

## 1. Project Data

Summary project data			
GEF project ID		2913	
GEF Agency project ID		P095617	
GEF Replenishment Phase		GEF - 3	
Lead GEF Agency (include all for joint projects)		World Bank	
Project name		Human-Wildlife-Coexistence Management Project in Northern Botswana	
Country/Countries		Botswana	
Region		Africa	
Focal area		Biodiversity	
Operational Program or Strategic Priorities/Objectives		SP4: Strengthening policy and legislation for mainstreaming biodiversity	
Executing agencies involved		Department of Wildlife and National Parks (DWNP), Government of Botswana	
NGOs/CBOs involvement		NGOs implemented activities under the project - Kalahari Conservation Society, Cheetah Conservation Botswana, BOCOBONET and Caraca. Participation of Community Based Trusts (CBT), Village Project Committees (VPC) and Community-based management and monitoring systems.	
Private sector involvement		Consultations with the private sector and private operations of concession areas, important stakeholders in the project	
CEO Endorsement (FSP) /Approval date (MSP)		October 2009	
Effectiveness date / project start		31-March-2010	
Expected date of project completion (at start)		31-January-2015	
Actual date of project completion		31-January-2016	
Project Financing			
		At Endorsement (US \$M)	At Completion (US \$M)
Project Preparation Grant	GEF funding	0.32	0.32
	Co-financing	0.048	0.048
GEF Project Grant		5.5	5.5
Co-financing	IA own		
	Government	14.97	
	Other multi- /bi-laterals		
	Private sector		
	NGOs/CSOs		
Total GEF funding		5.82	5.82
Total Co-financing		14.97	UA
Total project funding (GEF grant(s) + co-financing)		20.83	UA
Terminal evaluation/review information			
TE completion date		July 28, 2016	

Author of TE	Claudia Sobrevila
TER completion date	3/6/2020
TER prepared by	Mourad Shalaby
TER peer review by (if GEF IEO review)	Molly Watts Sohn

## 2. Summary of Project Ratings

Criteria	Final PIR	IA Terminal Evaluation	IA Evaluation Office Review	GEF IEO Review
Project Outcomes	S	MS	MU	MU
Sustainability of Outcomes		'Modest' / 'Moderate'	'Substantial'	MU
M&E Design		-	'Negligible'	MS
M&E Implementation		-	'Negligible'	MU
Quality of Implementation		MS	MU	MU
Quality of Execution		MS	MU	MU
Quality of the Terminal Evaluation Report		-	'Substantial'	S

## 3. Project Objectives

### 3.1 Global Environmental Objectives of the project:

The purpose of the project described in the Grant Agreement is: (i) strengthening the policy and institutional framework for wildlife management; (ii) strengthening conservation and sustainable use of wildlife resources, and (iii) building partnerships with communities, non-governmental organizations, and the private sector to secure wildlife conservation.

### 3.2 Development Objectives of the project:

The project development objective is: i) to mitigate human-wildlife conflict through proactive prevention interventions in selected rural communities in Northern Botswana and ii) to offer local people in the project areas employment choices in wildlife-based tourism to benefit directly from the presence of wildlife.

### 3.3 Were there any **changes** in the Global Environmental Objectives, Development Objectives, or other activities during implementation?

There was one restructuring decision of the project – taken on 04/01/2014 – to extend the closing date by one year, and to adjust targets for several indicators on project efficacy and outcome. The closing date of the project was thus changed from January 31, 2015 to January 31, 2016, due to implementation delays.

There were also changes in the values of some of the target indicators to measure project outcomes by the end of the project. When the project was designed, one of the project outcome indicators was the number of annual wildlife conflict incidents caused by elephants and lions, to be reduced by 33 percent in project villages as a result of project supported interventions. The revised value of this target in the

restructuring was 10 percent. The reason for this change was that project sites were scattered, and it was hard for the project implementation unit to reach affected farmers in remote areas. This new target was more realistic given the logistics of the project. The target for the second project outcome, “number of community members employed in local wildlife based tourism venture”, was reduced from 75 individuals to 50 individuals, as the mid-term review revealed that the tourism training activities had not been initiated and with two and a half years remaining for project completion, it was deemed necessary to reduce the original target. There were some other minor changes in the targets for the Intermediate Outcome Indicators.

#### 4. GEF IEO assessment of Outcomes and Sustainability

Please refer to the GEF Terminal Evaluation Review Guidelines for detail on the criteria for ratings.

Relevance can receive either a Satisfactory or Unsatisfactory rating. For Effectiveness and Cost efficiency, a six point rating scale is used (Highly Satisfactory to Highly Unsatisfactory), or Unable to Assess. Sustainability ratings are assessed on a four-point scale: Likely=no or negligible risk; Moderately Likely=low risk; Moderately Unlikely=substantial risks; Unlikely=high risk. In assessing a Sustainability rating please note if, and to what degree, sustainability of project outcomes is threatened by financial, sociopolitical, institutional/governance, or environmental factors.

