key positions and the establishment of a new village in the project area.
- 638.Once a draft plan has been developed, the approval process itself takes a considerable amount of time and this is something that is often overlooked in the design of land-use planning initiatives. Plan approval involves: review and discussion at the community level; review by specific interest groups (eg private sector groups or farmers associations); review of the SEA and approval of the land-use plan by DEA; review at sub-District level (sub-DLUPU) and subsequently the District Level; and final approval by the Ministry of Land and Housing and Attorney General. Each stage requires presentation of the plan and facilitation of discussions, and revisions may need to be made to a draft plan to address issues raised. The process often takes months and one of the lessons that the Project Manager highlighted was the need for projects to 'consider and fit in with planning cycles'.

- 639. The Makgadikgadi SLM Project Document envisaged that the land-use plans would be developed and approved within the first year of the project. Other areas of project intervention were designed to support implementation of the plans over the following two years. In reality it has taken the full three years of project implementation to develop the ILUP document. Final approval and implementation of the plans looks likely<sup>91</sup>, but will occur following project end.
- 640. The fixed timeframe that projects entail can present real challenges for the facilitation of complex multi-stakeholder land-use planning processes. There can be an inherent conflict between a fixed project timeframe requiring a 'product' (ie the approved plan) to be produced by project end, and the participatory process required for effective development and approval of the plan.
- 641.If the project timeframe is inadequate then the project is faced with the difficult decision to either follow an effective participatory, integrated land-use planning process, but risk failing to produce the agreed 'product' by project end; or it has to adopt a sub-optimal process to 'fast-track' the approach in order to produce the required plan document, but this then risks developing a sub-optimal plan which may not have strong stakeholder buy-in and support. Projects that try to short-circuit consultative process risk producing land-use plans that are not based on an in-depth understanding of the area and land-use issues, and therefore don't provide an effective planning framework for SLM. Without effective stakeholder engagement, plans are also less likely to be accepted and supported by stakeholders when they are implemented. It is important for funding agencies, UNDP and National Government Agencies to realise that production of the plan document by EOP does not necessarily equate to production of a sustainable and effective land-use planning result.

This Makgadikgadi SLM project took a sensible middle path by facilitating the engagement of all stakeholders in the land-use planning process, undertaking baseline assessments for resource mapping and commissioning a strategic environmental assessment (SEA). However, due to conflictual issues and disagreements over the boundaries of communal rangelands, the land-use planning process was not able to include any detailed planning and management measures for communal rangelands. Instead it focussed on developing detailed plans for the village settlement areas, and placed these within an overarching document which outlines the broader SLM issues across the SSP. This has resulted in the production of five settlement plans that have broad support, however, it means that the ILUP itself is unlikely to have any real impact in addressing the key SLM issue of over-stocking of rangeland areas and this remains a priority issue for the Southern Sua Pan at project end.

## Strategic Support for SLM

- 642. <u>Strategic Environmental Assessment (SEA)</u> is core to sustainable land-use planning and management, and is a regulatory requirement in Botswana. It is important to ensure that financial and technical provisions are made for SEA within the design and implementation of any project which includes land-use planning, and that the timeframe and approach established in the project strategy incorporates a SEA early on in the plan development process. It may also be useful in future initiatives to incorporate training alongside support for SEA, so as to strengthen capacity within government agencies.
- 643. The <u>Department of Town and Country Planning (DTCP)</u> as the national department responsible for spatial planning and for the control of land development in Botswana, is a key player in land use planning and can provide direct support for development of land use plans. DTCP were not originally included in the Project Document as a key stakeholder, however in

<sup>&</sup>lt;sup>91</sup> The Land Board stated that they fully intend to use the ILUP for land allocation within settlement areas and have frozen all land allocation until the ILUP is approved by the Ministry / Attorney General. Although at EOP there is no clear evidence that the plan has been approved by the Ministry of Lands and Housing / the Attorney General, BLB have shared strong indications from a recent Ministerial debate which indicate that it is highly likely to be approved.

implementation of the Makgadikgadi SLM project they provided key support and guidance for development of the ILUP.

- 644.DTCP supports land-use planning through the preparation of spatial development frameworks and policies including Regional Master Plans, District Land Use Plans and District Settlement Strategies. It is also the department responsible for preparing the National Physical Plan and for implementation of the National Human Settlement Policy. DTCP acts as the principal advisory agency on physical planning matters to the Ministry of Lands and Housing, Parastatals, Non-Governmental Organizations and Local Authorities including Councils and Land Boards. It is therefore a key institution within land use planning.
- 645. The 'In-house' approach adopted by the project for development of land-use plans was effective; led by DTCP the project directly engaged key government agencies within the design teams, and the planning process built knowledge and understanding of the area and land-use management issues by key agencies, supported coordination and partnership between stakeholder groups and established ownership of the plans at all levels. The project also demonstrates how <u>external experts</u> can provide valuable support, in particular for specialised components such as SEA. Future initiatives may wish to learn from the overall approach adopted by this project, to consider how to support a nationally led plan development processes in which external experts can be strategically used to support specialist components, whilst also strengthening national capacity, through for example training elements or working alongside local counterparts.

#### **Projects as Facilitators of Change**

- 646. The Makgadikgadi SLM project demonstrates how projects can be catalysts for positive change. Future projects can learn lessons from the effective approaches adopted by the project in working as a facilitator on various levels. Key stakeholders were directly engaged from the start, helping to shape project implementation mechanisms and the project has established strong ownership of results, and built capacity and awareness. In order to achieve SLM it is important for projects to work closely with all those who can influence land-use practices: Livestock Associations, VDC Farming Initiatives; Community Trusts, Borehole owners and Government agencies (DAP, DCP, DVS, DWNP, DTCP), District Council, Land Board etc. The Project Manager stressed that it takes time to win support and buy-in from stakeholders, and it is important to continually build partnerships from project start to end, to maintain stakeholders' interest and participation.
- 647. The Project Manager was a skilled facilitator and adopted a pro-active approach, forging partnerships, assessing and identifying opportunities and working as the central cog in the wheel, effectively driving project implementation. In recruiting project managers, implementing and executing agencies should recognise the importance of facilitation skills, and place emphasis on this skill set within TOR and selection. Project work plans should also include an adequate timeframe and budget for facilitation and stakeholder engagement.
- 648. The TRG and PSC were key fora, facilitating inter-sectoral and inter-stakeholder coordination, and providing key strategic advice and support throughout project implementation. The PSC provided high level support and guidance and the Project Manager stressed the important role senior government officials played in facilitating speedy decision-making. The inclusion within the TRG of all stakeholder groups, including government departments, Kgosi, farmers associations and community trusts, ensured that TRG meetings were a forum for partnership and learning at all levels. It combined a broad range of interest groups with different knowledge and skills, who together guided the project in providing well targeted support.
- 649. The leadership provided by core Government partners including DFRR, DCP, DAP and DTCP provides an example of how sectoral agencies can contribute strongly to achieving project results whilst also working to achieve their own strategic priorities, and how a project can help to strengthen partnership between agencies and with community groups. The Project Manager highlights that in engaging with Government departments it is important for projects

to align support with government planning and financial cycles. He suggested that in future projects it is important for PMU to recognise that departments are more active in quarters 2 and 3 than at the start and end of the year; implementation of core activities should therefore be focussed in the middle of the year. The Project Manager also emphasised the importance of 'proper handover between leaving and incoming staff at the government institutions.' Frequent change of staff within government institutions causes delays and a lack of continuity of initiatives.

- 650. In providing support to livestock associations and community trusts, the project also demonstrates the potential of these groups to facilitate change within communities. CBOs share knowledge, raise awareness and can provide leadership for the implementation of community based SLM livelihood initiatives. The project worked directly with these groups, helping to build capacity and was pro-active in the way in which it supported community trusts and farmers associations to access external funds through NEF and through applications to grant schemes operated by the local mining companies.
- 651.BirdLife Botswana (BLB) were a flexible and highly competent project Executing Agency. Important elements of the PMU's approach to project management include the establishment of good working relationships with a range of partners at all levels from the start, and taking time to fully understand the area and development context. BLB also supported effective project implementation through their network of partners nationally, through information dissemination and leveraging additional support. Their international links through Birdlife International also provide them with access to a pool of international expertise, which supported the SEA and MTR. BLB also has experience in SLM and of working with a range of donors, including under the GEF SGP. As an independent NGO BLB had flexibility to adapt quickly to changes in a project's situation and was able to facilitate partnership between different groups at all levels. The skill set and organisational suitability of an Executing Agency is an important consideration in project design.
- 652. The Makgadikgadi SLM project demonstrates how projects can work to facilitate positive change, as part of a long-term process which requires ongoing commitment from all partners.

#### **Cost Efficiency**

653.As outlined in Section 3.2 in this TE report the project made efficient use of project resources and was able to leverage considerable extra support. Lessons can also be learnt from the sensible and considered approach which the project took to the provision of equipment. Project Documents allocate a specific budget for essential equipment, and this is based on assessment during project design of the core equipment required for the achievement of intended development results. However, during project implementation, project management units (PMU) are often approached by stakeholders with requests for additional equipment. That also occurred during this project and the PSC and TRG provided valuable advice assessing a) whether the items requested were core to the achievement of intended results b) whether the budget was available / whether expenditure on additional equipment would jeopardise other areas of project support c) whether other opportunities exist for project stakeholders to access the equipment. The PSC concluded that it would not be cost efficient for the project to provide the additional tractors and agricultural equipment requested. The PSC provided the sound advice that when it comes to equipment provision it is better for a PMU to under-promise and over-deliver than over-promise and under-deliver! Unnecessary or excessive project expenditure on equipment draws resources away from other areas of project engagement and can be a very inefficient use of project finances. It can also lead to conflicts amongst partners if one group is seen to have been given more than another.

### A Project Document should be Internally Coherent and should clearly Define Intended Outcome Level Results

- 654. The evaluation of project design in part 3.1 of this TE report highlights the need to ensure that there is a clear and cohesive 'internal logic' to the strategy presented within a Project Document. The project's Results Framework should then establish the means to monitor and measure achievement of results.
- 655. Within a Project Document, Outcomes should be clearly defined through a description of the overall 'development results' which the project aims to achieve by EOP. In describing and defining Outcome level results, the Project Document should clarify how the project strategy addresses the key barriers identified in the situational analysis. There should be clear links between Outputs, which together should work to achieve the Outcomes, and ultimately the project Objective. Intended Outcomes and Objective should also be realistic within the timeframe and resources available to a project.
- 656. The Results Framework should then provide the means to measure achievement of the Objective, Outcome and Output level development results. It is important that the indicators and targets within it capture the intended results described in the project strategy, and are 'specific, measurable, achievable, relevant and timebound' (SMART). The Results Framework is a key monitoring and evaluation tool; if the OVIs and Targets do not adequately reflect and capture the intended development results then this can be misleading for project implementing partners, who may focus on achievement of the 'Target' without achieving the intended development result. Development of the OVIs and Targets within a Results Framework can help to highlight whether proposed Outcomes and Objective are feasible, due to the fact that the project design team has to assess how these results will be defined and measured. It is also important to ensure that clear baselines are established within the Results Framework, against which project partners can monitor and measure progress.