Please justify ratings in the space below each box.

4.1 <b>Relevance</b>	Rating: Satisfactory
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The World Bank’s Implementation and Completion Results (ICR) report rates the relevance of objectives, design and implementation as ‘substantial’, and this TER rates relevance as satisfactory because of the project’s alignment with biodiversity priorities and objectives of the Government of Botswana, the World Bank and the GEF.

The objectives of the Northern Botswana Human Wildlife Coexistence project remain highly relevant to the Government of Botswana. Support to community development and reducing the cost of living with wildlife is a priority for the government, development partners and the World Bank. The project is aligned with Pillar 2 of the Government of Botswana’s National Vision 2016, which is relevant to the development of nature-based tourism and includes: i) Employment; ii) A positive movement in the workforce to greater gender balance; iii) Economic Growth and Diversification; iv) Historically impressive growth, though slowing down in recent years; v) Sustainable Development with local communities becoming involved in the planning, use and preservation of their environmental assets, including wildlife and good success in managing some wildlife species, especially elephants. The project’s objectives were thus highly relevant in that they supported Botswana’s goal to bring in a new strategy of proactive coexistence between wildlife and humans to protect its land and wildlife resources.

The project is aligned with the renewed emphasis by the Government of Botswana, the World Bank and the international community on: (i) wildlife management in the face of the poaching crisis in Africa; and (ii) climate change mitigation and adaptation, particularly with respect to rural land use sector (forestry

and agriculture). The vision promoted by the project, namely linking natural resource management to economic growth and to rural poverty reduction through mitigating the costs to communities of living close to wildlife and nature-based tourism development, remains highly relevant to the World Bank's current natural resource management strategy.

The project was developed under GEF-3 under the biodiversity focal area to address the objectives of the GEF Operational Program 1: Arid and Semi-Arid Zone Ecosystems. The project is in line and fits with the revised GEF-4 strategic objectives for biodiversity and contributes to Strategic Program 4: Strengthening policy and legislation for mainstreaming biodiversity.

The design of the project is also considered highly relevant, allowing for the flexibility and reactivity necessary for the implementation of human wildlife conflict mitigation strategies and to offer local people in the project areas alternatives, such as skill training in tourism that could provide them with employment opportunities.

<b>4.2 Effectiveness</b>	Rating: Moderately unsatisfactory
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The ICR rates the project's outcomes as 'moderately satisfactory'. This TER rates the project's efficacy as moderately unsatisfactory, given that a program to develop the Human-Wildlife Conflict (HWC) coexistence strategy was prepared, but indicators of impact were weak, and the capacity of the local implementing agency to carry out the project was overestimated. The project satisfactorily created employment, but it fell short of decreasing the number of Human Wildlife Conflicts – the data shows no discernible improvement, or at best, a small reduction in HWC. There were significant shortcomings in the operation's achievement of its objectives and in its efficiency.

The project consisted of three components:

- Component 1: Strengthened extension service delivery for Human Wildlife Conflict (HWC) interventions.
- Component 2: Strengthened capacity of rural target population to implement Human Wildlife Conflict (HWC) strategies.
- Component 3: Project management support.

However, the ICR evaluates the achievement of global environmental objectives, which roughly correspond to the above-stated components, rather than analyze the project's three components individually.

- Objective 1: Mitigate human-wildlife conflicts.

The Project Development Objective (PDO)-level results indicator for this objective was for the number of annual wildlife conflict incidents caused by key species such as elephants and lions to be reduced by 33%

in project villages as a result of project-supported intervention. The achievement of this objective is rated as 'modest' by the ICR. The first project outcome indicator aimed to reduce wildlife-human conflicts by 33 percent, revised down to 10 percent, in project villages compared to the baseline. This indicator was divided in two: elephant conflict and lion conflict. The Management Oriented Monitoring System (MOMS) was used to collect data on the extent of Human Wildlife Conflict (HWC) and was an activity funded by the project. The available MOMS data on elephant and lion conflicts recorded in the project villages was only made available to the Bank in 2015 after the last implementation support mission of the project.

The elephant data set demonstrates a shortage of data during the initial years of the project, which is attributed to a lack of reporting capacity. Baseline data was estimated by CARACAL and MOMS data was originally going to be collected by them in collaboration with communities, but this activity failed as a result of NGO low capacity and was then taken over by the Project Implementation Unit (PIU). The ICR indicates that "there has clearly been an increase in the severity of the problem". A small reduction occurred in 2013 and could be explained by the difference in rainfall, since 2013 was a year associated with average rainfall, whereas 2014 was associated with reduced rainfall leading to an increase in the number of incidents. Available project data suggests that the project interventions have not managed to reduce the number of human-elephant conflicts over a six-year period.