### Post Project Sustainability:

- 657.It is important for sustainability mechanisms to be clearly written in to project design. Within the Makgadikgadi SLM project, BirdLife Botswana has provided support to a range of partners to enable them to access resources to continue with the work initiated under the project following EOP. However, this is largely due to the commitment and engagement of BLB as a pro-active project Executing Agency.
- 658. The design of future projects can learn from the actions BLB has taken, which highlight ways in which financial and technical support can be sourced to support partners, post project. The Project Document should incorporate provisions for support by project management units (PMU) to partner groups, during the last half of project implementation, for the development of proposals to relevant small grant funds, and the establishment of links with relevant private sector organisations and Government Departments. This will help to ensure that work initiated through projects has financial and technical support to be sustained following project end.
- 659.Ongoing support by national government partners following EOP is critical and the PSC can provide a key forum to secure high-level commitment for this. Within a project strategy it is important to highlight the need for formal commitment from government partners, in the final year of project implementation, for the provision of ongoing post project support across relevant areas. This commitment can be incorporated within sustainability targets in a project's Results Framework.

#### Allow Adequate Time for a Project Design Process

660. Consultations during the TE indicate that weakness in the Makgadikgadi SLM Project Document may in large part be due to a rushed design process. It is important that UNDP allows adequate time for project design; this is a good investment as the Project Document provides the bedrock of analysis, and the structure and strategic approach on which project implementation is based. A well-constructed Project Document greatly increases the likelihood that a project will achieve effective and sustainable results. Allowing adequate time for design also means that a design team can consult with all key stakeholders, review existing data, build on lessons learnt from past work, and on systems, information and tools developed under previous projects, and establish links to existing initiatives; all of which will greatly increase the likelihood of effective and efficient project implementation.

### RECOMMENDATIONS

661. The following recommendations build on the analysis in the TE report to suggest some potential avenues through which project partners can increase the likelihood of achieving sustainable SLM impacts in the SSP and broader Makgadikgadi region, and to guide the implementation of future initiatives.

# 1: SPECIFIC RECOMMENDATIONS FOR SUSTAINABLE LAND MANAGEMENT (SLM) IN THE MAKGADIKGADI REGION

Recommendation 1a: To achieve SLM results in the Southern Sua Pan, support needs to be maintained by Government Partners across all core areas of work initiated under the project

- 662. The Makgadikgadi SLM project was a 3-year MSP with high ambitions; it achieved a lot within the time and resources available to it. The Project has supported learning and capacity building, it has strengthened organisations, piloted new approaches and developed land-use planning and management tools. Through consultation and partnership, it has established real momentum and enthusiasm for change. However, there is a danger that if support is not maintained at the community level, the progress made through the project could slip backwards. That in itself would be likely to lead to frustration, and the risk that key stakeholders could lose interest in SLM practices if they consider that these approaches are not working.
- 663.It will be essential for national government agencies, in particular DAP, DCP, DFRR, DWNP and DEA, to continue the work initiated under the project. The TE strongly recommends that all relevant Government departments ensure that resources are allocated in annual budgets and workplans to provide ongoing support across all areas of project intervention. The includes the following:

<u>Department of Crop Production (DCP)</u>: Ensure priority is given in departmental budgets, workplans and strategies to:

- Establish a system for monitoring conservation agriculture results including measurement
  of the land area under CA and geographic location of fields; number of farmers practicing
  CA; yield achieved in tonnes/ ha and production costs. All data should be disaggregated
  according to gender and age. The project has developed a recording sheet which DCP
  and farmers can continue to use to support their work. DCP are also recommended to
  make more use of the telephone data collection techniques trialled under the project.
- Review the results and lessons learnt through the project, in partnership with pilot farmers and community trusts, in order to identify priority areas of future support.
- Assess opportunities to train and equip village development committees, community trusts
   / farmers associations to enable them to become more self-sufficient in use of
   conservation agriculture (CA) techniques, and to enable them to train others within
   communities (training of trainers).
- Establish an induction process for new Extension Officers, to ensure that staff coming in to the SSP area have a good understanding of conservation agriculture techniques, ongoing work and local context (specific challenges of farming in the SSP). Encourage extension officers to continually assess and capture lessons learnt in piloting CA and ensure that this learning is institutionalised. Reduce the rate of turn-over of extension officers to enable

officers and farmers to establish partnerships in trialling effective CA practices over several seasons.

 Identify opportunities to scale up CA pilots to other areas, including the sharing of lessons learnt and support for farmer exchanges.

<u>Department of Animal Production (DAP)</u>: Ensure priority is given in departmental budgets, workplans and strategies to:

- Provide support that will continue to build the capacity of both the Small Stock and Beef Farmers Associations, to a level where they can sustain themselves.
- Prioritise training in practices that will support more sustainable levels and types of production, including supplementary feeding, kraaling, management of livestock movements and increasing rate of cattle offtake.
- Strengthen market incentives for more sustainable levels and types of production
- Strengthen monitoring of livestock numbers and movements in rangelands and work with DFRR to determine sustainable stocking levels / rangeland carrying capacity.
- Identify opportunities to strengthen management of livestock numbers around boreholes, so as to establish more sustainable levels of grazing in these areas.

<u>Department of Forestry and Range Resources (DFRR)</u>: Ensure priority is given in departmental budgets, workplans and strategies to:

- continue to provide support for fire management including prevention and control: train fire fighters, identify and address priority issues; establish fire breaks, maintain equipment etc
- actively support MOMS, including training of community teams, printing of monitoring sheets, support for active use of data by communities, digitisation of MOMS, and strengthened partnership with community groups.
- support the establishment of a community-based management system for sustainable harvesting of veldt products in the SSP
- work with DAP to determine rangeland carrying capacity for livestock
- strengthen monitoring of the condition and productivity of rangeland ecosystems. (parameters such as grass and tree species composition and cover, rangeland biodiversity, overall land cover (NDVI), invasive species)

#### Department of Environmental Affairs

- Advise on amendments to the ILUP, based on review of the recommendations in the SEA
- Maintain support to the Makgadikgadi Wetlands Management Committee
- Provide ongoing support and advice to all stakeholders to strengthen SLM in the SSP and broader Makgadikgadi region and for implementation of the SSPMP and MFMP.
- Assess opportunities to access further external technical and financial support for a 'second phase' of this Makgadikgadi SLM project, to sustain initiatives started through the project, address the priority areas of work highlighted in the TE recommendations, and scale up impact over the broader Makgadikgadi region.

#### Sub DLUPU

 ensure effective interagency co-ordination of SLM initiatives at the sub-District level to support implementation of the ILUP and SSPMP for SLM outcomes.

#### Recommendation 1b: Implement the Land Use Plan in conjunction with the SEA

664. To achieve a positive SLM outcome, implementation of the ILUP should be undertaken in close conjunction with the SEA. The ILUP document itself would be greatly strengthened if it is revised to address the core issues and recommendations outlined in the SEA. SEA Chapter 9

'Conclusions and Recommendations' provides a clear summary as to how the ILUP could be updated to more effectively support SLM.

665. If the ILUP, SEA and the existing Southern Sua Pan Management Plan (SSPMP), are to work effectively as tools to support sustainable rangeland management, beyond the boundaries of village/community land areas, it will be important to develop a clear, integrated framework which specifies the roles and responsibilities of all relevant agencies, groups and departments in plan implementation, including for monitoring the effectiveness of plan implementation towards achievement of SLM objectives. The SEA provides key advice and guidance on monitoring to support SLM. The ILUP currently specifies that coordination and monitoring of the plan should be 'the responsibility of the sub-Land Board and Boteti sub-District Council' and that the main tools to be used for monitoring of the ILUP are the 'Urban Developments Standards (1992) and Development Control Code (2013)'. These standards are appropriate to development within the settlement areas, but not as monitoring tools for sustainable land-use management across the SSP rangelands. As the SEA underlines, the village areas cover only 'a small proportion of the total LUP / SSP area (0.05% at present and 0.27% by 2036). Many of the key environmental issues being faced in the SSP area, such as land degradation resulting from overgrazing, relate primarily to the 99.7% of the SSP area that lies outside of the village footprint,' and to support SLM it will be important to monitor and manage land-use across this broader area.

## Recommendation 1c: Establish a multi-scale, integrated rangeland monitoring system for the Southern Sua Pan.

- 666. To achieve sustainable land management in the Southern Sua Pan, and more broadly across the Makgadikgadi region, there is an urgent need for government partners to establish an integrated system for monitoring range condition and productivity. This is essential to enable all partners to get a clear understanding of the condition of habitats / ecosystems, the impact of land-use pressures on those ecosystems over time, and consequently to determine the management measures needed to achieve SLM.
- 667.An effective monitoring system should combine technical data/analysis from relevant government agencies (including DFRR, DCP, DAP, DVC, DWNP, DEA, DTCP, DoT/BTO), NGOs such as BirdLife Botswana and communities, through MOMS assessments. The system should reflect and build on the participatory, partnership design process used for development of both the ILUP under this project, and previously for the SSPMP and MFMP. It should also build on the existing tools and systems used by agencies, including those developed under previous projects<sup>92</sup>.
- 668. The <u>Strategic Environmental Assessment (SEA)</u> developed under this project provides some key recommendations to support the establishment of 'a comprehensive programme of data collation and monitoring, by all implementing agencies' (refer SEA chapter 8). The TE strongly recommends that partners review the recommendations provided in the SEA:

669. The most urgent priority is to establish baseline and threshold data, including:

- Sustainable yield of the groundwater resource (i.e. the maximum amount that can be abstracted without depleting the groundwater resource).
- Rangeland condition and extent and severity of land degradation, including:
  - land cover as measured by Normalised Difference Vegetation Index (NVDI) and its derivative, the Vegetation Condition Index (VCI);
  - location, area (ha) and % of land affected by bush encroachment;

<sup>&</sup>lt;sup>92</sup> For example, a previous GEF supported 'Indigenous Vegetation Project' supported DFRR to develop rangeland monitoring tools.

- severity of bush encroachment (i.e. the extent to which the land is impenetrable for livestock as a result of bush encroachment);
- location, area (ha) and % of land with native, palatable, perennial grass species (v. invasive, unpalatable, annual grass species).
- Carrying capacity of the rangelands.
- Location and sustainable yield of veldt products (i.e. the maximum amount of veldt product that can be harvested without depleting the veldt product resource or causing land degradation).
- Amount of wood collected for fuel / lighting and the area affected.
- Population and distribution of key species, including:
  - rare / endangered bird species on Sua Pan;
  - common bird species in the rangelands;
  - herbivore / ungulate species;
  - IUCN Red Data List species; and
  - rare / endangered species of flora.
- 670. The SEA emphasises that 'monitoring needs to be carried out on an ongoing basis in order to identify trends in the environmental status of the Southern Sua Pan (SSP) area and progress against the targets proposed in the SEA report. The frequency of this monitoring will depend on what is being monitored and the extent to which this data is already collected.' 'Where appropriate, the local communities should be actively engaged in this monitoring to help them develop a stronger understanding of their local environment and the impacts, both positive and negative, of the land uses in which they are engaged. This engagement should also help to develop a sense of ownership and responsibility in helping to tackle issues and in making the management of land and other resources in the area more sustainable.'