The lion data set suggests that the baseline estimate of human-lion conflict (84 incidents) may have been under-estimated, and that the problem was greater than initially anticipated. Data was collected inaccurately, both in terms of time and space. The data was not collected in all the villages affected by the project, and not during all the years of the project operation. Similarly to the elephant conflicts, lion conflicts have not been reduced as a result of the project interventions.

Crucially, the ICR points out that climate was not included as a project risk but has an overriding influence on the occurrence and intensity of Human-Wildlife Conflict (HWC) incidents, whereby reduced rainfall and drought is generally associated with increased HWC due to the following reasons: i) Dry seasons reduce food availability and elephants in search of food raid crops, fruit trees and thus come into conflict with communities, and; ii) Prey populations tend to cluster in the greater vicinity of permanent water during reduced rainfall periods, resulting in an influx of lions and other predators leading to a corresponding increase in the numbers of livestock that are predated.

Nonetheless, the ICR mentions that "there have been several activities funded by the project that indicate that progress towards solving this issue in the long run is underway", such as the "well prepared" Human-Wildlife Coexistence Strategy which "provides a structured approach to guide the development of action plans and coordination approaches to address the challenges of HWC across the nation". Additionally, Department of Wildlife and National Parks (DWNP) staff capacity for dealing with HWC has been significantly improved, and many practical implementation lessons have been learnt by staff. Thirdly, many farmers have significantly improved their skills to deal with HWC and have been used as role models to inspire other farmers to use the techniques presented under the project more effectively.

- Objective 2: Offer local people in the project areas employment choices in wildlife-based tourism.

The Project Development Objective (PDO)-level results indicator for this objective was for the number of community members employed in local nature-based tourism ventures to increase by 75 individuals. The achievement of this objective is rated ‘substantial’ by the ICR. The relative weight of this objective is considered higher as it directly relates to improving human well-being by offering tourism skill training to young villagers to increase their chances of employment, reduce their dependency on farming/grazing and minimize the costs of wildlife damages.

Data provided for 2013 and 2014 indicates that a total of 93 community members had acquired employment at that time. The project results have therefore exceeded the requirements on this outcome. What is worth noting is that most of those who were employed were the most vulnerable members of the Bushman/San tribe and they performed well and excelled in the more complex careers such as accounting and lodge management. This achievement was even appreciated by the village chief who stated during the final evaluation visit that this training has provided much hope to the entire Gudigwa community, which had struggled with depression and despair from HWC for many years.

4.3 <b>Efficiency</b>	Rating: Moderately satisfactory
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Efficiency is rated ‘substantial’ by the ICR, and this TER rates efficiency as moderately satisfactory, given that the project achieved efficiency in only one of its stated objectives, which is increasing jobs for communities that suffer from the loss of crops and livestock due to elephant and lion conflicts. The increase in human-wildlife conflict in Botswana continues to be a challenge. The project proved however to be a cost-effective way to pilot different approaches and interventions and provided an opportunity for the Department of Wildlife and National Parks (DWNP) to learn from the project results.

The project had several aspects that are cost-effective. For the interventions selected, the focus was to use cost-effective solutions and nature-based prevention techniques, such as chili-pepper deterrents, early maturing maize, restraining fence lines, and improved livestock kraaling, instead of more costly options such as large-scale wildlife-proof fencing. For training, the project partnered with local training institutions which, besides being less expensive than other providers, encouraged skills development adapted to the local market. The same advantages apply to the use of local NGOs instead of international ones in project implementation.

The cost of the baseline scenario was estimated at US\$14.97 million and the incremental cost of the GEF alternative was estimated at US\$5.5 million. The GEF grant was to cover the total incremental cost and was fully disbursed.

4.4 Sustainability	Rating: Moderately unlikely
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The ICR rates the “risk to development outcome” as high. This TER rates sustainability as moderately unlikely, given the significant financial and environment risks to project sustainability, even though progress was made in terms of social and institutional sustainability.

**Financial Resources**

The project identified the potential risk that compensation schemes for wildlife damage and subsidies from other government programs for agriculture and livestock production would continue to encourage a "culture of dependency" among local communities and impede take-up of proactive prevention strategies. A culture of dependency has prevailed with communities expecting the Department of Wildlife and National Parks (DWNP) to address their Human-Wildlife Conflicts (HWC) issues and compensate them financially for crop and livestock losses caused by wildlife. Prevailing policies were not changed, disincentives to protect crops and manage livestock in a more sustainable manner remain, and the total annual costs are currently estimated at US\$6.8 million. The cost of administrating the compensation program will continue to be a burden for the Department of Wildlife and National Parks (DWNP), which wished to phase out the use of unsustainable compensation mechanisms, considering perverse incentives and the fact that these consume a third of DWNP’s annual budget.