The Land Use Conflict Information System (LUCIS) is a powerful tool for planning and management, so long as the data in it is accurate; planning based on old or inaccurate data can be counterproductive. The SEA raises the concern that some of the data used in the LUCIS is historic, including use of data from the 2012 Southern Sua Pan Management Plan (SSPMP). It will be important for partners to establish a multi-agency system to ensure that the data in LUCIS is regularly updated through monitoring. New data and maps may also need to be added if priority issues emerge, for example to map the spread of invasive species or disease. It will also be important for all relevant agencies (including DFRR, DAP, DCP, DWNP, DoT/BTA) to have direct access to the LUCIS tool / the information in the system. LUCIS is a tool that can support a range of agencies in their work, as part of land-use management and monitoring.

671. There is also the need for ongoing support by DFRR, DWNP and BLB to build the capacity of community groups for use of <u>Management Oriented Monitoring Systems (MOMS)</u>. It is important to ensure that MOMS data is actively used to support decision making. For communities this means ensuring that the information collected is directly relevant to them and that they have a means of recording it, and referring to it over time. For government departments and BLB, the development of a system for digitising data from MOMS will make this information more accessible so that changes can be compared and measured over time.

#### Recommendation 1d: Urgent need to address Land Degradation caused by Overgrazing

- 672. The Project Document assessed that 'the long-term solution to reverse the degradation of rangelands in the Makgadikgadi is to mainstream SLM principles into the livestock production sector, specifically in areas where rangeland degradation is most intense.' The findings of the Strategic Environmental Assessment (SEA) underline the fact that at project end this issue remains a priority, it stresses that 'land degradation resulting from overgrazing is probably the single most important environmental issue in the area.' It recommends that there is an urgent need to put in place appropriate land management measures to help halt and reverse land degradation and to ensure that livestock numbers are kept within the carrying capacity of the rangelands.
- 673. The SEA raises the concern that the carrying capacity of the rangelands is not clearly understood and recommends that 'the Department of Forestry and Range Resources will need to work closely with the Department of Animal Production to put measures in place to ensure that stocking densities of livestock are reduced to, and kept below, the carrying capacity of the rangelands on which the livestock (and the local communities) depend.' It puts forward recommendations on actions that can be taken including:
  - reducing the number of livestock or excluding livestock in areas affected by land degradation, particularly around water points and the pans;
  - bush removal / de-bushing in areas suffering from bush encroachment especially around features of interest, such as Mokubilo and Mmea Pans
  - increasing the distance between boreholes / water points and, where existing boreholes / water points are too closely spaced, considering closing these.
- 674. The TE strongly recommends that all partners (including DAP, DFRR, DEA, DWNP) consider the recommendations and analysis put forward in the SEA and work together to identify the measures needed to achieve more effective and sustainable herd management practices within the SSP, that can help to decrease, and ideally reverse, land degradation. Alongside the practical measures outlined in the SEA, this is also likely to involve the development of strategies to strengthen market incentives for more sustainable livestock production and policies and regulations that support strengthened livestock control and management.

## 2: CONSIDERATIONS FOR IMPLEMENTATION OF FUTURE UNDP / GEF PROJECTS

# Recommendation 2a: Establish mechanisms for monitoring and recording co-financing from project inception.

- 675.Co-financing is part of the contractual agreement between a country and UNDP / GEF. It is important that co-financing is both realised and recorded. A project's inception process should consolidate co-financing commitments and clarify how cash and in-kind co-financing will be used to support the achievement of results. A system for monitoring and recording co-financing contributions should be established with co-financing partners at project start and a Project Manager subsequently liaise with co-financing partners to ensure co-financing is recorded and monitored throughout implementation.
- 676.It is important that the Department of Environmental Affairs (DEA), as the GEF Focal Point, work with UNDP, as a core GEF Implementing Partner, to establish a standard mechanism which project co-financing partners can use to record and measure co-financing in future GEF projects. DEA confirmed that they are currently working on such a system.

# Recommendation 2b: Establish a strategy for gender mainstreaming and monitoring at project inception.

677.It is recommended that UNDP provide guidance and support to project Executing Agencies and their partners for the development of a gender mainstreaming strategy at project inception. This should include the establishment of sex-disaggregated indicators and data collection systems for monitoring the gender impacts of project actions. The strategy should ensure that the aspirations and needs of women and men are considered, valued and favoured equally throughout project implementation. Monitoring of results and impact should examine the extent to which this has been achieved. It may be useful for UNDP to develop brief guidelines and a framework to support all future projects in achieving gender mainstreaming and monitoring. The Makgadikgadi SLM project considered gender implications of the support provided, both through engagement and provision of support to men and women in project activities, and gender sensitive approaches to consultation. However, the gender mainstreaming results could have been more clearly demonstrated if the project had established a strategy at project start and could demonstrate how it followed that strategy.

## ANNEXES

Annex 1: SLM Tracking Tool

(Please see attached excel spreadsheet for SLM Tracking Tool completed by project stakeholders following the TE)

## ANNEX 2 Stakeholders Consulted and Evaluation Schedule

<u>Time</u>	Activity	<u>Day 1</u>	<u>Day 2</u>	<u>Day 3</u>	<u>Day 4</u>	<u>Day 5</u>	<u>Day 6</u>	<u>Day 7</u>	<u>Day</u> <u>8</u>	<u>Day 9</u>	<u>Day</u> <u>10</u>	<u>Day</u> <u>11</u>	<u>Day</u> <u>12</u>	<u>Day</u> <u>13</u>
М	TRAVEL FROM KASANE TO LETLHAKANE ENROUTE FRANCISTOWN (ROAD) 6am													
A	Meeting with Director of <b>Birdlife International</b> national office (Lead Author Project Design and Director of Executing Agency)	Wed												
E	TE inception meeting with Project Manager													
	SLM MAKGADIKGADI - DISTRICT AND LOCAL LEVEL MEETINGS													
М	Meeting with SLM Technical Advisory Group in Letlhakane		Thu											
А	Field visit to beneficiaries Mosu and Farm													
M-A	Field visit to beneficiaries: Mmea & Mokubilo, villages			Fri										
M-A	Field visit to beneficiaries: Makgaba & Mmatshumo villages				Sat									
M-A	Review of consultation findings					Sun								
М	Meeting with Letlhakane Sub-Land Board and Boteti Sub - District Land Use Planning Unit (sub-DLUPU)						Mon							
А	Meeting with DA, Council Secretary, Land Board													
М	Meeting with Chiefs and tribal elders							Tue						
А	Meeting CBOs, Beef and Small Stock Associations							Tue						
M-A	Meeting to discuss overall findings of stakeholder consultation with TRG and agreement on any additional information to be provided.								We d					
М	TRAVEL TO SEROWE FROM LETLHAKANE (EARLY MORNING)													
М	Meeting with District Gov't Departments in Serowe: DFRR, DEA, DWNP, DAP, DCP, DVP									Thur				
А	ETURN TO GABORONE (COMING FROM SEROWE)  Meeting with Mr Goatwemang Shatera: DTRP Serowe													
М	Meeting with UNDP Resident Rep and Dr Koboto													
А	Meeting with DWNP; DFRR and DEA GEF Focal Point										Fri			
M-A	Review of consultation findings and additional literature											Sat		
M-A	Preparation of presentation for end of mission debriefing for both projects												Sun	
M A	End of Mission debriefing and Presentation of preliminary findings of Biochobe and SLM Makgadikgadi to UNDP, BLB, DFRR, DEA, MENT Meeting with DWNP													Mon

#### Individuals consulted

Dr Kabelo Senyatso: Director of Birdlife Botswana Dr Oduetse Koboto: UNDP Environment and Climate Change Specialist Mrs Jacintha Barrins: UN Resident Coordinator & UNDP Resident Representative Mrs Tsalano Peggy Kedikilwe: Ministry of Environment Wildlife and Tourism (Gaborone) Mr Khulekani Mpofu: GEF Operational Focal Point, DEA, MEWT (Gabarone) Mr Mosimanegape Nthaka, Department of Environment (DEA) Gabarone DFRR Gabarone (names of individuals met to be confirmed by UNDP) Mr Motshereganyi Virat Kootsositse: Project Manager Mr Joseph Modo: Department of Livestock Production (Letlhakane) Mr Chemelani Mokgosi: Department of Crop production (Letlhakane) Mr Desmond Serero: Department of Forestry and Range Resources (Serowe) Ms Namasiku Mufwanzala: Department of Forestry and Range Resources (Serowe) Ms Ntebaleng Thapelo: Letlhakane Sub Land Board, Letlhakane) Mr Keletshwaretse Phetsogang: Chief, Mmatshumo Village Mr Phillip Kopano: Chief, Mosu Village Mr Badigeng Resetse: Chief, Mokubilo Village Mr Polson Keithaganetse: Chief, Mmea Village Ms Babatshani Mathapa: Gaing – O Conservation Trust manage Mr Tapologo Budani: Surveyor, Letlhakane Sub Land Board Mr Mmoloki Ntema: Land Use Officer, Land Board Mr Mmika Letileng: Department of Forestry and Range Resources, Letlhakane Mr Balefi Gobuamang: Fire Management Committee Chairperson

Ms Bakhwi Bakwali: CA famer, Mokubilo Ms Boitshwarelo Masole: CA famers, Karekatea Famers Association, Mokubilo Mr Goatwemang Shatera: Department of Town and Regional Planning, Serowe Tikologo Small Stock Farmers Association, various individuals Boteti Beef Farmers Association, various individuals

### **ANNEX 3: EVALUATIVE CRITERIA QUESTIONS**

Evaluative Criteria Questions	Indicators	Sources	Methodology						
Relevance: How does the project relate to the main objectives of the GEF focal area, and to the environment and development priorities at the local, regional and national levels?									
How does the project support the GEF Biodiversity focal area and strategic priorities									
How does the project support the GEF Focal Area strategic priorities and Programme Objectives	<ul> <li>Existence of a clear relationship between the project objectives and GEF biodiversity focal area / Programme Objectives</li> <li>Extent to which the project is implemented in line with incremental cost argument</li> <li>Extent to which project is contributing to achievement of GEF strategic priorities</li> </ul>	<ul> <li>Project Document</li> <li>GEF strategic documents &amp; guidelines</li> </ul>	<ul> <li>Document review</li> <li>GEF website</li> <li>Consultation with UNDP &amp; DEA</li> </ul>						
How does the project support UNDAF, UNDP CP and CPAP Objectives?									
How does the project support the United Nations Development Framework (UNDAF), UNDP Country Programme (CP) and Country Programme Action Plan (CPAP) Outcomes and Outputs?	<ul> <li>UNDAF priorities and areas of work reflected in project design</li> <li>The contribution of the project to UNDP CP and CPAP</li> </ul>	<ul> <li>Project document</li> <li>UNDAF, UNCP CP and CPAP</li> </ul>	<ul> <li>Document review</li> <li>Consultation with project team, UNDP and other partners</li> </ul>						
Is the project relevant to relevant national environment and sustainable development objectives?									
<ul> <li>How does the project support achievement of relevant NBSAP objectives/ areas of work? Does the project align with other relevant national strategies and plans?</li> <li>Did project design involve key national agencies &amp; relevant stakeholders and receive strong input and support?</li> <li>Does the project adequately take into account the national realities, (including institutional capacity, key stakeholders and policy/strategic/legislative framework) in its design and its implementation?</li> </ul>	<ul> <li>Coherence of project objectives with NBSAP &amp; relevant policies, strategies, plans and regulations.</li> <li>Project design and implementation strategies reflect situation on the ground</li> <li>Level of involvement of government officials and other partners in the project design &amp; implementation process</li> </ul>	<ul> <li>Project Document</li> <li>National policies and strategies</li> <li>Key project partners</li> </ul>	<ul> <li>Document review</li> <li>Consultation with UNDP and project partners</li> </ul>						