**Sociopolitical**

Insufficient participation in consultations, training and adoption of proactive conflict mitigation options by local communities was identified as a risk. The project managed this risk by strengthening community-based management and monitoring systems as well as mechanisms to build community knowledge of the impact of proactive prevention, through the establishment of representative Village Project Committees (VPC) in every project village.

**Institutional Frameworks and Governance**

The project had identified the potential risk that Department of Wildlife and National Parks (DWNP) staff and local communities may not have sufficient experience in implementing a GEF-funded project. This risk materialized and slowed down implementation. Adhering to the World Bank / GEF requirements and procedures was challenging, particularly in the early stages of the project, and this low capacity at the local level could hinder the institutional sustainability of this project.

The project also identified the potential risk that local village and district elites capture the decision-making process and direct benefits from the project, preventing more vulnerable community members from appropriate participation. This risk materialized but was managed through the development of representative Village Project Committees (VPC). A balance was reached between the participation of both non-elite and elite project beneficiaries in project activities. Elite involvement encouraged involvement of non-elites by way of setting examples and has contributed towards project sustainability. Village Project Committees (VPCs) have been established in each of the project villages

through appointment of community members. Their role has been a key component in the successful implementation of the project and its institutional sustainability.

### **Environmental**

The project identified the potential risk that the number of Human-Wildlife Conflicts (HCW) may increase at the end of the project, rather than decrease, due to poor reporting and monitoring activities. This risk has materialized. The baseline for human wildlife conflict was under-stated. The effects of climate variability, increasing elephant populations and elephant range expansion were not accounted in this risk assessment but have contributed to increased elephant and lion conflicts during the project period. As such, the project did not provide a sustainable solution to the HCW issue.

## **5. Processes and factors affecting attainment of project outcomes**

5.1 Co-financing. To what extent was the reported co-financing essential to the achievement of GEF objectives? If there was a difference in the level of expected co-financing and actual co-financing, then what were the reasons for it? Did the extent of materialization of co-financing affect project's outcomes and/or sustainability? If so, in what ways and through what causal linkages?

The project was financed through a GEF Grant of \$5.5 million of which 96 percent (\$5.26 million) was disbursed. The Project Appraisal Document (PAD) reports estimated total project cost at USD 20.47 million, made up of the GEF grant amount plus counterpart funds of USD 14.97 million provided by the Government of Botswana. Counterpart funding, representing three quarters of the total project cost, was for ongoing and recurrent expenditures on budget support for community trusts, operational and administrative costs, and direct compensation to farmers for crop and livestock losses. However, the ICR presents project costs for the GEF grant only and does not present co-financing contributions.

5.2 Project extensions and/or delays. If there were delays in project implementation and completion, then what were the reasons for it? Did the delay affect the project's outcomes and/or sustainability? If so, in what ways and through what causal linkages?

The Project was approved on 11/19/2009 and closed on 01/31/2016, one year after the scheduled closing date of 01/31/2015 –an overall project period of 7 years and 2 months. Mid-term Review (MTR) was held in April 2012, 3 and a half years after approval, and just short of the MTR date planned at appraisal of May 2012.

The project underwent one restructuring on April 1, 2014, to extend the closing date from January 31, 2015 to January 31, 2016 and to include a change in the value of the targets of some indicators, which is discussed in section 3.3. The indicators themselves did not change. The extension was requested to enable full disbursement of project activities, particularly the tourism training, thereby maximizing the benefits to targeted communities.

5.3 Country ownership. Assess the extent to which country ownership has affected project outcomes and sustainability? Describe the ways in which it affected outcomes and sustainability, highlighting the causal links:

The Government of Botswana supported the project throughout its implementation, although with varying degrees of interest. The fact that the Permanent Secretary (PS) and/or the deputy PS of the Ministry of Natural Resources and Tourism chaired and provided leadership to the Project Steering Committee (PSC) is evidence of the Government’s support for the project. The PSC mobilized support from other ministries and departments, including the Land Board, the Department of Tourism, Department of Agriculture, Department of Forestry and the Department of Veterinary Services. The government also integrated other sectors of government, creating joint programs, synergies and opportunities of relevance to the project and allowing a cross-pollination of ideas that have greatly facilitated project implementation. The Project Steering Committee (PSC) involved government officials from the capital Gaborone, from the district level and from the field which kept the project aligned with national developments and kept it practical and relevant to the situation faced on the ground. The TE states that the functioning of the Project Steering Committee (PSC) would not have been possible without the leadership and commitment from the Ministry of Environment, Wildlife and Tourism.