## Is the project internally coherent in its design

<ul> <li>Are there logical linkages between expected results of the project (SRF) and the project design in terms of project components, structure, delivery mechanism, scope, budget, use of resources, partners etc.?</li> <li>Does the SRF capture key elements outlined within the Project Strategy</li> <li>Will the activities proposed work to achieve intended Outputs?</li> <li>Do Outputs work to achieve intended Outcomes, and Outcomes to achieve intended project Objective?</li> <li>Does the project address the key barriers identified?</li> <li>Does the project strategy work coherently to achieve the GEF alternative situation outlined in the Project Document?</li> <li>Are all key stakeholders involved that are necessary to achieve intended Outcomes?</li> <li>Is the length of the project sufficient to achieve project outcomes?</li> </ul>	<ul> <li>Level of coherence between project activities, Outputs, Outcomes and Objective.</li> <li>Level of coherence between Project Strategy description and logframe / SRF</li> <li>Appropriateness of project implementation approach including roles and responsibilities of key partners and stakeholder groups.</li> <li>GEF alternative situation addresses key barriers identified.</li> </ul>	<ul> <li>Program and Project Document</li> <li>Information from project partners</li> <li>National and local strategic documents.</li> </ul>	<ul> <li>Document review</li> <li>Stakeholder Consultation</li> </ul>						
Fit of the project within the scope of other national and donor fu	inded initiatives (current and planned)?								
<ul> <li>Does the support provided through the project with GEF funding focus on issues not addressed by other donors?</li> <li>Does the project document outline mechanisms for coordination with other relevant initiatives (national, NGO, community and donor funded) and ensure there is no conflict (in terms of approach or workload of partners agencies)?</li> <li>How does the project help to add value to the existing matrix of initiatives in the area?</li> </ul>	<ul> <li>Fit within overall context of national and local initiatives</li> <li>No overlap with current or planned initiatives</li> <li>Clear mechanisms for coordination and coherence.</li> </ul>	<ul> <li>Documents from other donor supported activities</li> <li>Other donor representatives</li> <li>Project Document</li> </ul>	<ul> <li>Document review</li> <li>Consultation with project partners and relevant stakeholders</li> </ul>						
How does the project build on lessons learnt from previous projects (nationally and internationally)?									
<ul> <li>Does the project document clearly outline how the approach proposed builds on the lessons learnt through national and international initiatives?</li> <li>Are mechanisms included within the project strategy to encourage / support project executing partners to engage with other relevant initiatives?</li> </ul>	Project Document includes analysis of lessons learnt; builds on the analysis and outlines how the project will engage with relevant initiatives (nationally and internationally)	<ul> <li>Project Document</li> <li>Information from Stakeholders</li> <li>Lessons learnt papers</li> <li>Documents from other donor supported activities</li> </ul>	<ul> <li>Document review</li> <li>Consultation with project partners and relevant stakeholders</li> </ul>						
ffectiveness: To what extent have the expected outcomes and objecti	ve of the project been achieved?		SIAKENOIDERS						
# Has the project been effective in achieving the expected outputs outcomes and objective?

		1	
<ul> <li>What results have been achieved by the project and do they align with intended development results outlined in the Project Document? Has the project been effective in achieving its expected Outcome and Objective level Targets?</li> <li>Has the anticipated GEF alternative situation been achieved? What changes have there been against the baseline situation outlined in the Project Document?</li> <li>To what extent have key threats been addressed?</li> <li>How have implementation mechanisms influenced the effectiveness of project actions in achieving results?</li> <li>Are products being used and are they helping to strengthen capacity and effectively address key issues?</li> <li>If the project developed guidelines and plans, are these of good quality and do they provide strategic guidance for the achievement of sustainable results, in line with intended project Outcomes? Are they being used /implemented and what impact are they having?</li> <li>What are stakeholders views on to the extent to which the project has been effective in achieving intended results? How and Why? Do different stakeholders view differ if so how?</li> </ul>	<ul> <li>Monitoring data demonstrates project has achieved Indicators and Targets in the Project logframe / SRF</li> <li>Approach used to achieve results has supported sustainable, positive change</li> <li>Key Threats have been reduced</li> <li>Stakeholders confirm project effectiveness in achieving intended results</li> <li>Products used to good effect</li> </ul>	<ul> <li>Project Document</li> <li>Information/feedback from Stakeholders on results achieved.</li> <li>Monitoring data and project reporting (PIR, PPR etc)</li> <li>Products /Reports</li> <li>Impact on the ground</li> </ul>	<ul> <li>Document review</li> <li>Data review</li> <li>Consultation with project team</li> <li>Consultation with stakeholders</li> <li>Field visits</li> </ul>
How have risks been managed and risk mitigation strategies de	veloped and implemented?		
<ul> <li>Was a risk assessment / mitigation plan developed at project start? Did this involve consultation with key stakeholders?</li> <li>Have other risks evolved during project implementation and have effective mitigation strategies been developed?</li> <li>Overall, was there effective monitoring of risk and effective implementation of mitigation strategies to support adaptive management?</li> <li>Are strategies in place to support risk mitigation in the long-term, and to minimize risks to sustainability of project Outcomes?</li> </ul>	<ul> <li>Risk assessment / mitigation plan</li> <li>Effectiveness of risk identification, monitoring &amp; mitigation actions.</li> <li>Level of engagement of stakeholders in identifying risks and developing mitigation strategies</li> <li>Measures in place to ensure long-term monitoring of risks and to support risk mitigation.</li> </ul>	<ul> <li>Project Document</li> <li>Risk assessment and mitigation plan</li> <li>Monitoring reports</li> <li>Project Results</li> <li>Information/feedback from Stakeholders</li> <li>Products /Reports</li> <li>Impact on the ground</li> </ul>	<ul> <li>Document review</li> <li>Data review</li> <li>Consultation with project team</li> <li>Consultation with stakeholders</li> <li>Field visits</li> </ul>
Has monitoring supported results based, adaptive management	·	·	
<ul> <li>Was a monitoring and evaluation plan/framework established at project inception with clear definition of the roles and</li> </ul>	Evidence that SRF was regularly used to monitor progress and indicators /	<ul><li>M&amp;E plan / framework</li><li>Monitoring reports</li></ul>	<ul> <li>Document review</li> </ul>

· · · ·	responsibilities of partners and agreement on indicators/ targets? Were the indicators and targets in the logical framework / SRF used to regularly monitor project progress towards the achievement of intended results? Was the project baseline verified / established at project start? Was the SRF and within it the indicators, targets, risks and assumptions adequate and effective in supporting adaptive management of the project. If there were issues what were these and how were they overcome? Were any changes made to SRF targets and indicators during the course of project implementation, how was the decision made to make the changes and how has it affected measurement of project progress? Were monitoring systems/partnerships established with project partners in year one of project implementation? Did the project management team and implementation partners receive adequate training / briefing on use of the SRF and project monitoring and management tools during implementation? Have project monitoring systems helped to build the capacity of key partners and to strengthen monitoring systems so that these will continue to be effective following EOP? Were progress reports produced on time and did the information provided in them clearly outline progress against indicators/ targets? Were key issues such as gender equality, environmental sustainability, stakeholder engagement and capacity building effectively incorporated within M&E systems? Was an MTR organized on time, mid project, and how were the findings of the MTR used to improve progress? Were the results of the MTR shared with stakeholders and partners and was a stakeholder workshop held following the MTR to agree on the approach to address issues raised? Were the findings of the MTR effectively used by the project management? Did the project develop an 'Exit Strategy' following the MTR?	• • •	Targets were core to project monitoring systems Intended development results have been demonstrated through clear monitoring data Progress reports are clear and outline progress towards achieving targets. Monitoring systems established with partners are building local capacity Monitoring of key issues such as gender equality, sustainability, capacity and stakeholder engagement Monitoring of key indicators relevant to local / national groups and institutions will continue to function following EOP		<ul> <li>Project Document</li> <li>Project progress reports and meeting reports</li> <li>Project Outputs / Results</li> <li>Information/feedback from Stakeholders on results achieved</li> <li>Products /Reports</li> <li>Impact on the ground</li> </ul>	•	<ul> <li>Data review</li> <li>Consultation with project team</li> <li>Consultation with stakeholders</li> <li>Field visits</li> </ul>	
Ha	ave all key stakeholders been actively engaged in the project a	nd	has there been effective consultation	?				
•	Did the Project Document outline all key stakeholders? How were stakeholders identified and engaged in the project?	•	Stakeholder involvement in design. Inception report includes all key		<ul><li>Project Document</li><li>Inception report</li></ul>	•	Document review	

<ul> <li>Did the Project Document outline all key stakeholders?</li> <li>How were stakeholders identified and engaged in the project? Were all key stakeholders engaged to an appropriate degree / were any groups left out?</li> <li>Was there adequate consideration for gender equality and equal opportunities for involvement of women / equal benefits accruing to women? How and what?</li> <li>Were disadvantaged groups effectively involved in the project?</li> <li>To what extent were partnerships/linkages between institutions/organizations encouraged and facilitated?</li> <li>Do stakeholders feel that they have been given the opportunity to engage in the project and that it will result in long term positive benefits (including both men and women)?</li> <li>What consultation processes were used, were they effective?</li> <li>Did the project result in any conflicts between stakeholders?</li> <li>Did the project work to facilitate strong partnership, cooperation and collaboration between stakeholders and what is the likelihood that these relationships will be continued following EOP?</li> </ul>	<ul> <li>Stakeholder involvement in design.</li> <li>Inception report includes all key stakeholders</li> <li>Monitoring / meeting reports show consultation &amp; engagement of all key stakeholders including men &amp; women</li> <li>TOR for key studies and for MTR / TE include adequate time allocated for stakeholder consultation</li> <li>Stakeholder involvement in project activities/processes (men &amp; women)</li> <li>Examples of partnerships &amp; evidence that key partnerships / processes will be sustained following EOP.</li> </ul>	<ul> <li>Project Document</li> <li>Inception report</li> <li>Monitoring reports</li> <li>Information/feedback from Stakeholders</li> <li>Products /Plans</li> <li>Partnership Frameworks</li> </ul>	<ul> <li>Document review</li> <li>Data review</li> <li>Consultation with project team</li> <li>Consultation with stakeholders</li> </ul>
Has the project been effective in increasing local capacity?			
<ul> <li>Was a capacity assessment process / report undertaken at project start and end?</li> <li>Was there monitoring of capacity / capacity needs over the life of the project?</li> <li>What capacity building initiatives/activities were supported under the project? Have training programmes been targeted at capacity weaknesses?</li> <li>Were the training / capacity building needs of women adequately addressed? Do women have greater capacities &amp; opportunities at project end?</li> <li>Has training been provided as part of a strategic capacity building process?</li> <li>Have any changes / improvements been made to systems, processes or procedures as a result of training?</li> <li>How has the project helped to increase the capacity of Govt institutions; Community organiastions; NGOs and private sector?</li> <li>Are guidelines and tools developed through the project being actively used?</li> <li>Do relevant stakeholders confirm that information products are useful and of good quality?</li> </ul>	<ul> <li>Capacity assessments</li> <li>Monitoring reports outline capacity support / impact</li> <li>Evidence of capacity building processes (training, workshops, support to teams within institutions etc)</li> <li>Relevant stakeholders confirm project support has helped to increase capacity</li> <li>Guidelines / Tools / Products of good quality and being used</li> </ul>	<ul> <li>Project Document</li> <li>Capacity Assessments (start and end of project)</li> <li>Monitoring reports</li> <li>Workshop reports</li> <li>Project Outputs</li> <li>Information/feedback from Stakeholders</li> <li>Products /Reports</li> </ul>	<ul> <li>Document review</li> <li>Data review</li> <li>Consultation with project team</li> <li>Consultation with stakeholders</li> <li>Visits to institutions / groups</li> </ul>