## 6. Assessment of project’s Monitoring and Evaluation system

Ratings are assessed on a six point scale: Highly Satisfactory=no shortcomings in this M&E component; Satisfactory=minor shortcomings in this M&E component; Moderately Satisfactory=moderate shortcomings in this M&E component; Moderately Unsatisfactory=significant shortcomings in this M&E component; Unsatisfactory=major shortcomings in this M&E component; Highly Unsatisfactory=there were no project M&E systems.

Please justify ratings in the space below each box.

<b>6.1 M&amp;E Design at entry</b>	Rating: Moderately satisfactory
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This TER rates M&E design as ‘moderately satisfactory’, given that the results frameworks and indicators were logical, measurable and straightforward, but the capacity of the local counterpart, the Department of Wildlife and National Parks (DWNP), to carry out important monitoring activities was overestimated by the project team.

The M&E system for the project was designed taking into consideration existing capacity and monitoring efforts from involved stakeholders at the local and national levels. The Project Appraisal Document (PAD) and the Project Implementation Manual detailed the monitoring and evaluation arrangements. The focus was on monitoring and evaluation of indicators and target values of the results framework. The results framework comprised 2 Project Development Objective (PDO)-level results indicators and 26 intermediate results indicators.

Indicators to measure the PDO were: i) Number of annual wildlife conflict incidents caused by key species such as elephants and lions reduced by 33 percent in project villages as a result of project

supported intervention (for elephants and lions) and, ii) Number of community members employed in local wildlife-based tourism ventures increased by 75 individuals. These indicators were simple but measuring the baseline and achieving the reduced levels for the first indicator turned out to be difficult, as evidenced in the M&E implementation section.

<b>6.2 M&amp;E Implementation</b>	Rating: Moderately unsatisfactory
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This TER rates M&E implementation as ‘moderately unsatisfactory’, given that the original baseline data was under-estimated and was affected by too many external factors, and there were significant capacity gaps with regards to local implementation of the project.

For the first PDO-level indicator (numbers of annual wildlife conflict incidents involving lions and elephants reduced by 33 percent), the original baseline data was under-estimated and was affected by too many external factors, such as climate and changing wildlife populations, to provide a reasonable indication of overall project success. In 2014, the original target number for this indicator was decreased from 33 percent to 10 percent. This indicator was not achieved even with the reduced target numbers. If a better monitoring of human wildlife incidents would have been established sooner, the full extent of human wildlife conflict incidents would have been known and the project restructuring would have suggested a different measure of the indicator.

The second PDO-level indicator measured employment achieved by youths from project villages that were offered skills training for entry into the ecotourism industry. Approximately 60 percent of graduates have found employment, and this figure may rise as the remainder continues to seek employment.

Several intermediate indicators to measure project management, concerning training, GPS equipment and Human Wildlife Conflict (HWC) mitigation techniques, were probably excessive and could have been reduced to one.

The project Implementation Unit (PIU) employed one person dedicated to reporting the status of the results framework indicators, provided to the World Bank every 6 months through Management Oriented Monitoring Systems (MOMS) and Decision Support Systems (DSS). This type of monitoring involved Department of Wildlife and National Parks (DWNP) field staff and community members who undertook data collection, recording and analysis with minimal external support. The training and deployment of MOMS to DWNP staff and communities suffered significant delays. Data on HWC incidents started to be collected by the Village Project Committees after the communities were trained on the MOMS program, at the end of the third year of implementation. Therefore, the use of MOMS data in wildlife management decision-making was limited, and the World Bank team only received the data in the final evaluation report presented by the Government.

Quality of Implementation includes the quality of project design, as well as the quality of supervision and assistance provided by implementing agency(s) to execution agencies throughout project implementation. Quality of Execution covers the effectiveness of the executing agency(s) in

performing its roles and responsibilities. In both instances, the focus is upon factors that are largely within the control of the respective implementing and executing agency(s). A six point rating scale is used (Highly Satisfactory to Highly Unsatisfactory), or Unable to Assess.

Please justify ratings in the space below each box.

<b>7.1 Quality of Project Implementation</b>	Rating: Moderately unsatisfactory
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The ICR rates the overall World Bank performance as ‘moderately satisfactory’. This TER rates the quality of project implementation as moderately unsatisfactory, given that the World Bank failed to consider the significant influence of climate on Human-Wildlife Conflict (HWC) incidents during the design and implementation of the project

The World Bank participated actively in the design phase of the project, taking into account the results and lessons learned from Human-Wildlife Conflict (HWC) prevention techniques that had been tested and proven successful in Zimbabwe, Kenya, South Africa and Botswana, such as the use of chili pepper as a deterrent for elephants, early maturing maize, solar-powered elephant restraining fence lines, beekeeping, guard dogs and Management Oriented Monitoring System (MOMS) as a suitable monitoring system by communities. The World Bank also ensured that community consultations were used during preparation and involved a series of village level meetings. The Bank team provided useful training on all fiduciary aspects to the Project Implementation Unit (PIU). Bank implementation support missions were regular and constructive, and improved project performance. The Bank team was able to identify issues readily, extract lessons from practice and propose solutions to challenges proactively, including on technical, fiduciary and safeguard matters.

However, a significant shortcoming of the Bank, particularly during the design phase, was the fact that the influence of climate change was not included as a project risk, even though climate has an overriding influence on the occurrence and intensity of Human-Wildlife Conflict (HWC) incidents, whereby reduced rainfall and drought is generally associated with increased HWC.

<b>7.2 Quality of Project Execution</b>	Rating: Moderately unsatisfactory
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The ICR rates implementing agency performance as ‘moderately satisfactory’, while this TER rates the quality of project execution as ‘moderately unsatisfactory’. There were several significant shortcomings on the part of the executing agency and Project Implementation Unit (PIU), mainly related to capacity, although the PIU showed enthusiasm and commitment to the project.

The Project Implementation Unit (PIU) demonstrated enthusiasm and commitment to the project. But their performance suffered from the resignation of the Project Coordinator and other staff, lack of capacity, lack of internal communication, insufficient project planning and management, poor

performance of the Monitoring and Evaluation system, changes in the procurement personnel and poor procurement performance. Financial management that had been satisfactory during many implementation stages suffered when the financial specialist resigned.

On the other hand, the TER commends the level of commitment by the project focal officers. Community members facing serious wildlife conflict are frequently frustrated and angry. They feel a sense of despair as a result of not being able to deal with a problem that is recurring and far beyond their control. Community engagement is difficult under such circumstances, yet the focal officers maintained a close communication and provided practical solutions and encouragement.

## **8. Assessment of Project Impacts**

***Note - In instances where information on any impact related topic is not provided in the terminal evaluations, the reviewer should indicate in the relevant sections below that this is indeed the case and identify the information gaps. When providing information on topics related to impact, please cite the page number of the terminal evaluation from where the information is sourced.***

8.1 Environmental Change. Describe the changes in environmental stress and environmental status that occurred by the end of the project. Include both quantitative and qualitative changes documented, sources of information for these changes, and how project activities contributed to or hindered these changes. Also include how contextual factors have contributed to or hindered these changes.

The project fell short of decreasing the number of Human-Wildlife Conflicts (HWC) – the main environmental objective of the project – as the data shows no discernible improvement, or at best, a small reduction in HWC. Crucially, the ICR points out that climate was not included as a project risk but has an overriding influence on the occurrence and intensity of Human Wildlife Conflict (HWC) incidents, whereby reduced rainfall and drought is generally associated with increased HWC. A small reduction in HWC incidents occurred in 2013 and could be explained by the difference in rainfall, since 2013 was a year associated with average rainfall, whereas 2014 was associated with reduced rainfall leading to an increase in the number of incidents. Available project data suggests that the project interventions have not managed to reduce the number of human-elephant and human-lion conflicts over a six-year period. The ICR indicates that “there has clearly been an increase in the severity of the problem”.

8.2 Socioeconomic change. Describe any changes in human well-being (income, education, health, community relationships, etc.) that occurred by the end of the project. Include both quantitative and qualitative changes documented, sources of information for these changes, and how project activities contributed to or hindered these changes. Also include how contextual factors have contributed to or hindered these changes.

The project implemented traditional consultation techniques widely accepted at the local level. There was extensive participation by vulnerable groups. Community-based management and monitoring systems was achieved as well as mechanisms to build community knowledge of the impact of proactive prevention, through the establishment of representative Village Project Committees (VPC) in every

project village through appointment of community members. The participation of both non-elite and elite project beneficiaries in project activities was balanced. Their role was a key component in the successful implementation of the project. As such, the project had a positive social impact, integrating vulnerable groups and concerned villages in the decision-making and monitoring processes.

8.3 Capacity and governance changes. Describe notable changes in capacities and governance that can lead to large-scale action (both mass and legislative) bringing about positive environmental change. “Capacities” include awareness, knowledge, skills, infrastructure, and environmental monitoring systems, among others. “Governance” refers to decision-making processes, structures and systems, including access to and use of information, and thus would include laws, administrative bodies, trust-building and conflict resolution processes, information-sharing systems, etc. Indicate how project activities contributed to/ hindered these changes, as well as how contextual factors have influenced these changes.

#### a) Capacities

The project’s three components contained capacity-building activities.