<ul> <li>Is equipment purchased through the project relevant to intended Outputs and Outcomes?</li> <li>How will equipment purchased through the project help to increase the effectiveness of institutions in the long term?</li> <li>Is ownership of equipment purchased clearly agreed and appropriate to the achievement of sustainable Outcomes following project end?</li> </ul>	<ul> <li>Equipment installed and working to support achievement of results</li> <li>Relevant institutions have the capacity to operate equipment following EOP</li> <li>Monitoring reports demonstrate the effectiveness of equipment</li> <li>Project hand-over agreements</li> </ul>	<ul> <li>Monitoring reports</li> <li>Project Results</li> <li>Information/feedback from Stakeholders on results achieved</li> <li>Impact on the ground</li> </ul>	<ul> <li>Document review</li> <li>Data review</li> <li>Consultation with project team</li> <li>Consultation with stakeholders</li> <li>Field visits</li> </ul>
Has communication and awareness raising supported effective	project implementation		
<ul> <li>Was a communication and awareness raising plan developed</li> <li>Have communication materials produced through the project helped to increase stakeholders understanding of the project and of key issues being addressed?</li> <li>Were progress reports / the key findings of progress reports shared will key stakeholders, in particular implementing / executing partners?</li> </ul>	<ul> <li>Communication and awareness raising plan</li> <li>Communication materials of good quality and clearly outline key issues / information</li> <li>Stakeholders confirm effective communication by the project &amp; have a good understanding of the project and of the issues it aimed to address</li> </ul>	<ul> <li>Communication and awareness raising plan</li> <li>Monitoring reports</li> <li>Project Outputs / Results</li> <li>Information/feedback from Stakeholders on results achieved</li> <li>Products /Reports</li> </ul>	<ul> <li>Document review</li> <li>Communication material review</li> <li>Data review</li> <li>Consultation with project team</li> <li>Consultation with stakeholders</li> </ul>
What lessons can be learnt to increase effectiveness of future p	rojects		
<ul> <li>Has project monitoring highlighted any lessons which could be used to improve process for achieving project results / Outcomes in future projects?</li> <li>What changes could have been made to the design of the project in order to improve the achievement of the project's expected results?</li> <li>How could the project have been managed more effectively (management structures, processes, facilitatory role, partnerships, planning, monitoring etc)</li> <li>Could oversight (eg by UNDP and PSC) been strengthened in any way to increase effectiveness of the project?</li> <li>How can lessons learnt be captured to effectively guide the design and implementation of future projects (lessons learnt papers, guidelines, protocols etc)</li> <li>What processes have been established to ensure that agencies</li> </ul>	<ul> <li>Monitoring reports highlight effectiveness of processes and procedures</li> <li>Project has developed lessons learnt papers / guidance</li> <li>Key organisations (UNDP, Govt agencies, NGOs) have systems to internalise lessons to feed in to design of new initiatives</li> </ul>	<ul> <li>Monitoring reports</li> <li>Project Results</li> <li>Project Document</li> <li>Information/feedback from Stakeholders on results achieved</li> <li>Products /Reports</li> <li>Impact on the ground</li> </ul>	<ul> <li>Document review</li> <li>Data review</li> <li>Consultation with project team</li> <li>Consultation with stakeholders</li> <li>Field visits</li> </ul>

internalise lessons learnt to guide new design processes?			
Efficiency: Was the project implemented efficiently, in-line with required	GEF / UNDP norms and standards?		
Were GEF resources used efficiently in line with GEF/UNDP nor	ns and standards?		
<ul> <li>Were project accounting and financial systems in place &amp; of acceptable standard?</li> <li>Did the project manager produce accurate and timely financial information?</li> <li>Did accounting and financial systems within the implementing agency ensure that project resources were utilized in line with GEF/UNDP norms and standards?</li> <li>Did the PSC provide effective oversight to ensure efficient use of project resources towards achievement of intended results?</li> <li>Was project implementation as cost effective as originally proposed (planned vs. actual). If not why not? Were any Outcomes or project management budget overspent?</li> <li>How were partnership mechanisms used to increase the efficiency of project implementation?</li> <li>Was co-financing committed in design provided? If no why not?</li> <li>Was the capacity of local organisations adequately taken in to account in design and implementation of the project?</li> <li>Was procurement carried out to maximise efficient use of project resources (competitive bidding; assessment of quality &amp; suitability of items procured etc)?</li> <li>Do the results?</li> <li>Were any changes made to the project implementation approach to improve project efficiency? Did results-based management (progress reporting, monitoring and evaluation) support efficiency?</li> </ul>	<ul> <li>Availability and quality of financial and progress reports</li> <li>Timeliness and adequacy of reporting</li> <li>Level of discrepancy between planned and utilized financial expenditures per Outcome / project management</li> <li>Cost relative to results achieved compared to costs of similar projects from other organizations</li> <li>Was project expenditure required in view of existing context, infrastructure, capacity etc)</li> <li>Number/quality of analyses done to assess local capacity potential capacity</li> <li>Cost associated with delivery mechanism and management structure compare to alternatives</li> </ul>	<ul> <li>Project Document</li> <li>Financial reports and data</li> <li>Monitoring &amp; evaluation reports</li> <li>UNDP financial records</li> <li>Audit reports</li> <li>Procurement information</li> <li>Meeting reports</li> <li>Information/feedback from Stakeholders on results achieved /impacts</li> </ul>	<ul> <li>Document review</li> <li>Stakeholder consultation</li> <li>Data Analysis</li> </ul>
Was all co-financing pledged in the Project Document realised?			
<ul> <li>Was all national partner co-financing pledged at design realised?</li> <li>Were co-financing resources produced on time, efficiently to support the achievement of intended results?</li> </ul>	<ul> <li>Planned vs. actual funds leveraged (co- financing)</li> <li>Additional leveraged resources</li> </ul>	<ul> <li>Project Document</li> <li>Financial reports/ data</li> <li>M&amp;E reports</li> </ul>	<ul> <li>Document review</li> <li>Consultation</li> </ul>

<ul> <li>Was there morproject implementation</li> <li>Were any address implementation</li> <li>Does the co-finel p to secure EOP?</li> </ul>	onitoring and recording of co-financing throughout nentation to demonstrate efficiency? ditional sources of financing leveraged during project on? inancing committed during project implementation e the likelihood of financial sustainability following	• t •	Timeliness and adequacy of co- financing for achievement of intended results Efficient monitoring of co-financing	• • •	UNDP financial records Audit reports Procurement information Information from Stakeholders	•	Data Analysis
What lessons c	an be learnt to increase efficiency of future proje	ects	?				
<ul> <li>Have M&amp;E proused to make</li> <li>What changes in order to incomechanisms,</li> <li>What changes managed to n procurement,</li> <li>Could oversig any way to income how can less design and im</li> <li>What process agencies interprocesses?</li> </ul>	ocesses highlighted any lessons which could be processes more efficient in future projects? s could have been made to the design of the project crease project efficiency (eg implementation budget etc) ? s could have been made to the way the project was nake it more efficient (financial planning, budgeting, reporting etc)? wh (eg by UNDP and PSC) been strengthened in crease efficiency of the project? ons learnt be captured to effectively guide the uplementation of future projects? ses have been established to ensure that key rnalise lessons learnt to guide new design	•	Monitoring reports highlight efficiency of processes and procedures and any issues encountered End of project report highlights lessons learnt Key organisations (UNDP, Govt agencies, NGOs) have systems to internalise lessons to feed in to design of new processes	•	Monitoring reports Project Outputs / Results Project Document Information/feedback from Stakeholders on results achieved Products /Reports	•	Document review Consultation Data Analysis
Sustainability: To	what extent are there financial, institutional, socio-ec	conc	omic, and environmental risks to sustainir	ng l	ong-term project results?		
Did project des	ign and implementation internalise mechanisms	to e	ensure the project worked to effect lon	g-t	erm results?		
<ul> <li>Were sustaina</li> <li>Do indicators</li> <li>Did the project ownership of</li> <li>Did project me sustainability strategies dev outcomes?</li> <li>Did the project sustainability</li> </ul>	ability strategies included in the Project Document?? and targets in the SRF capture sustainability? ct effectively engage stakeholders to ensure strong project Outcomes? onitoring and evaluation include consideration of /achievement of long term results? Are the veloped likely to ensure the sustainability of project ct develop an Exit Strategy to support the of Outcomes following EOP?	•	Reduction in level of threats compared to project baseline Financial arrangements are in place to ensure sustainability of key results Institutional arrangements and partnerships working to ensure sustainability of results following EOP Level of awareness increased amongst key stakeholders Environmental monitoring	• • • •	Monitoring reports Project Outputs / Results Project Document Information/feedback from Stakeholders on results achieved Products /Reports Impact on the ground	•	Document review Data review Consultation with project team Consultation with stakeholders Field visits

Environmental monitoring

• Did the project work to support catalytic mechanisms to expand the influence of the project beyond local project area / demonstration sites, for example mechanisms for knowledge transfer nationally / internationally; training of trainers; identification of sources of support for replication of pilot sites following EOP etc	<ul> <li>demonstrates positive results and a reduction in environmental risks</li> <li>Socio-economic benefits demonstrated and incentives in place to sustain results</li> </ul>		
Are there risks within institutional and governance processes a	d structures to the sustainability of proj	ect Outcomes?	
<ul> <li>Do the legal frameworks, policies, and governance structures and processes within which the project operates pose risks that may jeopardize sustainability of project benefits?</li> <li>Has the project supported capacity building and institutional strengthening of key organisations to the level required to enable them to operate without project support in order to sustain project Outcomes? Were results of project implementation well assimilated by organizations?</li> <li>Is there evidence that local partners are committed to continuing activities beyond EOP? What is the degree of local ownership of results?</li> <li>What is the level of political commitment to sustain project Outcomes?</li> <li>Has policy, legal and strategic support provided under the project established the strategic and legal framework necessary to support sustainable impacts?</li> <li>Are there policies or practices with perverse incentives negatively affecting long-term benefits?</li> </ul>	<ul> <li>Capacity of key stakeholders and institutions</li> <li>Institutions / groups have committed finances to continue work to achieve / sustain project Outcomes following EOP</li> <li>Institutional workplans include activities to sustain activities initiated, or relevant to the project following EOP</li> <li>Policy and strategic framework strengthened</li> <li>Roles and responsibilities of relevant institutions clear</li> <li>Institutional &amp; strategic partnerships strengthened</li> <li>Evidence of mechanisms to catalyse impacts to other areas / groups.</li> </ul>	<ul> <li>Monitoring reports</li> <li>Project Outputs / Results</li> <li>Project Document</li> <li>Information/feedback from Stakeholders on results achieved</li> <li>Products /Reports</li> <li>Impact on the ground</li> </ul>	<ul> <li>Document review</li> <li>Data review</li> <li>Consultation with project team</li> <li>Consultation with stakeholders</li> <li>Field visits</li> </ul>
Are there financial risks to the sustainability of project Outcome	s?		
<ul> <li>Are there financial risks that may jeopardize the sustainability of project outcomes? What is the likelihood of financial and economic resources not being available once GEF grant assistance ends?</li> <li>Are financial resources committed by project partner organisations / groups adequate to sustain project Outcomes? Has the project put mechanisms in place to ensure the financial and economic sustainability of results following EOP?</li> <li>Are accountability systems in place to support transparency?</li> <li>Have key stakeholder organisations confirmed their commitment to fund and / or undertake key processes following EOP</li> <li>Will Govt agencies commit the resources and staff necessary to</li> </ul>	<ul> <li>Monitoring demonstrates a reduction in financial risks against the baseline</li> <li>Levels of financial support to be provided by relevant sectors following EOP sufficient to sustain results.</li> <li>Commitments from all key stakeholder groups (private sector, NGO, community and Govt)</li> <li>Changes in financial allocations within annual workplans</li> <li>Changes in financial strategies or procedures</li> </ul>	<ul> <li>Monitoring reports</li> <li>Project Outputs / Results</li> <li>Project Document</li> <li>Information/feedback from Stakeholders on results achieved</li> <li>Products /Reports</li> <li>Impact on the ground</li> </ul>	<ul> <li>Document review</li> <li>Data review</li> <li>Consultation with project team</li> <li>Consultation with stakeholders</li> <li>Field visits</li> </ul>