The first component aimed to strengthen the extension service delivery for human-wildlife coexistence strategies, such as proactive wildlife conflict interventions, by addressing administrative and operational capacity requirements at the district level. This was to ensure that district staff can plan, make decisions, implement and monitor Human-Wildlife Conflict (HWC) in three main project areas. It also provided for sufficient staffing, training and office systems for this task. Activities financed under this component included, among others: training for national and district based staff in strategic and operations management; and implementation support, community mobilization and training in proactive HWC interventions for Department of Wildlife and National Parks (DWNP) staff. The indicators on training reflect the importance that the project gave to building the capacity of DWNP officials to deliver extension services and monitoring and to give communities different mitigation techniques to test. As a result, DWNP staff capacity for dealing with HWC was significantly improved, and many practical implementation lessons have been learnt by staff.

The second component simultaneously addressed reducing vulnerability and increasing rural livelihood and income opportunities. The component built the capacity of rural populations at the three project sites to adopt proactive prevention methods in order to mitigate Human-Wildlife Conflict (HWC) impacts and gain skills to find employment in the tourism industry. Communities adopted tested deterrent methods to reduce the destruction of crops by elephants and deploy livestock predator mitigation practices, such as fences for cattle and other domesticated animals. About 1500 households were targeted to adopt elephant deterrents while 100 candidates were trained in various hospitality management operations.

The third component strengthened the Department of Wildlife and National Parks’ (DWNP) capacity to efficiently administer project funds and coordinate and implement project activities, through trainings in

advanced project management, strategic management, operational management, and project monitoring and evaluation. It also improved the project's external communications, including the establishment of a permanent information dissemination forum to involve all relevant stakeholders and development partners

#### b) Governance

The project had identified the potential risk that local village and district elites would capture the decision making process and benefits from the project, preventing more vulnerable community members from appropriate participation. This risk materialized but was managed through the development of representative Village Project Committees (VPC). A balance was reached between the participation of both non-elite and elite project beneficiaries in project activities. Elite involvement encouraged involvement of non-elites by way of setting examples and contributed towards project sustainability and more equitable and representative governance at the village level.

8.4 Unintended impacts. Describe any impacts not targeted by the project, whether positive or negative, affecting either ecological or social aspects. Indicate the factors that contributed to these unintended impacts occurring.

There were no documented unintended impacts.

8.5 Adoption of GEF initiatives at scale. Identify any initiatives (e.g. technologies, approaches, financing instruments, implementing bodies, legal frameworks, information systems) that have been mainstreamed, replicated and/or scaled up by government and other stakeholders by project end. Include the extent to which this broader adoption has taken place, e.g. if plans and resources have been established but no actual adoption has taken place, or if market change and large-scale environmental benefits have begun to occur. Indicate how project activities and other contextual factors contributed to this taking place. If broader adoption has not taken place as expected, indicate which factors (both project-related and contextual) have hindered this from happening.

The project aimed to mainstream conservation into the various production landscapes, mainly wildlife, forestry and tourism. The project also aimed to mainstream monitoring by communities in development programs. The World Bank reminded the Project Implementation Unit (PIU) several times of the importance to mainstream the Human-Wildlife Conflict (HWC) interventions within other departments to leverage the actions and increase the likelihood of project success. However, this action failed. The lack of mainstreaming of the project into the Department of Wildlife and National Parks (DWNP) is a result of project design and DWNP leadership, as noted by the TE.

Department of Wildlife and National Parks (DWNP) staff capacity for dealing with Human-Wildlife Conflicts (HWC) has been significantly improved, and many practical implementation lessons have been learnt by staff. HWC interventions need to be rolled out on a larger scale, which will certainly be facilitated by staff capacity gains that have been achieved as a result of the project's activities. Project interventions provided an opportunity to learn many lessons pertaining to the implementation of

specific HWC interventions, such as nature-based prevention techniques, which will be valuable for the future management of HWC on a wider scale.

## **9. Lessons and recommendations**

9.1 Briefly describe the key lessons, good practices, or approaches mentioned in the terminal evaluation report that could have application for other GEF projects.

Project implementation took a business-as-usual approach without anticipating the fact that this engagement was entirely new to the client, the Department of Wildlife and National Parks (DWNP), which lacked the capacity to carry out several project activities. It is also important to recognize that there is a core responsibility of the project implementor, i.e. the World Bank, to manage overall project implementation, which cannot be delegated. Some project management functions can be subcontracted, but this should be done at the beginning of the project, when responsibilities are being defined and the project management organization is being put in place. NGOs and other service providers collaborated extensively in the implementation of project activities, but there have been a number of delays resulting from declining capacity in some NGOs, which was not initially foreseen. Many NGOs in Botswana are small operations that depend on the services of one or two key staff members, and any change in those persons' availability dramatically impacts the NGO's capacity to meet commitments. A lesson learned for future projects is that at the design stage, an institutional capacity assessment of service providers should be carried out diligently before selecting them to implement project activities.