<ul> <li>sustain Outcomes?</li> <li>Have there been any changes to national financial policies or to budget allocation within institutions to indicate ongoing support will be adequate to sustain Outcomes?</li> </ul>	<ul> <li>Increased self sufficiency of communities</li> </ul>		
Are there environmental risks to the sustainability of project Ou	tcomes?		
<ul> <li>How has the project addressed the key environmental threats identified in the Project Document?</li> <li>Have any new environmental threats emerged in the project's lifetime and how have these been addressed?</li> <li>Has effective monitoring been undertaken of environmental variables, including the establishment and monitoring of environmental sustainability indicators?</li> <li>Have national / local monitoring systems been strengthened to ensure ongoing monitoring of environmental threats / to support sustainability?</li> <li>Has legislation been strengthened to support environmental sustainability (eg SEA or EIA)</li> <li>Have national or local strategies and plans been strengthened to support environmental sustainability and are these being implemented?</li> <li>Are planning systems strengthened to include consideration of long-term sustainability issues and opportunities to reduce negative impacts?</li> <li>Have incentives been established to increase the likelihood of sustainable use and reduction in environmentally damaging practices?</li> </ul>	<ul> <li>Environmental monitoring demonstrates a reduction in environmental threats / risks against the project baseline</li> <li>National / local monitoring systems strengthened and include adequate indicators and systems for monitoring environmental sustainability</li> <li>Strengthened national environmental assessment procedures (eg strengthened legislation, strategies etc)</li> <li>Increased engagement by relevant stakeholders in monitoring environmental sustainability indicators at different levels (strengthened partnership)</li> <li>Incentives established for sustainable use</li> <li>Strengthened planning systems focussed on sustainable development.</li> </ul>	<ul> <li>Monitoring reports</li> <li>Project Outputs / Results</li> <li>Project Document</li> <li>Information/feedback from Stakeholders on results achieved</li> <li>Products /Reports</li> <li>Impact on the ground</li> </ul>	<ul> <li>Document review</li> <li>Data review</li> <li>Consultation with project team</li> <li>Consultation with stakeholders</li> <li>Field visits</li> </ul>
Are there socio-economic risks to the sustainability of project C	utcomes?		
<ul> <li>Have the key socio-economic threats that were identified in design been addressed?</li> <li>Were any new socio-economic threats identified during project implementation and have these been addressed?</li> <li>Have systems been established to monitor and address socio-economic risks/threats?</li> <li>Have socio-economic partnerships been established to support</li> </ul>	<ul> <li>Monitoring demonstrates a reduction in socio-economic threats / risks against the project baseline</li> <li>Strengthened national / local monitoring systems / socio-economic indicators.</li> <li>Strengthened national / local policies and plans.</li> </ul>	<ul> <li>Monitoring reports</li> <li>Project Outputs / Results</li> <li>Project Document</li> <li>Information/feedback from Stakeholders on results achieved</li> <li>Products /Reports</li> </ul>	<ul> <li>Document review</li> <li>Data review</li> <li>Consultation with project team</li> <li>Consultation</li> </ul>

<ul> <li>sustainability (eg public-private partnerships, community engagement in monitoring etc)</li> <li>Are key stakeholder groups committed to continuing to engage in activities necessary to sustain Outcomes?</li> <li>Is there sufficient public/stakeholder awareness and understanding to sustain Outcomes?</li> <li>Have socio-economic policies and plans been strengthened to support project Outcomes in the long term?</li> <li>Have social and economic incentives been established to sustain project Outcomes (for example incentives for more sustainable patterns of resource use or for biodiversity conservation through increased engagement in tourism)?</li> <li>Is there increased recognition of the importance of gender equality and strengthened systems and mechanisms to ensure women benefit from project Outcomes?</li> </ul>	<ul> <li>Increased engagement by relevant stakeholders in supporting sustainable Outcomes</li> <li>Increased / improved socio-economic partnerships</li> <li>Incentives established for sustainable use</li> <li>Strengthened planning systems focussed on sustainable development.</li> </ul>	Impact on the ground	with stakeholders • Field visits
What lessons can be drawn regarding the need to ensure mech	anisms are established through projects	to support sustainable Outco	mes?
<ul> <li>What could the project have done differently to increase the likelihood of sustainable Outcomes across all of the above areas: financial; socio-economic; institutional/governance and environmental?</li> <li>How could project design have more effectively incorporated mechanisms to ensure sustainability</li> <li>How could project implementation have been strengthened to increase the likelihood of sustainable positive Outcomes?</li> </ul>	<ul> <li>Monitoring reports highlight sustainability issues</li> <li>Stakeholders are aware of risks and opportunities to increase likelihood of sustainability</li> <li>Key organisations (UNDP, Govt agencies, NGOs) have systems to internalise lessons to feed in to design of new processes.</li> </ul>	<ul> <li>Monitoring reports</li> <li>Project Results</li> <li>Project Document</li> <li>Information/feedback from Stakeholders on results achieved</li> <li>Products /Reports</li> <li>Impact on the ground</li> </ul>	<ul> <li>Document review</li> <li>Data review</li> <li>Consultation with project team</li> <li>Consultation with stakeholders</li> <li>Field visits</li> </ul>
Impact: Are there indications that the project has contributed to, or en	abled progress toward, reduced environmen	tal stress and/or improved ecol	ogical status?
<ul> <li>What were the environmental stresses at the beginning of the project and are there verifiable reductions in stress on ecological systems that can be identified through specified process indicators, to demonstrate that progress is being made towards achievement of stress reduction and/or ecological improvement?</li> <li>Have other stresses been identified during project implementation and if so have these been addressed effectively through the project?</li> </ul>	<ul> <li>Threats reduced</li> <li>Verifiable improvements in ecological status</li> <li>Changes in ecological status including increased ecosystem resilience</li> <li>Increased incentives and support for project Outcomes</li> <li>Improved monitoring systems</li> </ul>	<ul> <li>Monitoring reports</li> <li>Project Outputs / Results</li> <li>Project Document</li> <li>Information/feedback from Stakeholders on results achieved.</li> <li>Products /Reports</li> <li>Impact on the ground</li> </ul>	<ul> <li>Document review</li> <li>Data review</li> <li>Consultation with project team</li> <li>Consultation with</li> </ul>

<ul> <li>Have the ecological status of the habitats and resources of targeted species been improved? To what extent? At what level?</li> <li>What are the mechanisms at work resulting in the reduction of environmental stresses (i.e. the causal links to project outputs and outcomes)?</li> <li>What is the extent to which changes are taking place at scales commensurate to natural system boundaries;</li> <li>Are project impacts likely to continue in the long-term?</li> <li>Has the project had any negative impacts that result in increasing environmental stresses?</li> </ul>	/indicators to monitor long term effects		stakeholders • Field visits
Country Ownership: Has government approved policies or regulator	y frameworks in line with the Project Objecti	ve	
<ul> <li>Did the project align with relevant national priorities and plans?</li> </ul>	<ul> <li>Project document includes review of national policies and plans</li> <li>Project approach is aligned with relevant national sectoral and development plans</li> </ul>	<ul> <li>Project Document</li> <li>Project Results</li> <li>Stakeholder feedback</li> <li>National Policies, Strategies and Plans</li> </ul>	<ul> <li>Document review</li> <li>Consultation</li> <li>Data analysis</li> </ul>
<ul> <li>Were the relevant representatives from government and civil society involved in project implementation, including as part of the project steering committee?</li> </ul>	<ul> <li>Project implementation strategy includes all key stakeholders</li> <li>Project reports demonstrate active involvement by all key stakeholder groups</li> </ul>	<ul> <li>Monitoring reports</li> <li>Project / Results</li> <li>Project Document</li> <li>Stakeholder feedback</li> </ul>	<ul> <li>Document review</li> <li>Consultation</li> <li>Data analysis</li> </ul>
<ul> <li>How have national partners assumed responsibility for the project and provided support to project execution, including the degree of cooperation received from the various public institutions involved in the project?</li> </ul>	<ul> <li>Endorsement of project by governmental agencies</li> <li>Provision of co-financing</li> </ul>	<ul> <li>Monitoring reports</li> <li>Project / Results</li> <li>Project Document</li> <li>Stakeholder feedback</li> <li>Policies, Strategies and Plans</li> </ul>	<ul> <li>Document review</li> <li>Consultation</li> <li>Data analysis</li> </ul>
Has the project stimulated national / local ownership of project outputs and outcomes?	<ul> <li>Perception of ownership by national and local agencies</li> </ul>	<ul> <li>Monitoring reports</li> <li>Project / Results</li> <li>Project Document</li> <li>Stakeholder feedback</li> </ul>	<ul> <li>Document review</li> <li>Consultation</li> <li>Data analysis</li> </ul>
<ul> <li>Was an intergovernmental Project Steering Committee given responsibility for strategic oversight of the project and did it provide active guidance and support throughout project</li> </ul>	PSC established and meeting regularly	<ul> <li>Monitoring reports</li> <li>Project / Results</li> <li>Project Document</li> <li>Stakeholder feedback</li> </ul>	<ul> <li>Document review</li> <li>Consultation</li> <li>Data analysis</li> </ul>

Was an intergovernmental Project Steering Committee given responsibility for strategic oversight of the project and did it provide active guidance and support throughout project implementation?	•	PSC established and meeting regularly	•	Monitoring reports Project / Results Project Document Stakeholder feedback	<ul> <li>Document review</li> <li>Consultation</li> <li>Data analysis</li> </ul>
<ul> <li>Has the government signed off any new policies, strategies, plans or other national / regional strategic documents</li> </ul>	•	Evidence of new strategic documents that have been signed off/ are being used	• • •	Monitoring reports Project / Results Project Document Stakeholder feedback Policies, Strategies and Plans	<ul> <li>Document review</li> <li>Consultation</li> <li>Data analysis</li> </ul>
Synergy with Other Projects/Programmes: Explain how synergies project	W	ith other projects/programmes have bee	en	incorporated in the impleme	entation of the
<ul> <li>Were projects and programmes identified in project design along with a strategy for how the project should engage with them?</li> </ul>	•	All relevant projects and programmes identified in the project document	•	Monitoring reports Project / Results Project Document Stakeholder feedback Reports from relevant initiatives	<ul> <li>Document review</li> <li>Consultation</li> <li>Data analysis</li> </ul>
<ul> <li>How has the project collaborated with relevant projects and programmes / has there been good communication and synergy with all relevant projects / programmes?</li> </ul>	•	Extent to which the project has worked with other projects and programmes	•	Monitoring reports Project / Results Project Document Stakeholder feedback Reports from relevant initiatives	<ul> <li>Document review</li> <li>Consultation</li> <li>Data analysis</li> </ul>
Have results and the sustainability of results been strengthened through effective synergy with relevant projects and programmes	•	Extent to which project results and sustainability of results has been strengthened through effective collaboration	• • • •	Monitoring reports Project / Results Project Document Stakeholder feedback Reports from relevant initiatives	<ul> <li>Document review</li> <li>Consultation</li> <li>Data analysis</li> </ul>
Have the partnerships between projects and programmes helped to establish new or strengthened working relationships between statished and a strengthened working relationships between	•	Project stakeholders are collaborating with stakeholders from other projects	•	Monitoring reports Project / Results	Document     review

#### **Annex 4: Evaluation Code of Conduct and Agreement Form**

#### ANNEX 4: Evaluation Consultant Code of Conduct and Agreement Form

#### Evaluators: )

- 1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
- 2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
- 3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
- 4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
- 5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
- Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
- 7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Evaluation Consultant Agreement Form<sup>3</sup>

Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: Miss Sophie van der Meeren

Name of Consultancy Organization: Independent Consultant

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signature: - This under Mase

Mare\_\_\_\_\_ Signed at Perranuthnoe, Cornwall UK on 25th February 2018

<sup>3</sup>www.unevaluation.org/unegcodeofconduct

# ANNEX 5: COFINANCING TABLE

Co-financing (type/source)	UNDP own fina	ancing (US\$)	Government (US\$)		Other Partner A (US\$)	gency/ Group	Total (US\$)		
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	
Grants	225,000	UNDP to provide data	2,000,000 (DFRR)	Not Available	1,440,000 BLB	BLB to provide data			
			1,500,000 (DEA)	Not Available	150,000 JICA	150,000			
			500,000 (DAP)	Not Available	150,000 Gaingo-O	Not Available			
			150,000 (Letlhakane sub LB)	Not Available	280,000 BotAsh	Not Available			
			50,000 (DNMM)	Not Available					
Loans/Concessions									
<ul> <li>In-kind support</li> </ul>			200,000 (Boteti sub-D Council)	Not Available	150 000 Gumakutshaa	Not Available			
Other									
Totals	225,000	UNDP to provide data		Not recorded by project or Govt Partners		Comprehensi ve data not recorded by project or Govt Partners	6,570,000	Data not available	

# Co-Financing Pledged in Project Document

Sources of Co-Finance	Name of co-financier	Туре	Amount \$
Multi-lateral	UNDP	Cash	225 000.00
Bilateral	Japan International Cooperation Agency (JICA)	Cash	150 000.00
National Government	Department of Forestry and Range Resources (DFRR)	Cash	2 000 000.00
National Government	Department of Environmental Affairs	Cash	1 500 000.00
National Government	Department of Animal Production	Cash	500 000.00
National Government	Department of National Museum and Monuments	Cash	50 000.00
National Government Boteti sub-district Council		In kind	200 000.00
Private	Botswana Ash Pty Ltd	Cash	280 000.00
Civil Society Organisation	BirdLife Botswana	Cash	1 440 000.00
Civil society organisation	Gaingo-O Community Trust	Cash	150 000.00
National Government	Letlhakane Sub-Land Board	Cash	150 000.00
Civil society Organisation	Gumakutshaa Conservation Trust	In-Kind	150 000.00
Total Co-financing			6 795 000.00

# Annex 6: National Biodiversity Strategy Action Plan (NBSAP) Targets Botswana

# Botswana NBSAP Targets

		Related
		Strategic Goals
Reference	Target	Aichi Targets
National Target 1	By 2025, all people in Botswana appreciate how biodiversity contributes to their lives, and are aware of steps they can take to conserve and use it sustainably.	1
National Target 2	By 2025, planning processes at all (district, urban and national) levels, and national accounting and reporting systems in Botswana contain explicit actions to promote biodiversity conservation.	2
National Target 3	By 2025, incentives and subsidies across all sectors are revised, designed or introduced to improve support for sustainable consumption and production and promote biodiversity conservation.	3
National Target 4	By 2025, at all levels, policy and regulatory instruments are in place to ensure production and consumption by government, industry and society are kept within sustainable levels and safe ecological limits.	4
National Target 5	By 2025, the rate of natural land conversion is at least halved, and degradation and fragmentation are significantly reduced.	5
National Target 6	By 2025, animal and plant resources in Botswana's wetlands, woodlands and savannas are sustainably managed using the ecosystem approach, so that the impacts of harvesting remain within safe ecological limits.	6
National Target 7	By 2025, wetlands, woodlands and savannas, particularly where used for use for range or crops, are managed sustainably,	7

7	ensuring conservation of biodiversity.	
National Target 8	By 2025, levels of air, water and soil pollution are maintained below levels that would threaten ecosystem functioning and biodiversity.	8
National Target 9	By 2025, key invasive alien species are identified and controlled or eradicated, and pathways for their spread are managed to prevent further introduction and establishment.	9
National Target 10	By 2025, the anthropogenic pressures on wetlands, woodlands and savannas are minimised, so that the impacts of climate change and other external perturbations on their ecological integrity and functioning can be managed.	10
National Target 11	By 2025, at least 25 percent of all Botswana's ecoregions, particularly the wetlands, rivers and pans in them, are effectively conserved through an ecosystem approach that integrates their management with that of the surrounding landscapes and involves resident communities.	11
National Target 12	By 2025, the conservation status of species in Botswana that are listed as threatened has been improved or sustained.	12
National Target 13	By 2025, the genetic resources of traditional agricultural species and their wild relatives are protected, and strategies for minimizing genetic erosion and safeguarding their genetic diversity have been implemented.	13
National Target 14	By 2025, ecosystem services are identified and restored or maintained in all Botswana's ecoregions, and contribute to livelihood improvement through strategies that enable equitable access by all vulnerable groups, including women, the poor and local communities.	14
National Target	By 2025, ecosystem integrity in all Botswana's ecoregions will be conserved through the adoption of ecosystem-level management approaches built around key ecological processes, so that they	15

	approaches built around key ecological processes, so that they contribute to climate change mitigation and to combating desertification.	
National Target 16	By 2025, the Nagoya Protocol is domesticated and operational, and specific actions that ensure fair and equitable access and benefit sharing are implemented.	16
National Target 17	By 2015, Botswana's revised NBSAP has commenced implementation with the full support of all sectors and levels of governance.	17
National Target 18	By 2025, the indigenous knowledge of Botswana's various communities, as it relates to the conservation and sustainable use of biodiversity in all the country's ecoregions, will be documented, assessed and legally protected, and - where relevant - integrated into programmes and projects supporting biodiversity conservation.	18
National Target 19	By 2025, information and techniques relating to the biodiversity and its value in all Botswana's ecoregions are efficiently documented, stored, shared, disseminated and used by all sectors and levels of society.	19
National Target 20	By 2017, at least 80% of the required budget for the revised NBSAP, generated from diverse sources, is made available for its implementation.	20

Annex 7: Terms of Reference for Terminal Evaluation of the project Using SLM to improve the integrity of the Makgadikgadi ecosystem and to secure the livelihoods of rangeland-dependent communities (PIMS #5359.)

## INTRODUCTION

In accordance with UNDP and GEF M&E policies and procedures, all full and medium-sized UNDP support GEF financed projects are required to undergo a terminal evaluation upon completion of implementation. These terms of reference (TOR) sets out the expectations for a Terminal Evaluation (TE) of the Using SLM to improve the integrity of the Makgadikgadi ecosystem and to secure the livelihoods of rangeland-dependent communities (PIMS #5359.)

The essentials of the project to be evaluated are as follows:

Project Title:	Using SL	M to improve the integrity of the Ma	kgadikgadi ecosystem and to	secure the livelihoods of rangeland-	dependent communities
GEF Pr	oject ID:	5789		at endorsement (Million US\$)	at completion (Million US\$)
UNDP Pr	oject ID:	00081415 00090691	GEF financing:	792,832.00	
(	Country:	BOTSWANA	IA/EA own:		
	Region:	Africa	Government:	6,570,000.00	
Foo	cal Area:	Land Degradation	Other:	225,000	
FA Ob	jectives, (OP/SP):	Reduce pressures on natural resources by managing competing land uses in wider landscape	Total co-financing:	6,795,000.00	
Executing	Agency:	BirdLife Botswana	Total Project Cost:	7,587,832.00	
Other	Partners	Department of Forestry and	ProDo	oc Signature (date project began):	22 Sept. 2014
I	nvolved:	Range Resources and the Department of Environmental Affairs under the Ministry of Environment, Wildlife and Tourism	(Operational) Closing Date:	<b>Proposed:</b> 31 <sup>st</sup> December 2017	Actual:

## **PROJECT SUMMARY TABLE**

#### **PROJECT OBJECTIVE AND SCOPE**

#### **Project Summary**

Prevalent land and livestock management processes in Botswana's Makgadikgadi ecosystem are likely to compromise the continued flow of ecosystem goods and services from the savannah ecosystem that are necessary to sustain the national economy, livelihoods and the rich fauna and flora diversity. Local communities need to participate meaningfully in mainstreaming **SLM principles into rangeland management and governance** in order to secure the ecosystems goods and services necessary for current and future development and maintenance of biodiversity. **However, the effectiveness of their participation is currently hindered by critical barriers, chief among them, inadequate knowledge and skills for adoption of SLM in arable farming, livestock management and livelihood support systems (primarily for the hitherto under-utilised veld products); lack of integrated localized land-use plans and inadequate user-right privileges for resident natural resource users. These barriers are preventing the government and the local communities to achieve the long-term solutions desired for the rangelands.** 

#### **Project Goal**

The project aims to remove these barriers by supporting communities to mainstream SLM principles into the Sub-district-wide land-use planning, and at a few pilot sites into both livestock production (through strengthening Farmer's Associations and providing through them technical backstopping to enable farmers to improve livestock productivity whilst enhancing rangeland conditions) and arable farming (through conservation agriculture). This will be achieved through two components.

#### **Project Components**

**Component 1** will put in place systems and capacities for applying improved range management principles over 1,900,000 hectares of rangelands. Activities will be targeted at the entire Makgadikgadi Framework Management Planning (MFMP) area, but with other more detailed support for land use planning focusing on the Boteti sub-district. Replication of the successful pilots could have an impact on an additional 1,440,000 hectares (notably in the adjoining Tutume sub-district planning area).

**Component 2** will facilitate the conditions necessary for development and successful implementation of local integrated land use plans in pilot villages. Component 2 will empower local institutions to improve resource governance and stakeholder participation in regional dialogues on the importance of mainstreaming SLM into rangeland management for local development. Overall, the project will improve capacity for local resource management and governance, removing barriers to small-scale, non-beef enterprises (including veld product processing, development and marketing, and community-based tourism that utilizes threatened trees of conservation and cultural significance), and conservation agriculture to enhance arable production catalyzed through GEF resources.