The project focused on testing approaches to reducing Human-Wildlife Conflicts (HWC) and considered the direct cost of interventions, but did not carry out a cost-benefit analysis that included the potential value of what is at risk from HWC (crops and livestock) together with the conservation value of wildlife and the job opportunities from tourism employment. Such cost-benefit analysis would strengthen the approaches that the government takes in the future to address HWC..

The use of chili peppers for the creation of fences or as chili-impregnated blocks for burning is effective in deterring crop-raiding elephants and farmers should be widely encouraged to adopt these techniques. Use of honey bees is not a practical means of deterring crop-raiding elephants, and was discontinued as a Department of Wildlife and National Parks (DWNP) approved Human-Wildlife Conflict (HWC) intervention.

Strong predator proof kraals can be effective in reducing livestock predation. There is a high value of livestock at stake and the affected predators (lion and leopard) have an important conservation value. Predator-proof kraals are worthy of funding and an adequate source of funds need to be established to continue this Human-Wildlife Conflict (HWC) intervention.

9.2 Briefly describe the recommendations given in the terminal evaluation.

The capacity needs of the executing agencies should be carefully assessed and appropriate guidance should be provided to the implementing agency on setting up the project management structure,

staffing the project team, contracting out the functions for which it lacks in-house capacity, and establishing appropriate project management processes and procedures.

Land use planning and elephant restraining fences can be an effective approach towards dealing with Human-Wildlife Conflicts (HWC), particularly in areas where the HWC issues are severe. The concept can however lead to considerable land use disruption. Land use planning by government officials to determine agriculture or wildlife habitat expansion need to be put in place to ensure that HWC is addressed. At the local level, a clear set of village regulations are therefore required prior to implementing such land use plans and determining where the investments in fences are worthwhile.

Chili should be provided to farmers in a safe and ready-to-use format that discourages waste or inappropriate use. The full supply chain for provision of safe and ready-to-use chili, in the form of burning blocks or mixed with grease, needs to be developed. There is widespread potential for the use of chili products and large scale production should be investigated before these interventions can be widely rolled out. Farmers need to take a greater level of ownership of protecting their crops for their own benefit, and the manner whereby such interventions are introduced to farmers needs to be improved. One option may be a requirement for farmers to make some contribution of their own, which should be conditional to receiving materials for elephant deterrent support.

Procurement of the least cost option for kraals did not result in the purchase of strong kraals. Many of them were not of good quality. Kraals need to be strong and built to a good standard using quality material if they are to serve as an effective Human-Wildlife Conflicts (HWC) intervention. Improved designs for cattle kraals should be further investigated.

Improving the prospects of the youth and women in Human-Wildlife Conflicts (HWC)-affected villages to find employment in the wildlife sector has improved the attitudes of whole communities towards coexistence with wildlife. This approach should therefore be incorporated into future programs to reduce conflict and promote human-wildlife coexistence. Improving the standard of the training provided in Botswana through a program for training the trainers would achieve greater levels of human-wildlife coexistence.

## 10. Quality of the Terminal Evaluation Report

A six point rating scale is used for each sub-criteria and overall rating of the terminal evaluation report (Highly Satisfactory to Highly Unsatisfactory)

Criteria	GEF IEO comments	Rating
To what extent does the report contain an assessment of relevant outcomes and impacts of the project and the achievement of the objectives?	The TE assesses outcomes, objectives and impacts (and lack of impacts). The information is clear and the charts and graphs helpful.	S
To what extent is the report internally consistent, the evidence presented complete and convincing, and ratings well substantiated?	The report is consistent, and the ratings substantiated. The report's criticism of the omission of climate change in the baseline measurement is informative.	S

To what extent does the report properly assess project sustainability and/or project exit strategy?	The report assesses 'risk' from different angles and perspectives, although financing is not analyzed enough and the information is not abundant.	<b>MS</b>
To what extent are the lessons learned supported by the evidence presented and are they comprehensive?	The lessons learned and recommendations are divided in operations and technical issues in a clear and informative way.	<b>S</b>
Does the report include the actual project costs (total and per activity) and actual co-financing used?	The ICR presents project costs for the GEF grant only, and does not present co-financing contributions.	<b>U</b>
Assess the quality of the report's evaluation of project M&E systems:	The report analyses M&E design, implementation and utilization, emphasizing the important omission of climate in the baseline measurement.	<b>S</b>
<b>Overall TE Rating</b>		<b>S</b>

**11. Note any additional sources of information used in the preparation of the terminal evaluation report (excluding PIRs, TEs, and PADs).**