#### **Project Resources**

The total budget for the project is USD 7,587,832, out of which GEF contributes USD792, 832, and a co-finance of 6,795,000, out of which UNDP contributes USD 225,000, and national partners contribute the balance of USD 6,570,000. The three-year project will be implemented by BirdLife Botswana, supported by the Department of Forestry and Range Resources and the Department of Environmental Affairs under the Ministry of Environment, Wildlife and Tourism.

The TE will be conducted according to the guidance, rules and procedures established by UNDP and GEF as reflected in the UNDP Evaluation Guidance for GEF Financed Projects.

The objectives of the evaluation are to assess the achievement of project results, and to draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming

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# **EVALUATION APPROACH AND METHOD**

An overall approach and method<sup>1</sup> for conducting project terminal evaluations of UNDP supported GEF financed projects has developed over time. The evaluator is expected to frame the evaluation effort using the criteria of **relevance**, **effectiveness**, **efficiency**, **sustainability**, **and impact**, as defined and explained in the <u>UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported</u>, <u>GEF-financed Projects</u>. A set of questions covering each of these criteria have been drafted and are included with this TOR (*fill in <u>Annex C</u>*) The evaluator is expected to amend, complete and submit this matrix as part of an evaluation inception report, and shall include it as an annex to the final report.

The evaluation must provide evidence-based information that is credible, reliable and useful. The evaluator is expected to follow a participatory and consultative approach ensuring close engagement with government counterparts, in particular the GEF operational focal point, UNDP Country Office, project team, UNDP GEF Technical Adviser based in the region and key stakeholders. **The evaluator is expected to conduct a field mission** to Lethakane village **including the following project sites**: Mmea, Mokubilo, Mosu, Makgaba, and Mmatshumo. **Interviews will be held with the following organizations and individuals at a minimum**: BirdLife Botswana, UNDP (Botswana), Department of Forestry and Range Resources (DFRR) and Department of Environmental Affairs (DEA), as well as Mr Keletshwaretse Phetsogang (Mmatshumo Village Chief), Paulson Keithaganetse (Mmea Village Chief), Mr Khulekani Mpofu (DEA, Gaborone), Ms Tuelo Nkwane (DEA, Serowe), Ms Namasiku Mufwanzala (DFRR), Ms Kefilwe Tsetse (DFRR, Gaborone), Ms Babatshani Mathapa (Manager, Gaing- O Conservation Trust), Mr George Ntalabgwe (Chairperson, Gumakutshaa Conservation Trust), Mr Gopolang Sitale (Chairperson, Tikologo Small Stock Famers Association), Mr keikemetse Shaka (Vice Chairperson, Boteti Beef Farmers Association), Mr Joseph Modo (Department of Animal Production, Letlhakane), Mr Chemelani Mokgosi (Department of Crop Production), Mrs Ntebalang Thapelo (Land Board, Letlhakane), Mr Rorisang Chubele (Physical Planning Unit, Letlhakane), Mrs Mpho Marope (Department of Wildlife and National Parks, Serowe).

<sup>&</sup>lt;sup>1</sup> For additional information on methods, see the <u>Handbook on Planning</u>, <u>Monitoring and Evaluating for Development Results</u>, Chapter 7, pg. 163

The evaluator will review all relevant sources of information, such as the project document, project reports – including Annual APR/PIR, project budget revisions, midterm review, progress reports, GEF focal area tracking tools, project files, national strategic and legal documents, and any other materials that the evaluator considers useful for this evidence-based assessment. A list of documents that the project team will provide to the evaluator for review is included in <u>Annex B</u> of this Terms of Reference.

#### **EVALUATION CRITERIA & RATINGS**

An assessment of project performance will be carried out, based against expectations set out in the Project Logical Framework/Results Framework (see <u>Annex A</u>), which provides performance and impact indicators for project implementation along with their corresponding means of verification. The evaluation will at a minimum cover the criteria of: **relevance**, **effectiveness**, **efficiency**, **sustainability and impact**. Ratings must be provided on the following performance criteria. The completed table must be included in the evaluation executive summary. The obligatory rating scales are included in <u>Annex D</u>.

Evaluation Ratings:			
1. Monitoring and Evaluation	rating	2. IA& EA Execution	rating
M&E design at entry		Quality of UNDP Implementation	
M&E Plan Implementation		Quality of Execution - Executing Agency	
Overall quality of M&E		Overall quality of Implementation / Execution	
3. Assessment of Outcomes	rating	4. Sustainability	rating
Relevance		Financial resources:	
Effectiveness		Socio-political:	
Efficiency		Institutional framework and governance:	
Overall Project Outcome Rating		Environmental :	
		Overall likelihood of sustainability:	

### **PROJECT FINANCE / COFINANCE**

The Evaluation will assess the key financial aspects of the project, including the extent of co-financing planned and realized. Project cost and funding data will be required, including annual expenditures. Variances between planned and actual expenditures will need to be assessed and explained. Results from recent financial audits, as available, should be taken into consideration. The evaluator(s) will receive assistance from the Country Office (CO) and Project Team to obtain financial data in order to complete the co-financing table below, which will be included in the terminal evaluation report.

Co-financing (type/source)	UNDP own (mill. US\$)	financing	Governme (mill. US\$)	nt	Partner Ag (mill. US\$)	jency	Total (mill. US\$)	
	Planned	Actual	Planned	Actual	Planned	Actual	Actual	Actual



#### MAINSTREAMING

UNDP supported GEF financed projects are key components in UNDP country programming, as well as regional and global programmes. The evaluation will assess the extent to which the project was successfully mainstreamed with other UNDP priorities, including poverty

alleviation, improved governance, the prevention and recovery from natural disasters, and gender.

# IMPACT

The evaluators will assess the extent to which the project is achieving impacts or progressing towards the achievement of impacts. Key findings that should be brought out in the evaluations include whether the project has demonstrated: a) verifiable improvements in ecological status, b) verifiable reductions in stress on ecological systems, and/or c) demonstrated progress towards these impact achievements.<sup>2</sup>

## CONCLUSIONS, RECOMMENDATIONS & LESSONS

The evaluation report must include a chapter providing a set of **conclusions**, **recommendations** and **lessons**. Conclusions should build on findings and be based in evidence. Recommendations should be prioritized, specific, relevant, and targeted, with suggested implementers of the recommendations. Lessons should have wider applicability to other initiatives across the region, the area of intervention, and for the future.

# IMPLEMENTATION ARRANGEMENTS

The principal responsibility for managing this evaluation resides with the UNDP CO in Botswana. The UNDP CO will contract the evaluators and ensure the timely provision of per diems and travel arrangements within the country for the evaluation team. The Project Team will be responsible for liaising with the Evaluators team to set up stakeholder interviews, arrange field visits, coordinate with the Government etc.

# **EVALUATION TIMEFRAME**

The total duration of the evaluation will be 30 days over a period of 2 months according to the following plan:

Activity	Timing	Completion Date
<ul> <li>Preparation</li> <li>handover of documents, desk review</li> </ul>	7 days	12 – 19 Feb 2018

<sup>&</sup>lt;sup>2</sup> A useful tool for gauging progress to impact is the Review of Outcomes to Impacts (ROtI) method developed by the GEF Evaluation Office: <u>ROTI Handbook 2009</u>

<ul> <li>inception report</li> </ul>		
<ul> <li>Evaluation Mission</li> <li>Stakeholder meetings, interviews, field visits, debriefing meeting with UNDP</li> </ul>	8 days	26 Feb – 6 March
<ul> <li>Draft Evaluation Report</li> <li>Preparing draft report</li> <li>Circulation for comments feedback</li> </ul>	10 days	7 – 16 March 2018
<ul> <li>Final Report</li> <li>Incorporate comments, finalize and submit report (accommodate time delay in dates for circulation and review of the draft report)</li> </ul>	5 days	25 – 30 March 2018

# EVALUATION DELIVERABLES

The evaluation team is expected to deliver the following:

Deliverable	Content	Timing	Responsibilities
Inception	Evaluator provides	No later than 2 weeks	Evaluator submits to UNDP
Report	clarifications on timing	before the evaluation	со
	and method	mission.	
Presentation	Initial Findings	End of evaluation mission	To project management,
			UNDP CO
Draft Final	Full report, (per	Within 3 weeks of the	Sent to CO, reviewed by RTA,
Report	annexed template)	evaluation mission	PCU, GEF OFPs
	with annexes		
Final Report*	Revised report	Within 1 week of	Sent to CO for uploading to

	receiving UNDP	UNDP ERC.
	comments on draft	

\*When submitting the final evaluation report, the evaluator is required also to provide an 'audit trail', detailing how all received comments have (and have not) been addressed in the final evaluation report.

#### INDIVIDUAL CONSULTANT

The consultant shall have prior experience in evaluating similar projects. Experience with GEF financed projects is an advantage. The evaluator selected should not have participated in the project preparation and/or implementation and should not have conflict of interest with project related activities.

The evaluator will be selected on the basis of:

- 1. Availability as per the evaluation time frame
- 2. Financial bid

### **EVALUATOR ETHICS**

Evaluation consultants will be held to the highest ethical standards and are required to sign a Code of Conduct (Annex E) upon acceptance of the assignment. UNDP evaluations are conducted in accordance with the principles outlined in the <u>UNEG 'Ethical Guidelines for Evaluations'</u>

#### PAYMENT MODALITIES AND SPECIFICATIONS

(this payment schedule is indicative, to be filled in by the CO and UNDP GEF Technical Adviser based on their standard procurement procedures)

%	Milestone
40%	Following submission and approval of the 1 <sup>st</sup> draft terminal evaluation report
60%	Following submission and approval (UNDP-CO and UNDP RTA) of the final terminal evaluation report

#### APPLICATION PROCESS

The application should contain a current and complete C.V. in English with indication of the e-mail and phone contact. Shortlisted candidates will be requested to submit a price offer indicating the total cost of the assignment (including daily fee, per diem and travel costs).

UNDP applies a fair and transparent selection process that will take into account the competencies/skills of the applicants as well as their financial proposals. Qualified women and members of social minorities are encouraged to apply.

### **RECOMMENDED PRESENTATION OF OFFER**

For purposes of generating Offers whose contents are uniformly presented and to facilitate the Comparative analysis, it is recommended that the offer is presented in the form for submitting service provider's proposal contained in the request for proposal (RFP) and containing following documents:

a) Duly accomplished Letter of Confirmation of Interest and Availability using the template provided by UNDP; (Annex B)

b) Updated personal CV or P11, indicating all past experience from similar projects, as well as the contact details (email and telephone number) of the Candidate and at least three (3) professional references;

c) Financial Proposal that indicates the all-inclusive fixed total contract price, supported by a breakdown of costs, as per template provided in the request for proposal. If an Offeror is employed by an organization/company/institution, and he/she expects his/her employer to charge a management fee in the process of releasing him/her to UNDP under Reimbursable Loan Agreement (RLA), the Offeror must indicate at this point, and ensure that all such costs are duly incorporated in the financial proposal submitted to UNDP.

### APPROVAL

This TOR is approved by: [indicate name of Approving Manager]

Signature:

Name and Designation:

ANNEX 8: TE REPORT AUDIT TRAIL (annexed as a separate file)